HAWAII PUBLIC HOUSING AUTHORITY

Environmental Reviews for Federally - Subsidized Public Projects

CITY & COUNTY OF HONOLULU

Prepared for:

State of Hawaii
Hawaii Public Housing Authority

Prepared by:

HHF PLANNERS
places for people

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EXECUTIVE SUMMARY

Hawaii Public Housing Authority
Environmental Reviews for Federally-Subsidized
Public Housing Projects

City and County of Honolulu Housing Projects
Executive Summary
January 2016

The Hawaii Public Housing Authority (HPHA) initiated Environmental Reviews (ER) for their existing housing projects statewide in preparation of applying for Federal funding from the U.S. Department of Housing and Urban Development (HUD) to implement various repair and rehabilitation improvements. HPHA is planning to implement various types of rehabilitation improvements to a total of 70 housing projects that are located on five (5) islands within the State of Hawaiʻi (Hawaiʻi, Maui, Molokaʻi, Oʻahu, and Kauaʻi).

HHF Planners (HHF) was retained by HPHA to conduct these environmental reviews. The ERs were prepared to document the applicability of repair and rehabilitation improvements receiving a Categorical Exclusion under HUD environmental regulations (24 CFR Part 58). The environmental review process covered the range of topics identified below.

- Airport Hazards
- Coastal Barrier Resources
- Flood Insurance
- Clean Air
- Coastal Zone Management
- Contamination and Toxic Substances
- Endangered Species
- Explosive and Flammable Hazards
- Farmlands Protection
- Floodplain Management
- Historic Preservation
- Noise Abatement and Control
- Sole Source Aquifers
- Wetlands Protection
- Wild and Scenic Rivers
- Environmental Justice

Each topic was reviewed to determine if repair and rehabilitation improvements met environmental assessment requirements. Based on the findings from this process, HPHA can evaluate whether improvements implemented for a particular housing project is exempt or categorically excluded from the preparation of an Environmental Assessment, requires further action, or will cause significant environmental impact.

The environmental review process consisted of data collection and literature reviews, site visits, technical studies, and agency consultations to support evaluation of effects. The literature review incorporated careful evaluation of current rules governing ERs (Code of Federal Regulations; Department of Housing and Urban Development rules, Flood Insurance Rate Maps, etc.). Each housing project was physically inspected to facilitate

HHF familiarity with the current condition for each site. For each site visit, a photo record was created to document current conditions. Interviews were conducted with management and maintenance personnel at these housing sites to get their input on environmental factors affecting each site.

Some technical studies were conducted by specialists to address specific environmental resources such as historic properties, flood hazards, and hazardous materials. Letters were transmitted to key State and Federal agencies to determine potential impacts associated with repair and rehabilitation improvements on the agency's regulatory functions and resources under their jurisdiction. The results of the environmental review process are summarized in Table 1.

Table 1: City and County of Honolulu Housing Projects Environmental Review Summary

AMP #	HA #	Project Name	Airport Hazards	Coastal Barrier Resources	Flood Insurance	Clean Air	Coastal Zone Management	Contamination and Toxic Substances	Endangered Species Act	Explosive and Flammable Hazards	Farmland Protection	Floodplain Management	Historic Preservation	Noise Abatement and Control	Sole Source Aquifers	Wetland Protection	Wild and Scenic Rivers	Environmental Justice
30	1026	Pu'uwai Momi	-	-	-	-	-	-	A	-	-	-	A	A	-	-	-	-
30	1027	Hale Laulima	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-
30	1038	Waipahu I	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-
30	1039	Waipahu II	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-
30	1066	Salt Lake Apartments	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-
31	1005	Kalihi Valley Homes	-	-	-	-	-	-	A	-	-	-	A	-	-	-	-	-
32	1003	Mayor Wright Homes	-	-	-	-	-	-	A	-	-	-	A	-	-	-	-	-
33	1009	Ka'ahumanu Homes	-	-	-	-	-	-	A	-	-	-	A	-	-	-	-	-
33	1099	Kamehameha Homes	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-
34	1012	Makua Ali'i	-	-	-	-	-	-	A	-	-	-	A	-	-	-	-	-

Key: - (Project does not affect the resources under consideration)
A (Project triggers compliance consultation and/or mitigation)

Table 1 (Cont'd): City and County of Honolulu Housing Projects Environmental Review Summary

AMP #	HA #	Project Name	Airport Hazards	Coastal Barrier Resources	Flood Insurance	Clean Air	Coastal Zone Management	Contamination and Toxic Substances	Endangered Species Act	Explosive and Flammable Hazards	Farmland Protection	Floodplain Management	Historic Preservation	Noise Abatement and Control	Sole Source Aquifers	Wetland Protection	Wild and Scenic Rivers	Environmental Justice
34	1036	Paoakalani	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-
34	1062	Kalākaua Homes	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-
35	1011	Punchbowl Homes	-	-	-	-	-	-	A	-	-	-	A	-	-	-	-	-
35	1024	Kalanihuia	-	-	-	-	-	-	A	-	-	-	A	-	-	-	-	-
35	1046	Makamae	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-
35	1047	Pumehana	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-
35	1073	Spencer House	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-
40	1007	Kūhiō Homes	-	-	-	-	-	-	A	-	-	-	A	-	-	-	-	-
40	1010	Kūhiō Park Terrace Low-Rise	-	-	-	-	-	-	A	-	-	-	A	-	-	-	-	-
44	1033	Māʻili I	-	-	-	-	-	-	A	-	-	-	A	-	-	-	-	-
44	1035	Nānākuli Homes	-	-	-	-	-	-	A	-	-	A	A	-	-	-	-	-
44	1057	Waimaha Sunflower	-	-	-	-	-	-	A	-	-	A	-	-	-	-	-	-
44	1091	Kauʻiokalani	-	-	-	-	-	-	A	-	-	A	-	-	-	-	-	-
44	1108	Māʻili II	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-
45	1025/ 1107	Waimānalo Homes I & II	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-
45	1030	Koʻolau Village	-	-	-	-	-	-	A	-	-	-	A	-	-	-	-	-
45	1069	Kāneʻohe Apartments	-	-	-	-	-	-	A	-	-	A	-	-	-	-	-	-
45	1072	Hoʻokipa Kahaluʻu	-	-	A	-	-	-	A	-	-	A	-	-	-	-	-	-
45	1090	Kauhale Ohana	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-

Key: - (Project does not affect the resources under consideration)
A (Project triggers compliance consultation and/or mitigation)

Table 1 (Cont'd): City and County of Honolulu Housing Projects Environmental Review Summary

AMP #	HA #	Project Name	Airport Hazards	Coastal Barrier Resources	Flood Insurance	Clean Air	Coastal Zone Management	Contamination and Toxic Substances	Endangered Species Act	Explosive and Flammable Hazards	Farmland Protection	Floodplain Management	Historic Preservation	Noise Abatement and Control	Sole Source Aquifers	Wetland Protection	Wild and Scenic Rivers	Environmental Justice
49	1015	Wahiawā Terrace	-	-	-	-	-	-	A	-	-	-	A	-	-	-	-	-
49	1050	Kupuna Home O'Waialua	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-
49	1056	Kauhale Nani	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-
50	1008	Pālolo Valley Homes	-	-	-	-	-	-	A	-	-	-	A	-	-	-	-	-
52	1010	Kūhiō Park Terrace High-Rise	-	-	-	-	-	A	A	-	-	-	A	-	-	-	-	-

Key: - (Project does not affect the resources under consideration)
A (Project triggers compliance consultation and/or mitigation)

The following is a summary of the findings for certain environmental areas for repair and rehabilitation improvements proposed for public housing projects within the City and County of Honolulu. The complete environmental compliance documentation for each housing project is included in this report.

Explosive and Flammable Hazards (24 CFR Part 51 Subpart C)

Site inspections of the HPHA housing projects in the City and County of Honolulu looked for the presence of above ground explosive or flammable material storage containers in excess of 100 gallons. The results of these inspections are shown in Table 2.

Table 2: City and County of Honolulu Housing Projects Above Ground Storage Tanks in Excess of 100 Gallons

AMP #	HA #	Project Name	Above Ground Storage Tank	Mitigation Measures if Density Increased
30	1026	Pu'uwai Momi	No	No
30	1027	Hale Laulima	No	No
30	1038	Waipahu I	No	No

Table 2 (Cont'd): City and County of Honolulu Housing Projects Above Ground Storage Tanks in Excess of 100 Gallons				
30	1039	Waipahu II	No	No
30	1066	Salt Lake Apartments	No	No
31	1005	Kalihi Valley Homes	No	No
32	1003	Mayor Wright Homes	No	No
33	1009	Kaʻahumanu Homes	No	No
33	1099	Kamehameha Homes	No	No
34	1012	Makua Aliʻi	No	No
34	1036	Paokalani	No	No
34	1062	Kalākaua Homes	No	No
35	1011	Punchbowl Homes	No	No
35	1024	Kalanihuia	No	No
35	1046	Makamae	No	No
35	1047	Pumehana	No	No
35	1073	Spencer House	No	No
40	1007	Kūhiō Homes	No	No
40	1010	Kūhiō Park Terrace Low-rise	No	No
44	1033	Māʻili I	**Yes**	**Yes**
44	1035	Nānākuli Homes	No	No
44	1057	Waimaha Sunflower	No	No
44	1091	Kauʻiokalani	**Yes**	**Yes**
44	1108	Māʻili II	No	No
45	1025/ 1107	Waimānalo Homes I & II	**Yes**	**Yes**
45	1030	Koʻolau Village	**Yes**	**Yes**
45	1069	Kāneʻohe Apartments	**Yes**	**Yes**
45	1072	Hoʻokipa Kahaluʻu	**Yes**	**Yes**
45	1090	Kauhale Ohana	**Yes**	**Yes**
49	1015	Wahiawā Terrace	No	No
49	1050	Kupuna Home O'Waialua	**Yes**	**Yes**
49	1056	Kauhale Nani	**Yes**	**Yes**
50	1008	Pālolo Valley Homes	No	No
52	1010	Kūhiō Park Terrace High-rise	No	No

There are 25 City and County of Honolulu housing projects that do not have hazardous above ground storage tanks on-site or in the direct vicinity. If, in the future, above ground storage tanks are installed at a HUD funded HPHA housing project site, mitigative measures will need to be implemented in accordance with HUD requirements. There are above ground liquid propane gas (LPG) containers in excess of 100 gallons at Maʻili I, Kauʻiokalani, Waimānalo Homes I & II, Koʻolau Village, Kāneʻohe Apartments, Hoʻokipa Kahaluʻu, Kauhale Ohana, Kupuna Home O'Waialua, and Kauhale Nani. Currently, HPHA does not plan on increasing density under repair and rehabilitation projects initiated. However, should repair and rehabilitation improvements at these sites increase the density of these projects (*e.g.*, increase the number of units and associated persons exposed to the hazard within the acceptable separation distance), mitigative measures will need to be implemented in accordance with HUD requirements.

Under CFR Title 24, Part 51, Subpart C, increasing the residential density and number of people under a rehabilitation project using HUD funding would be considered a "HUD-assisted project." Consequently, the existing fuel storage tank would be subject to standards under this regulation for establishing acceptable separation distances, or the application of the standards can be eliminated or modified if other conditions apply or mitigative measures identified below are provided. HPHA would need to evaluate site conditions, comply with regulatory requirements, and determine which appropriate measure to implement.

1. Utilize the nature of the topography to shield the proposed project from the hazard.
2. An existing permanent fire resistant structure of adequate size and strength will shield the proposed project from the hazard.
3. A barrier is constructed surrounding the hazard, at the site of the project, or in between the potential hazard and the proposed project.
4. The structure and outdoor areas used by people are designed to withstand blast overpressure and thermal radiation anticipated from the potential hazard (*e.g.*, the project is of masonry and steel or reinforced concrete and steel construction).

Historic Preservation (National Historic Preservation Act of 1966, Section 106; 36 CFR Part 800)

In accordance with Section 106 of the National Historic Preservation Act, as amended [16 U.S.C. 470 (f)], consultation was conducted to determine whether repair and rehabilitation improvements would have an effect on historic properties. Of the 35 housing projects on Oʻahu, nine (9) housing projects were identified as having buildings determined to meet National Register eligibility criteria. These housing projects were identified as meeting the

eligibility criteria due to: 1) their role in the social history of Hawaiʻi and housing reform movement; and 2) having architecture reflective of the type and style during that period. The remaining housing projects were determined not to meet National Register eligibility criteria because buildings have lost their architectural integrity. Table 3 identifies the housing projects that either met or did not meet National Register eligibility criteria.

Based upon Section 106 consultation, repair and rehabilitation improvements would have "no adverse effect" on these nine housing projects subject to mitigative measures. In addition, another six (6) housing projects were determined to have "no adverse effect" subject to mitigative measures pertaining only to ground disturbing activities because of the potential to encounter subsurface traditional Hawaiian or historic properties. The other remaining 20 housing projects were determined to have "no historic properties" affected. Table 3 summarizes which housing projects are subject to mitigative measures.

Table 3: City and County of Honolulu Housing Projects Eligibility for the National Register of Historic Places & Mitigation Measures

AMP #	HA #	Project Name	Year Built and Age	National Register Eligibility	Mitigation Measures (If Applicable)
30	1026	Puʻuwai Momi	1969 (46)	Not Eligible	**Subsurface Only**
30	1027	Hale Laulima	1981 (34)	Not Eligible	No
30	1038	Waipahu I	1970 (45)	Not Eligible	No
30	1039	Waipahu II	1969 (46)	Not Eligible	No
30	1066	Salt Lake Apartments	1969 (46)	Not Eligible	No
31	1005	Kalihi Valley Homes	1953 (62)	**Eligible (Only 15 Buildings)**	**Buildings and Subsurface**
32	1003	Mayor Wright Homes	1952 (63)	Not Eligible	**Subsurface Only**
33	1009	Kaʻahumanu Homes	1958 (57)	Not Eligible	**Subsurface Only**
33	1099	Kamehameha Homes	1996 (19)	Not Eligible	No
34	1012	Makua Aliʻi	1967 (48)	**Eligible**	**Buildings and Subsurface**
34	1036	Paokalani	1970 (45)	Not Eligible	No
34	1062	Kalākaua Homes	1983 (32)	Not Eligible	No
35	1011	Punchbowl Homes	1960 (55)	**Eligible**	**Buildings and Subsurface**
35	1024	Kalanihuia	1969 (46)	**Eligible**	**Buildings and Subsurface**
35	1046	Makamae	1971 (44)	Not Eligible	No
35	1047	Pumehana	1972 (43)	Not Eligible	No
35	1073	Spencer House	1968 (57)	Not Eligible	No

Table 3 (Cont'd): City and County of Honolulu Housing Projects Eligibility for the National Register of Historic Places & Mitigation Measures					
40	1007	Kūhiō Homes	1953 (62)	Not Eligible	**Subsurface Only**
40	1010	Kūhiō Park Terrace Low-Rise	1965 (50)	**Eligible (Except 1 Bldg. and 3 Community Bldgs.)**	**Buildings and Subsurface**
44	1033	Māʻili I	1969 (46)	Not Eligible	**Subsurface Only**
44	1035	Nānākuli Homes	1969 (46)	**Eligible**	**Buildings and Subsurface**
44	1057	Waimaha Sunflower	1980 (35)	Not Eligible	No
44	1091	Kauʻiokalani	1995 (20)	Not Eligible	No
44	1108	Māʻili II	1999 (16)	Not Eligible	No
45	1025/ 1107	Waimānalo Homes I & II	2001 (14)	Not Eligible	No
45	1030	Koʻolau Village	1969 (46)	Not Eligible	**Subsurface Only**
45	1069	Kāneʻohe Apartments	Bldg A- 1965 (50) Bldg B- 1972 (33)	Not Eligible	No
45	1072	Hoʻokipa Kahaluʻu	1983 (32)	Not Eligible	No
45	1090	Kauhale Ohana	1995 (20)	Not Eligible	No
45	1025/ 1107	Waimānalo Homes I & II	2001 (14)	Not Eligible	No
45	1030	Koʻolau Village	1969 (46)	Not Eligible	**Subsurface Only**
45	1069	Kāneʻohe Apartments	Bldg A- 1965 (50) Bldg B- 1972 (33)	Not Eligible	No
45	1072	Hoʻokipa Kahaluʻu	1983 (32)	Not Eligible	No
45	1090	Kauhale Ohana	1995 (20)	Not Eligible	No
49	1015	Wahiawā Terrace	1966 (49)	**Eligible**	**Buildings and Subsurface**
49	1050	Kupuna Home O'Waialua	1977 (38)	Not Eligible	No
49	1056	Kauhale Nani	1980 (35)	Not Eligible	No
50	1008	Pālolo Valley Homes	1957 (58)	Eligible (Except for 3 Bldgs.)	**Buildings and Subsurface**
52	1010	Kūhiō Park Terrace High-Rise	1965 (50)	Eligible	**Buildings and Subsurface**

Summary of Housing Projects with Historic Buildings

A summary is provided for each of the nine (9) housing projects in the City and County of Honolulu that have historic buildings deemed eligible for listing in the National Register of Historic Places (NRHP).

1. Kalihi Valley Homes. This housing project has been occupied since 1953 and includes a number of structures that are eligible for listing in the National Register. Buildings 25, 28, 29, 30, 32, 33, 34, 36, 37, 38, 39, 41, 42, 43 and 44 are significant because of their association with public housing and the social history of Hawaiʻi. They are intact and early examples of concrete construction used for the housing project by the Territory of Hawaiʻi, as well as the largest project at its date of competition. Character-defining features include a flat roof, canopies over windows and entry doors, wood framed windows with concrete block base, wood panel exterior and interior doors, and intact bathroom fixtures. Some structures have their original building numbers. The site arrangement of low-rise buildings terraced on hillside is also a defining feature.

2. Makua Aliʻi. This housing project has been occupied since 1967 and has been renovated twice, in 1972 and 1984. It was the second elderly housing project undertaken by the Hawaiʻi Housing Authority (HHA), a predecessor to the HPHA, and was the first immediately successful, large scale, low-cost, senior housing project in Hawaiʻi. The project is significant at the State level for its association with the history of the HHA and for its high quality of design. It is also considered eligible for listing in the National Register due to its association with Hawaiʻi's public housing history.

3. Punchbowl Homes. This housing project has been occupied since 1960 and retains its integrity of location, setting, feeling, design, materials, workmanship and association. Character-defining features include: full length exterior hallways along the entry side, original windows and doors, lanais with ornamental masonry grille work, and the main entry and lobby. This project is significant because of its association with public housing and the social history of Hawaiʻi. The project represents the first housing planned by the Territory and the State for the elderly and disabled. Punchbowl Homes appears to meet the criteria for listing in the NRHP based on its integrity, significance, and age.

4. Kalanihuia. This housing project has been occupied since 1969 and is significant because of its association with the development of public housing for senior citizens in Hawaiʻi. It is also architecturally significant as a good example of a high-rise building constructed in Hawaiʻi during the late 1960s. Character-

defining features include its design as a modern-style high rise building with a central courtyard, use of decorative concrete blocks, intact bathrooms and kitchen, aluminum jalousie windows with original locking lever handles, and stainless steel curtain rods in the studio units. The Kalanihuia housing project appears to meet the criteria for listing in the NRHP based on its integrity, significance, and age.

5. Kūhiō Park Terrace Low-Rise. This housing project was originally occupied in 1965 as part of the larger Kūhiō Park Terrace (KPT) development (included the KPT High-Rise housing portion), and includes 40 low-rise units in 12 duplex and row house buildings. The row houses are numbered from C1 to C8, while the duplexes are numbered from D1 to D4. KPT was the State's first and last attempt to house low-income families in publicly-owned high-rise buildings. The project included both high-rise and low-rise buildings in a campus-like setting. The complex originally featured large grassy areas between buildings and numerous community amenities including a pool with bathhouse, park building, basketball and volleyball courts, a softball field, and a community building.

   Character defining features of Row-House Buildings (C1 through C-8) include low-rise buildings separated by open grassy areas. Flat roofs, wide eaves, concrete wing walls at building corners, and as exterior dividers between units. Most set at 45 degree angle to street, and perpendicular to each other with shared yards. Glass jalousie windows, metal countertops and wood cabinets, wood staircases with wood and metal balustrades. Despite having some screen doors removed and two buildings re-roofed, these buildings retain their historic integrity.

   Character defining features of the Duplex Buildings (D-1 through D4) include one-story buildings with flat roofs. Wide overhanging eaves and wing-walls, glass jalousie windows, metal countertops and wood cabinets. Alterations that have been made to these buildings include: rear lanais have been incorporated into the units as interior space (D2 and D3), rear yard enclosures removed. Two buildings (D1 and D2) converted for office and storage use. One building (D2) has minimal alterations, while one unit in D1 has many interior walls removed. Most buildings have relatively minor alterations, retains integrity of location, setting, feeling, and association. Integrity of design, materials and workmanship have been compromised, most significantly at building D1. Buildings D2 through D4 were determined to be NRHP eligible, while building D1 is not eligible. Therefore, all of the buildings (Row-House and Duplex Buildings) within the KPT Low-Rise housing project, except for Building D1, are considered eligible for listing in the NRHP.

6. Nānākuli Homes. This housing project has been occupied since 1969 and underwent renovations in 1998. The project was one of the early "turnkey" program projects by the HHA. It is significant at the State level for its association with the history of public housing in Hawaiʻi. In addition to the use of cul-de-sacs that was typical of its time, the Nānākuli Homes housing project utilized single-wall construction, post-and-pier foundations, and corrugated metal roofs. This helped the project blend into the surrounding neighborhood which was a primary objective of the program to blend low cost housing projects into surrounding neighborhoods. Although it has undergone certain modifications, Nānākuli Homes remains very much intact. Other than kitchen and bath remodeling, most of the alterations have replaced original materials with in-kind materials. The only obvious new modification is the use of concrete masonry tiles to replace the carport's original wood posts. At this time, Nānākuli Homes appears to be the most historically intact turn-key project, and is a good example of the HHA's implementation of this Federal program. Nānākuli Homes appears to meet the criteria for listing in the NRHP based on its integrity, significance, and age.

7. Wahiawā Terrace. This housing project has been occupied since 1966 and has been renovated twice, in 1994 and during 2014 to 2015. Wahiawā Terrace was developed by the HHA and was the earliest known housing project in rural Oʻahu. It is significant at the State level for its association with the history of public housing in Hawaiʻi. It is also architecturally significant at the local level for its high quality of design. Wahiawā Terrace appears to meet the criteria for listing in the NRHP based on its integrity, significance, and age.

8. Pālolo Valley Homes. This housing project has been occupied since 1957. Buildings 16, 17, and 20 were remodeled in 2014 and do not meet NRHP-eligibility criteria because they no longer retain their integrity of design or materials. However, the project's 17 remaining buildings have been minimally altered and appear significant for their association with the development of public housing in Hawaiʻi, and for their architecture which is typical of the public housing design of the period. As a result, the non-remodeled buildings appear to have retained their historic integrity, and in terms of NRHP criteria, were evaluated as excellent examples of public housing in Hawaiʻi.

9. Kūhiō Park Terrace High-Rise. This housing project includes two high-rise residential towers; a single-family residence used by the management company, and five common area buildings including a Community Building, a Community Resource Center, a Teen Building, a Child Care Building, and a Cultural Pavilion. Structures that are considered eligible for listing in the NRHP were originally occupied in 1965 and include the two high-rise towers, the Community Building,

and the single-family residence. The remaining four common area buildings are not NRHP eligible.

Despite some alterations, and changes to design, materials, and workmanship, the high-rise towers retain their integrity of location, setting, feeling, and association. The one-story, single family residence retains its integrity of location, setting, design, materials design, workmanship, feeling and association. Despite some alterations to the design, materials and workmanship, the community center retains its integrity of location, setting, feeling, and association, and was determined to meet NRHP eligibility criteria.

No Historic Properties Affected Determination

In a letter to the State Historic Preservation Officer (SHPO), dated July 23, 2015, the HPHA determined that no historic properties would be affected (no effect) by repair and rehabilitation improvements for 26 O‘ahu housing projects that are less than 50 years old or determined to be ineligible-NRHP projects, as identified in Table 3. A copy of this letter and other documentation associated with these consultation efforts are included in Appendix A.

Letters were also sent to several native Hawaiian organizations and the various County Planning Departments on September 8, 2015 seeking their input on this determination. One comment letter was received from the State Office of Hawaiian Affairs (OHA), dated October 8, 2015, stating they had no objection to the determination. OHA also commented that they look forward to seeing the repair and rehabilitation projects completed because it will benefit the various communities (included in Appendix A).

The SHPO did not submit any comments or objections to the “no effect” determination for 20 of the 26 housing projects. This included follow-up emails with the State Historic Preservation Division regarding that status of responses to these remaining projects (included in Appendix A).

Comment letters were subsequently received from the SHPO for six of these 26 housing projects concurring that no NRHP-eligible buildings were present. However, ground disturbing activities may have the potential to encounter subsurface traditional Hawaiian or historic properties at these six housing projects. Therefore, these projects were determined to have “no adverse effect” subject to conditions pertaining only to ground disturbing activities. Copies of SHPO’s letters along with HPHA’s concurrence letter are included in Appendix A. Each individual ER report for these housing projects also includes a copy of the SHPO letter. Table 3 identified these six housing projects, and the conditions pertinent to subsurface activities is provided below.

Conditions. If ground disturbing activity is anticipated, HPHA must consult with the SHPD to determine effect to historic subsurface properties, and to identify appropriate required archaeological documentation and/or mitigation.

a. Submit detailed plans, specifications and a detailed scope of work once the plans have been developed.
b. Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation.
c. Submit a TMK map showing the full extent of the project area within the affected parcel(s).
d. Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area.
e. Summary of land use history, such as previous intensive cultivation, grubbing or grading.
f. Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

No Adverse Effect Determination

In a letter to the SHPO, dated August 20, 2015, the HPHA determined that nine housing projects included buildings determined to be NRHP-eligible, and these housing projects were previously identified. HPHA determined that repair and rehabilitation improvements for these housing projects would result in “no adverse effect” on historic properties based upon technical studies, consultations, and the following mitigative measures.

1. When considering rehabilitation improvements or building modifications: 1) the buildings’ character-defining features shall be retained to the extent practicable; and 2) the renovations shall adhere to the Secretary of the Interior’s (SOI) Standards for Rehabilitation.
2. If rehabilitation improvements or building modifications cannot retain the character-defining features or adhere to the SOI’s Standards, a Historic American Buildings Survey (HABS) will be conducted subject to the following conditions:
    a. Level II HABS documentation will be conducted in accordance with the National Park Service standards; and
    b. A representative sample of multiple building types would be selected for HABS documentation due to the multiple types of buildings constructed for housing projects.

In responding to the HPHA, in letters dated from November 16 through December 11, 2015, the SHPO determined that repair and rehabilitation improvements for these housing projects would have "no adverse effect" on historic properties. In addition, SHPO recommended additional conditions pertinent to ground-disturbing activities for these projects that are the same as those previously discuss for other housing projects. In response to this letter, the HPHA concurred with the additional conditions pertinent to ground disturbing activities for these housing projects. Copies of SHPO's letters along with HPHA's concurrence letter are included in Appendix A. Each individual ER report for these housing projects also includes a copy of the SHPO letter.

Additional Mitigative Measures

In addition to these mitigation measures and conditions discussed, the HPHA would enter into a Programmatic Agreement with the SHPO to address the implementation of future repair and rehabilitation improvements to HPHA housing projects after the current Section 106 review process is completed, and prior to the next environmental review process due in approximately five years.

Furthermore, should subsurface human remains or other traces of human activity greater than 50 years old be encountered during construction, all work in the vicinity of the find would immediately stop and the SHPD would be promptly notified. The treatment of any cultural artifacts and human remains that are encountered would be conducted in accordance with applicable requirements of Chapter 6E, Hawaiʻi Revised Statutes (Historic Preservation) and Chapter 13-300, Hawaiʻi Administrative Rules **(**Rules of Practice and Procedure Relating to Burial Sites and Human Remains).

Coastal Zone Management Act (16 USC 1451, Sections 307 (C) and (D))

HPHA consulted with the State Office of Planning (OP) to address federal review for consistency with Hawaiʻi's Coastal Zone Management (CZM) program. In a July 27, 2015 email to the OP, the HPHA determined that the use of HUD funds for the implementation of repair and rehabilitation improvements does not require review for consistency with Hawaiʻi's CZM program. Previous reviews conducted by OP in 2003, 2005, and 2010 similarly determined that projects receiving federal funds from HUD do not require CZM federal consistency review. The OP confirmed this determination in an email dated July 28, 2015, and it is included in Appendix B.

Endangered Species Act of 1973 (Section 7; 50 CFR Part 402)

Section 7 consultation with the U.S. Fish and Wildlife Service (FWS) under the Endangered Species Act resulted in the identification of appropriate minimization and avoidance measures to be implemented to avoid any impacts to federally-listed endangered or threatened species associated with the proposed improvements.

In a letter to the FWS dated July 24, 2015, the HPHA set forth a determination that repair and rehabilitation improvements for their housing projects are "not likely to adversely affect" these species, or existing or proposed designated habitat subject to certain avoidance, minimization, or best management practices measures. A copy of this letter and other documentation associated with this consultation is included in Appendix C. A meeting was held with the FWS on September 1, 2015 to discuss the proposed measures. Concurrence with the HPHA determination, including additional agreed upon measures proposed by FWS, was received in a letter from the FWS dated September 28, 2015.

Table 4 identifies the HPHA housing projects where endangered species may be present, and thus subject to minimization and avoidance measures.

Table 4: City and County of Honolulu Housing Project Sites Where Endangered Species May Be Present

AMP #	HA #	Project Name	Newell's Shearwater	Hawaiian Petrel	Hawaiian Hawk	Blackburn's Sphinx Moth
30	1026	Puʻuwai Momi	X			
30	1027	Hale Laulima				
30	1038	Waipahu I				
30	1039	Waipahu II				
30	1066	Salt Lake Apartments	X			
31	1005	Kalihi Valley Homes	X			
32	1003	Mayor Wright Homes	X			
33	1009	Kaʻahumanu Homes	X			
33	1099	Kamehameha Homes	X			
34	1012	Makua Aliʻi	X			
34	1036	Paokalani	X			
34	1062	Kalākaua Homes	X			
35	1011	Punchbowl Homes	X			
35	1024	Kalanihuia	X			
X = Species May Be Present						

Table 4 (Cont'd): City and County of Honolulu Housing Projects Sites Where Endangered Species May Be Present						
AMP #	**HA #**	**Project Name**	**Newell's Shearwater**	**Hawaiian Petrel**	**Hawaiian Hawk**	**Blackburn's Sphinx Moth**
35	1046	Makamae	**X**			
35	1047	Pumehana	**X**			
35	1073	Spencer House	**X**			
40	1007	Kūhiō Homes	**X**			
40	1010	Kūhiō Park Terrace Low-Rise	**X**			
44	1033	Māʻili I				
44	1035	Nānākuli Homes				
44	1057	Waimaha Sunflower				
44	1091	Kauʻiokalani				
44	1108	Māʻili II				
45	1025 / 1107	Waimānalo Homes I & II	**X**			
45	1030	Koʻolau Village	**X**			
45	1069	Kāneʻohe Apartments	**X**			
45	1072	Hoʻokipa Kahaluʻu	**X**			
45	1090	Kauhale Ohana				
49	1015	Wahiawā Terrace				
49	1050	Kupuna Home O Waialua	**X**			
49	1056	Kauhale Nani				
50	1008	Pālolo Valley Homes	**X**			
52	1010	Kūhiō Park Terrace High -Rise	**X**			
X = Species May Be Present						

As agreed upon by the HPHA and FWS, the following measures would address potential impacts to the species identified in Table 4. In addition, other conditions are identified to minimize or avoid impacts to other species at all HPHA project sites.

Newell's Shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime

construction will be avoided during the seabird fledging period, September 15th through December 15th. If nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.

Conditions Applicable to All Housing Projects

Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.

Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.

Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.

Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.

Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo‘i, impoundments or other vegetated water bodies.

1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols.

2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.
3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.

In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of activity.

Additional Measures: No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.

Additional Housing Project Conditions and Compliance Measures

AMP 30

1. PUʻUWAI MOMI (HA# 1026)

The Puʻuwai Momi housing project is located in the ʻAiea area on the island of Oʻahu. This housing project was originally occupied in 1969 and includes 28 buildings and 260 housing units.

The project is presently exposed to vehicular noise levels in the Normally Unacceptable category (above 65 Ldn but not exceeding 75 Ldn) along the State's Kamehameha Highway and Salt Lake Boulevard based upon HUD's Day-Night Level (DNL) calculator. With the future operation of the City and County of Honolulu's (City) rail transit (now under construction) and increased traffic volumes along highways and roadways, this housing project is likely to be exposed to higher traffic noise volumes. Repair and rehabilitation improvements would not contribute to increased vehicles and exposure to traffic noise levels. However, appropriate sound attenuation measures should be provided in order to reduce exposure to noise volumes particularly for buildings located along these roadways. The following measures are identified to address this:

1. Conduct a noise assessment study to better analyze existing vehicular noise effects on the project and identify appropriate measures that could be implemented to reduce exposure to traffic noise levels.
2. Consult with the City to provide necessary noise mitigation measures as part of the rail project due to the probable noise effects resulting from operation of the rail system when completed.

2. HALE LAULIMA (HA# 1027)

The Hale Laulima housing project is located in the Pearl City area on the island of O‘ahu. This housing project originally occupied in 1981 and includes 10 buildings and housing units.

There are no additional conditions or mitigative measures necessary.

3. WAIPAHU I (HA# 1038)

The Waipahu I housing project is located in the Waipahu area on the island of O‘ahu. This housing project was originally occupied in 1970 and includes one (1) building and 19 housing units.

There are no additional conditions or mitigative measures necessary.

4. WAIPAHU II (HA# 1039)

The Waipahu II housing project is located in the Waipahu area on the island of O‘ahu This housing project was originally occupied in 1969 and includes one (1) building and 20 housing units.

There are no additional conditions or mitigative measures necessary.

5. SALT LAKE (HA# 1066)

The Salt Lake Apartments housing project is located in the Salt Lake area of the Honolulu district on the island of O‘ahu. This housing project was originally occupied in 1969 and includes one (1) building and 28 housing units.

There are no additional conditions or mitigative measures necessary.

AMP 31

6. KALIHI VALLEY HOMES (HA# 1005)

The Kalihi Valley Homes housing project is located in the Kalihi area in the Honolulu district on the island of O‘ahu. This housing project was originally occupied in 1953 and includes 42 buildings and 373 housing units.

There are no additional conditions or mitigative measures necessary.

AMP 32

7. MAYOR WRIGHT HOMES (HA# 1003)

The Mayor Wright Homes housing project is located in the Liliha area of the Honolulu district on the island of O‘ahu. This housing project was originally occupied in 1952 and includes 36 buildings and 364 housing units.

There are no additional conditions or mitigative measures necessary.

AMP 33

8. KAʻAHUMANU HOMES (HA# 1009)

The Kaʻahumanu Homes housing project is located in the Kalihi area of the Honolulu district on the island of Oʻahu. This housing project was originally occupied in 1958 and includes 19 buildings and 152 housing units.

There are no additional conditions or mitigative measures necessary.

9. KAMEHAMEHA HOMES (HA# 1099)

The Kamehameha Homes housing project is located in the Kalihi-Pālama area on the island of Oʻahu. This housing project was originally occupied in 1996 and includes 28 buildings and 221 housing units.

There are no additional conditions or mitigative measures necessary.

AMP 34

10. MAKUA ALIʻI (HA# 1012)

The Makua Aliʻi housing project is located in the McCully-Moʻiliʻili area in the Honolulu district on the island of Oʻahu. This housing project was originally occupied in 1967 and includes one (1) building and 211 housing units.

There are no additional conditions or mitigative measures necessary.

11. PAOAKALANI (HA# 1036)

The Paoakalani housing project is located in the McCully-Moʻiliʻili area in the Honolulu district on the island of Oʻahu. This housing project was originally occupied in 1970 and includes one (1) building and 151 housing units.

There are no additional conditions or mitigative measures necessary.

12. KALAKAUA HOMES (HA# 1062)

The Kalākaua Homes housing project is located within the McCully-Moʻiliʻili community in the Honolulu district on the island of Oʻahu. This housing project was originally occupied in 1983 and includes nine (9) buildings and 221 housing units.

There are no additional conditions or mitigative measures necessary.

AMP 35

13. PUNCHBOWL HOMES (HA# 1011)

The Punchbowl Homes housing project is located south of the Punchbowl Crater and the National Memorial Cemetery of the Pacific and directly northeast of downtown Honolulu. This housing project was originally occupied in 1960 and includes 2 buildings and 156 housing units.

The project site is situated along a highway that has a high volume of vehicular traffic. Based on HUD's Day-Night Level (DNL) calculator, the housing project is presently exposed to vehicular noise levels in the Normally Unacceptable category (above 65 dBA but not exceeding 75 dBA). Traffic volumes along the highway will likely increase in the future due to growth and development and would expose the project to even higher traffic noise levels. Repair and rehabilitation improvements would not contribute to an increase in vehicle traffic and traffic noise. However, appropriate sound attenuation measures should be provided in order to reduce exposure to traffic noise particularly for the buildings located along the highway. The measures identified below would address this condition:

1. Conduct a noise assessment study to better analyze the effects of existing traffic noise on the project and identify appropriate measures that could be implemented to reduce exposure to traffic noise.

2. Consult the State Department of Transportation to provide noise attenuation measures in connection with future highway improvements.

14. KALANIHUIA (HA# 1024)

The Kalanihuia project is located in the Liliha area of the Honolulu district on the island of Oʻahu. This housing project was originally occupied in 1969 and includes one (1) building and 151 housing units.

There are no additional conditions or mitigative measures necessary.

15. MAKAMAE (HA# 1046)

The Makamae housing project is located in the Nuʻuanu area of urban Honolulu on the island of Oʻahu. This housing project was originally occupied in 1971 and includes one (1) building and 124 housing units

There are no additional conditions or mitigative measures necessary.

16. PUMEHANA (HA# 1047)

The Pumehana housing project is located in the Makiki community of Honolulu on the island of Oʻahu. This housing project was originally occupied in 1972 and includes one (1) building and 139 housing units

There are no additional conditions or mitigative measures necessary.

17 SPENCER HOUSE (HA# 1073)

The Spencer House project is located in the Makiki area of the Honolulu district on the island of Oʻahu. This housing project was originally occupied in 1968 and includes one (1) building and 17 housing units

There are no additional conditions or mitigative measures necessary.

AMP 40

18. KŪHIŌ HOMES (1007)

The Kūhiō Homes housing project is located in the Kalihi area of Honolulu on the island of Oʻahu. Kalihi is an urban neighborhood situated west of downtown Honolulu and east of Fort Shafter. This housing project was initially occupied in 1953 and includes 21 buildings and 134 housing units.

There are no additional conditions or mitigative measures necessary.

19. KŪHIŌ PARK TERRACE LOW-RISE (1010)

The Kūhiō Park Terrace Low-rise housing project is located in the Kalihi area of Honolulu on the island of Oʻahu. This housing project was originally occupied in 1981 and includes 12 buildings and 40 housing units.

There are no additional conditions or mitigative measures necessary.

AMP 44

20. MĀʻILI I (HA# 1033)

The Māʻili I housing project is located in the Māʻili area of the Waiʻanae Coast on the island of Oʻahu. Māʻili is situated between the communities of Waiʻanae to the north and Nānākuli to the south. This housing project was initially occupied in 1969 and includes 20 buildings and 20 housing units

There are no additional conditions or mitigative measures necessary.

21. NĀNĀKULI HOMES (HA# 1035)

The Nānākuli Homes housing project is located in the Nānākuli area on the island of Oʻahu. This housing project was originally occupied in 1969 and includes 36 buildings and 36 housing units.

Almost the entire project site is located in Zone D (area of undetermined flood hazard). A small section (about 15 feet) of the project's driveway entrance connection with Farrington Highway is situated within Zone AE (subject to 1% annual chance flood, base flood elevation determined). This flood area appears to be associated with flooding that occurs along the Farrington Highway corridor based upon the Flood Insurance Rate Map (FIRM). This area only includes a portion of the project driveway leading into the site, and does not have any building structures within or close to the flood area. A field inspection and information obtained from the AMP Manager confirmed no major flooding issues within the site.

No significant impacts to existing housing units or floodplain conditions are expected as a result of repair and rehabilitation improvements. Given the location of this area along the highway, no buildings should be constructed. The portion of the driveway entrance located within flood Zone AE would need "no-rise" certifications for any proposed fill or grading to ensure flood heights for nearby areas are not adversely affected. Design plans would be submitted to pertinent State and County agencies for review and approval as part of the design review process. Any required site modifications would comply with applicable flood regulations and design standards. The implementation of the design review process and compliance with pertinent flood regulations should minimize any impacts on public health, safety, and welfare. The project is in compliance with Executive Order 11988.

22. WAIMAHA SUNFLOWER (HA# 1057)

The Waimaha Sunflower housing project is located in the Waiʻanae area on the island of Oʻahu. This housing project was initially occupied in 1980 and includes 11 buildings and 130 housing units.

There are no additional conditions or mitigative measures necessary.

23. KAUʻIOKALANI (HA# 1091)

The Kauʻiokalani housing project is located in the Waiʻanae community on the island of Oʻahu. This housing project was initially occupied in 1997 d includes 11 buildings and 40 housing units.

The southwest half of the project site is located within Zone XS (0.2% annual chance of flood), while the northeast half of the site is located in the Zone X. A field inspection and information obtained from the AMP Manager confirmed no major flooding issues within the site. No significant impacts to existing housing units or Zone XS floodplain conditions are expected as a result of repair and rehabilitation improvements. However, should new housing units be constructed in the future, design plans would be submitted to pertinent State and County agencies for review and approval as part of the design review process. Any required site modifications would comply with applicable flood regulations and design standards. The implementation of the design review process and compliance with pertinent flood regulations should minimize any impacts on public health, safety, and welfare.

24. MĀʻILI II (HA# 1108)

The Māʻili II housing project is located in the Māʻili area of the Waiʻanae Coast on the island of Oʻahu. This housing project was originally occupied in 1999 and includes 18 buildings and 24 housing units.

There are no additional conditions or mitigative measures necessary.

AMP 45

25. WAIMĀNALO HOMES I (1025) AND WAIMĀNALO HOMES II (1107)

The Waimānalo Homes I and II housing projects are located in the Waimānalo area on the island of Oʻahu. These housing projects were originally occupied in 2001 and includes a combined total of 41 buildings and 41 housing units (single-family).

There are no additional conditions or mitigative measures necessary.

26. KOʻOLAU VILLAGE (HA# 1030)

The Koʻolau Village housing project is located in the Kāneʻohe area on the island of Oʻahu. This housing project was originally occupied in 1969 and includes 19 buildings and 80 housing units.

There are no additional conditions or mitigative measures necessary.

27. KĀNEʻOHE APARTMENTS (HA# 1069)

The Kāneʻohe Apartments housing project is located in the Kāneʻohe community on the island of Oʻahu. This housing project consists of two buildings and 24 housing units. Building A was originally occupied in 1965, while Building B was occupied in 1972.

As indicated under the updated November 5, 2014 Flood Insurance Rate Map (FIRM), a portion of the northern boundary of the property is within Flood Hazard areas while the large majority of the property is within Flood Zone X (outside the 0.2% annual chance floodplain). Flood Hazard areas include Zone AEF (floodway areas in Zone AE), Zone AE (1% annual chance flood, base flood elevation determined) and Zone XS (areas of 0.2% annual chance flood). These flood areas cover grassed landscape and parking areas within the housing project. Residential buildings are not located within the flood area. These flood areas are associated with Keaʻahala Stream that runs behind (north) the property, and this section of the stream along the property is a concrete lined channel.

A flood compliance report prepared as part of the prior 2011 Environmental Review document for this housing project included an updated floodplain management engineering report and determined that rehabilitation improvement should not have significant impact on housing units or existing floodplain conditions or pose a significant threat to human life, health, safety, and property as defined by current Federal and State guidelines that would require mitigation. The compliance report utilized a June 2005 FIRM for the project site that showed the property affected by a larger Zone AEF (Special Flood Hazard Area) than that designated under the current November 2014 updated FIRM. Therefore, the project site is less affected by flood hazards under the current FIRM.

Areas located within Flood Zone AEF and AE would need “no-rise” certifications for any proposed fill or grading to ensure flood heights for nearby areas are not adversely affected. Design plans would be submitted to pertinent State and County agencies for review and approval as part of the design review process. Any required site modifications

would comply with applicable flood regulations and design standards. The implementation of the design review process and compliance with pertinent flood regulations should minimize any impacts on public health, safety, and welfare. The project is in compliance with Executive Order 11988.

28. HOʻOKIPA KAHALUʻU (1072)

The Hoʻokipa Kahaluʻu housing project is located in the ʻĀhuimanu area of the Kāneʻohe district on the island of Oʻahu. This housing project was initially occupied in 1983 and includes nine (9) buildings and 56 housing units.

As indicated by Flood Insurance Rate Map 15003C0260F (Revised September 30, 2004), the majority of the project site lies within Zone AEF (floodway areas within Zone AE) which is associated with the now channelized ʻĀhuimanu Stream at the rear of the property. The small area remaining in the northern corner of the site falls within Zone AE (base flood elevations determined) and Zone XS. Zone AEF and Zone AE are Special Flood Hazard Areas that are subject to flooding by the 1% annual change flood (100-year flood), while Zone XS is subject to the 2% annual chance flood; and areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile. Based on the Flood Insurance Rate Map, the buildings on the project site lie within the limits of Zone AEF.

A flood compliance report and an updated floodplain management engineering report prepared by Sam O. Hirota, Inc. in 2009 (prior 2010 ER update for project) determined that repair and rehabilitation improvements should not have a significant impact on housing units or floodplain conditions nor pose a significant threat to human life, health, safety, and property that would require mitigation as defined by current Federal and State guidelines. A current field inspection of the site and information obtained from the AMP Manager in June 2015 confirmed no major flooding issues within the project site. It appears the Flood Insurance Rate Map was not updated after ʻĀhuimanu Stream was channelized to reduce flood impacts in this project area. Therefore, the Flood Insurance Rate Map for the project area is currently being updated to account for the channelization of ʻĀhuimanu Stream and the likely corresponding reduction of the Special Flood Hazard Area limits in the project area.

29. KAUHALE OHANA (HA# 1090)

The Kauhale ‘Ohana housing project is located in the Waimānalo community on the island of O‘ahu. Waimānalo is situated in the eastern most end of Windward O‘ahu, east of Kailua, and north of Hawai‘i Kai. This housing project was originally occupied in 1995 and includes five (5) buildings and 25 housing units.

There are no additional conditions or mitigative measures necessary.

AMP 49

30. WAHIAWĀ TERRACE (1015)

The Wahiawā Terrace housing project is located in the Wahiawā area on the island of O‘ahu. Wahiawā is situated in Central O‘ahu to the east of Schofield Barracks Army Base. This housing project was originally occupied in 1966 and includes nine (9) buildings and 60 housing units.

There are no additional conditions or mitigative measures necessary.

31. KUPUNA HOME O’WAIALUA (HA# 1050)

The Kupuna Home O‘Waialua housing project is located in the Waialua community on the island of O‘ahu. Waialua is located between the communities of Mokulē‘ia to the west and Hale‘iwa to the east. This housing project was originally occupied in 1977 and includes 21 buildings and 40 housing units.

There are no additional conditions or mitigative measures necessary.

32. KAUHALE NANI (HA# 1056)

The Kauhale Nani housing project is located within the Wahiawā community on the island of Oʻahu. Wahiawā is situated in Central Oahʻu and lies to the east of Schofield Barracks, a U.S. Army military This housing project was initially occupied in 1980 and includes 10 buildings and 50 housing units.

There are no additional conditions or mitigative measures necessary.

AMP 50

33. PĀLOLO VALLEY HOMES (HA# 1008)

The Pālolo Valley Homes housing project is located within the Pālolo area in urban Honolulu on the island of Oʻahu. This housing project was originally occupied in 1957 and includes 20 buildings and 118 housing units.

There are no additional conditions or mitigative measures necessary.

AMP 52

34. KŪHIŌ PARK TERRACE HIGH-RISE (HA# 1010)

The Kūhiō Park Terrace High-Rise housing project is located in the Kalihi area of Honolulu on the island of Oʻahu. Kalihi is an urban neighborhood situated west of downtown Honolulu and east of Fort Shafter. This housing project was originally occupied in 1965 and includes eight (8) buildings and 347 housing units.

There are no additional conditions or mitigative measures necessary.

ENVIRONMENTAL REVIEWS

INDIVIDUAL REPORTS

HAWAII PUBLIC HOUSING AUTHORITY

ENVIRONMENTAL REVIEW

PU`UWAI MOMI

`Aiea, O`ahu

AMP 30
HPHA No.1026

Prepared for:

State of Hawaii
Hawaii Public Housing Authority

Prepared by:

HHF PLANNERS
places for people

U.S. Department of Housing and Urban Development
451 Seventh Street, SW
Washington, DC 20410
www.hud.gov

espanol.hud.gov

Environmental Review for Activity/Project that is Categorically Excluded Subject to Section 58.5

Pursuant to 24 CFR 58.35(a)

Project Information

Project Name: Puʻuwai Momi (AMP 30)

Responsible Entity: Hawaii Public Housing Authority
1002 North School Street
Honolulu, HI 96817

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

State/Local Identifier: State of Hawaiʻi

Preparer: Mr. Scott Ezer, Vice President
HHF Planners
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Honolulu, Hawaiʻi 96813

Certifying Officer Name and Title: Mr. David Y. Ige
Governor, State of Hawaiʻi

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

Consultant (if applicable): HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaiʻi 96813

Direct Comments to: Mr. Hakim Ouansafi, Executive Director
Hawaii Public Housing Authority
1002 North School Street
Honolulu, Hawaiʻi 96817

Project Location: 99-132 Kohomua Street
Aiea, Hawaiʻi 96701

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]**:**

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a "major construction activity" and would involve one or a combination of several HUD designated categories of actions.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent;
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons;
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland;
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation;
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls);
7. Interior and exterior renovations and rehabilitation;
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site;
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Level of Environmental Review Determination:

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.5. Compliance with and completion of conformance determinations for other statute, executive order, or regulation has been completed and support the Categorical Exclusion.

Funding Information

Grant Number	HUD Program	Funding Amount
	Capital Fund Grants	To be determined
	Economic Development Initiative Special Project Grant	To be determined
	Other Grants	To be determined

Estimated Total HUD Funded Amount:

To be determined by HUD in coordination with HPHA.

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]**:**

To be determined by HUD in coordination with HPHA.

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	*The project is not within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.*
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☒	*Hawai'i has no coastal barriers (http://www.fws.gov/CBRA/Maps/Mapper.html)*
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes ☐ No ☒	*As indicated in the Flood Insurance Rate Map Panel 15003C0335H, the project site is located in Zone X and is determined to have minimal flood hazard and is outside the 500-year flood zone. Based on the project description the project includes no activities that would require further evaluation under this section. The project does not require flood insurance or is exempt from flood insurance. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with Flood Insurance requirements*

STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5		
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes ☐ No ☒	*The State of Hawai'i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. EPA's Green Book for currently designated "nonattainment areas" as of June 2015. Planned repair and rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.*
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes ☐ No ☒	*Documentation from the Office of Planning determined that projects receiving federal funds from HUD's Public Housing Capital Fund do not require review for consistency with Hawai'i's CZM program.*
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☐ No ☒	*Based on the results of the EDR report and site visit, there are no known hazardous materials, contamination, or toxic chemicals, gasses or radioactive substances in the immediate vicinity which could affect the health or safety of occupants or conflict with intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gasses, etc.*
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes ☐ No ☒	*The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices, while project-specific mitigation measures are identified in the following section.*
Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes ☐ No ☒	*There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. Repair and rehabilitation improvements would not increase the number of people exposed to hazardous operation, and thus do not meet the definition of a HUD-assisted project and are not subject to these regulations. The project site is also not within a Formerly Used Defense Site based upon*

		the EDR report and review of data (COE Website).
Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes ☐ No ☒	*The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. The project is located within the State Land Use Urban District. The existing development is located on urbanized property. No farmlands will be impacted by repair or rehabilitation improvements implemented.*
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes ☐ No ☒	*As indicated in the Flood Insurance Rate Map Panel 15003C0335H, the project site is located in Zone X and is determined to have minimal flood hazard and is outside the 500-year flood zone. The project is in compliance with Executive Order 11988.*
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes ☐ No ☒	*Constructed in 1969, the project has not yet reached a 50-year milestone. However, an architectural inventory survey was conducted for this project and determined it did not meet the criteria for listing on the National Registers of Historic Places. In a letter dated December 7, 2015, the State Historic Preservation Officer determined that repair and rehabilitation improvements for this project would have "no adverse effect" on historic properties pursuant to NHPA Section 106 and subject to certain mitigative measures.*
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes ☒ No ☐	*HUD's Day-Night Level (DNL) calculator estimated that Puuwai Momi is exposed to Normally Unacceptable vehicle noise along Kamehameha Highway (68.3 Ldn) and also possibly along Salt Lake Boulevard (65.3 Ldn). In the future, vehicular noise levels would likely increase with addition of the City's rail project currently under construction along the highway. Repair and renovation improvements would not contribute to increased vehicle noise effects, but could include some sound attenuation measures. A noise study should be conducted by HPHA to better analyze noise effects and identify appropriate measures (e.g. barriers.). Furthermore, HPHA should consult with the City on providing necessary noise mitigation measures due to the probable noise effects from the future rail.*

Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes ☐ No ☒	*The housing project is located within the O'ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation.*
Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☐ No ☒	*There are no known wetlands within the housing project's property, and therefore, no wetlands will be adversely impacted by the project improvements (http://www.fws.gov/wetlands/data/mapper.HTML)*
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes ☐ No ☒	*There are no Wild and Scenic Rivers in Hawai'i, which excludes this project from mitigation or formal consultation requirements (http://www.rivers.gov/map.php) .*
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes ☐ No ☒	*Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, these improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects on minority populations and low-income populations. Improvements should benefit low-income and minority populations living within this housing project.*

Field Inspection (Date and completed by)**:** April 28, 2015, Joseph Tamburello

Summary of Findings and Conclusions:

Repair and rehabilitation improvements implemented for this existing housing project by HPHA should not result in significant environmental impacts based upon research data collected, a field inspection, consultation with the site manager and maintenance staff, consultation with pertinent resource agencies, and prior HPHA experience implementing repair and rehabilitation improvements. Therefore, repair and rehabilitation improvements would comply and be consistent with the statutes, executive orders, and regulations addressed. Furthermore, HPHA would evaluate improvements planned to ensure the work is consistent with the designated categories of actions described under the project description section. Compliance with these factors evaluated are

further addressed in the attached Source Documentation Statutory Worksheet along with relevant technical reports/assessments.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Law, Authority, or Factor	Mitigation Measure
Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	*Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.* *Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.* *Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.* *Newell's shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.* *Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.* *Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers,*

	marshes, ponds, reservoirs, fish ponds, taro lo'i, impoundments or other vegetated water bodies. *1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols.* *2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.* *3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.* *In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.* *<u>Additional Measures</u>: The following additional measures would be implemented:* *1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.*
National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	*1. If ground disturbing activity is anticipated, HPHA must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation.* *a. Submit detailed plans, specifications and a detailed scope of work once the plans have been developed.* *b. Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation.* *c. Submit a TMK map showing the full extent of the project area within the affected parcel/s.* *d. Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area.* *e. Summary of land use history, such as previous intensive cultivation, grubbing or grading.*

	f. Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property. *In addition to these mitigation measures, the HPHA would enter into a Programmatic Agreement with the SHPO to address the implementation of future repair and rehabilitation improvements to State housing projects after the current Section 106 review process is completed and prior to the next environmental review process in approximately five years. Furthermore, should subsurface human remains or other traces of human activity greater than 50 years old be encountered during construction, all work in the vicinity of the find would immediately stop and the SHPD would be promptly notified. The treatment of any human remains that are encountered would be conducted in accordance with applicable requirements of Chapter 6E, Hawai'i Revised Statutes (Historic Preservation) and Chapter 13-300, Hawai'i Administrative Rules (**Rules of Practice and Procedure Relating to Burial Sites and Human Remains).**
Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	*1. Conduct a noise assessment study to better analyze existing vehicular noise effects on the project and identify appropriate measures that could be implemented to reduce noise levels.* *2. Consult with the City and County of Honolulu to discuss the rail project providing necessary noise mitigation measures due to the probable noise effects resulting from the operation of the rail system when completed.*

Determination:

☐ This categorically excluded activity/project converts to **EXEMPT** per Section 58.34(a)(12), because it does not require any mitigation for compliance with any listed statutes or authorities, nor requires any formal permit or license; **Funds may be committed and drawn down after certification of this part** for this (now) EXEMPT project; OR

☒ This categorically excluded activity/project cannot convert to Exempt status because one or more statutes or authorities listed at Section 58.5 requires formal consultation or mitigation. Complete consultation/mitigation protocol requirements, **publish NOI/RROF and obtain "Authority to Use Grant Funds"** (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR

☐ This project is not categorically excluded OR, if originally categorically excluded, is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

Preparer Signature: Scott Ezer Date: 12-17-15

Name/Title/Organization: Mr. Scott Ezer, Vice President
HHF Planners

Responsible Entity Agency Official Signature:

David Y Ige Date: APR 28 2016

Name/Title: Mr. David Y. Ige, Governor

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

PU‘UWAI MOMI (HA # 1026)

TMK: (1) 9-9-003:056, 064

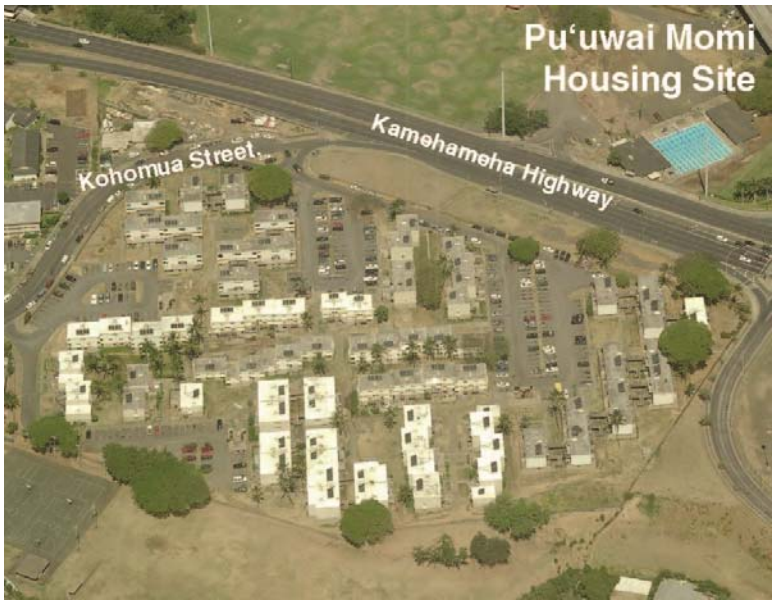
Hawai‘i Public Housing Authority (HPHA) Environmental Review

SOURCE DOCUMENTATION (SD) STATUTORY WORKSHEET

Site Visit Date: April 28, 2015
Prepared By: Joseph Tamburello

PROJECT DESCRIPTION

The Pu‘uwai Momi housing project is located in the community of ‘Aiea on the island of O‘ahu. ‘Aiea is located between the residential communities of Pearl City to the west, and Moanalua to the east.



The housing project site is situated just south of Aloha Stadium off of Kamehameha Highway with access provided by Kohomua Street. The property is bordered by Kamehameha Highway and the Makalapa Neighborhood Park to the west, apartment complexes to the south, and Salt Lake Blvd. to the north. This housing project is within HPHA’s Asset Management Project (AMP) 30 which includes four other housing projects.

Puuwai Momi was first occupied in 1969 and has a street address of 99-132 Kohomua Street. This property consists of 11.54 acres, and it is identified as Tax Map Key (TMK) No. (1) 9-9-003:056 & 064. The housing project is comprised of 27 two and three-story townhome buildings providing a total of 260 housing units having a range of one-, two-, three-, and four-bedrooms per unit. One single-story common area building houses administrative offices. The State land use designation for the property is the “Urban District,” and the City zoning for the site is A-2 Medium-density Apartment.

The project site is not located within a tsunami evacuation zone, and the entire site is located in Flood Zone X based upon the Flood Insurance Rate Map (Community Panel Number 15003C0331H, Revised November 5, 2014). Zone X is defined as areas determined to be outside the 0.2% annual chance floodplain.

The following figures in Exhibit A provide supporting information on this housing project:

Figure 1: Location Map
Figure 2: TMK Map
Figure 3: Site Map
Figure 4: Flood Map

COMPLIANCE FACTORS

I. AIRPORT CLEAR ZONES AND ACCIDENT POTENTIAL ZONES (24 CFR PART 51D)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable

The project is not within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: 24 CFR 51 (D).

Honolulu International Airport Master Plan - 2010 (August 1994), State Department of Transportation, Airports Division

II. COASTAL BARRIER RESOURCES (COASTAL BARRIER IMPROVEMENT ACT OF 1990 [16 USC 3501])

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable

The State of Hawai'i does not have any designated coastal barrier resource units.

SUPPORTING DOCUMENTATION:

Printed: U.S. Fish and Wildlife Service website at:

http://www.fws.gov/CBRA/Maps/Mapper.html

III. FLOOD INSURANCE (FLOOD DISASTER PROTECTION ACT OF 1973 AND NATIONAL FLOOD INSURANCE REFORM ACT OF 1994 [42 USC 4001-4128 AND 42 USC 5154a])

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program / No Mitigation or Formal Consultation Required

Project site is located in Zone X and is determined to have minimal flood hazard and is outside the 500-year flood zone. A field inspection and information obtained from the site manager confirmed no major flooding issues with project site. Based on the project description, the project includes no activities that would require further evaluation under this section. The project does not require flood insurance or is excepted from flood insurance. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with Flood Insurance requirements.

SUPPORTING DOCUMENTATION:

Field: A site visit of the project site did not visually show signs of prior flooding problems. A lower lying remnant State-owned parcel along Salt Lake Boulevard (north) along with the City-owned Makalapa Neighborhood Park located adjacently southeast receive stormwater runoff from portions of the of the project site. An interview with the maintenance supervisor also determined that no major ponding or flooding issues have occurred on the project site.

Printed: Flood Insurance Rate Map, City and County of Honolulu, Hawai'i Community Panel Number 15003C0331H, Revised November 5, 2014. A draft Physical Needs Assessment report (January 2015) for the project only identified minor isolated ponding at a few building courtyard areas likely due to undersized drainage inlets and partially clogged drain lines.

IV. CLEAN AIR ACT (40 CFR PARTS 6, 51, 93)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable

The State of Hawai'i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. EPA's Green Book for currently designated "nonattainment areas" as of June 2015. Planned rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.

SUPPORTING DOCUMENTATION:

Printed: *State of Hawai'i Annual Summary 2013 Air Quality Data*. State of Hawai'i, Department of Health, July 2014.

Web page: http://epa.gov/airquality/greenbk/. (Date accessed: 6/11/2015).

V. COASTAL ZONE MANAGEMENT ACT (16 USC 1451, SECTIONS 307 (C), (D))

CONTACT:
Mr. Leo R. Asuncion, Jr., AICP, Acting Director
Office of Planning
Department of Business, Economic Development & Tourism
State of Hawai'i
P.O. Box 2359
Honolulu, Hawai'i, 96804-2359

SUPPORTING DOCUMENTS

	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: Not Applicable

Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai'i's Coastal Zone Management (CZM) program.

SUPPORTING DOCUMENTATION:

Contact: In an e-mail to the Office of Planning (OP) dated July 27, 2015, the HPHA determined that the use of HUD funds for the implementation of repair and rehabilitation improvements does not require review for consistency with Hawai'i's CZM program. The OP confirmed this determination in an e-mail dated July 28, 2015 and included in the Appendices.

Experience: As part of past environmental reviews in December 2010, a letter from the OP dated July 20, 2005 determined that their review for consistency with Hawai'i's CZM program was not required. A copy of this letter is included in the Appendices.

VI. CONTAMINATION AND TOXIC SUBSTANCES (24 CFR PART 50.3 & 58.5(I)(2))

	SUPPORTING DOCUMENTS
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Project Not Affected / No Mitigation or Formal Consultation Required

There are no known hazardous materials, contamination, toxic chemicals, gasses or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gasses, etc.

SUPPORTING DOCUMENTATION:

Field: A site visit and interview conducted with the maintenance supervisor indicated no toxic or radioactive materials warranting further concern. A storage area by the project's maintenance office is used for paints, gasoline, and other possible hazardous materials, and was observed to be in acceptable condition and labeled with signage.

Study: Environmental Data Resources, Inc. (EDR), Inquiry Number 4237094.6s, dated March 18, 2015 conducted a search of available environmental records. EDR reviewed more than 25 federal and state regulatory databases for information regarding the treatment, storage, disposal and release of toxic chemicals at the site and within specific radii (generally 1 mile) of the site. A Detail Map within the EDR report documents those sites identified within 0.25 miles of the project site. The EDR report in Exhibit B includes the results of their research findings.

The project site was identified as having a small quantity hazardous waste handler within a category that generates less than 1,000 kilograms (kg) of hazardous waste during any month and accumulates less than 6,000 kg at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1,000 kg of hazardous waste at any time. No violations were found for this handler.

The Ford Island Naval Station is a U.S. Department of Defense (DOD) property located across of Kamehameha Highway that is identified as a National Priority List site (NPL). The NPL is the list of national priorities among the known releases or threatened releases of hazardous substances, pollutants, or contaminants throughout the U.S., and is intended primarily to guide the EPA in determining which sites warrant further investigation such as this naval station. The area east of the project site consists of residential subdivisions, but is identified as being formerly part of the Pearl Harbor Naval Station. However, this station is not identified as a Formerly Used Defense Site (FUDS) by the U.S. Army Corps of Engineers that is subject to cleanup actions for DOD generated contamination. The State's Aloha Stadium is situated about 0.25 miles away

from the project site to the north, and was identified as having an underground storage tank (diesel) that is permanently out of use and closed on 2002.

VII. ENDANGERED SPECIES (50 CFR PART 402)

CONTACT:
Mr. Loyal Mehrhoff, Field Supervisor
Pacific Islands Administrator
Fish and Wildlife Services
U.S. Department of the Interior
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawai'i 96813
Tel. #: 792-9400

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Adverse Effect Subject to Mitigation

The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received by the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices.

SUPPORTING DOCUMENTATION:

Contact: A letter from the HPHA dated July 24, 2015 was submitted to the Pacific Island Administrator for the FWS determining that repair and rehabilitation improvements that may be implemented using HUD funds for this housing project would have no likelihood of effect on any listed species or proposed species, or existing or proposed designated critical habitat subject to certain measures. Concurrence with this determination along with proposed minimization and avoidance measures was received from the FWS in a letter dated September 28, 2015 which is included in the Appendices. This housing project is subject to the following minimization and avoidance measures.

Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.

Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.

Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.

Newell's shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the

proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.

Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.

Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo‘i, impoundments or other vegetated water bodies.

1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS’s recommended Hawaiian Waterbird Survey Protocols.
2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.
3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.

In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.

Additional Measures: The following additional measures would be implemented:

1. No vegetation or soil disturbance shall be conducted outside a project’s previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.

Experience: The FWS was previously consulted as part of environmental reviews that were completed in 2005 (39 housing projects) and 2010 (70 housing projects) which supported the determination that repair and rehabilitation improvements would either: 1) have no likelihood of effect for certain housing projects; or 2) not likely adversely affect

federally listed species or critical habitat for certain housing projects subject to mitigative measures. A summary of these consultation efforts follows.

2005 Consultation: In a letter dated July 15, 2005, the Housing and Community Development Corporation of Hawai‘i (predecessor to the HPHA), determined that the implementation of minor repair and rehabilitation improvements for 39 housing projects would not have an adverse effect on federally-listed species or critical habitat. In a letter dated August 11, 2005, the FWS concurred with the HCDCH determination.

2010 Consultation: In a letter dated May 17, 2010, the HPHA informed the FWS that HUD funds would be used to immediately implement repair and rehabilitation improvements for six housing projects on O‘ahu and the island of Hawai`i. In a subsequent letter dated May 21, 2010, the FWS was informed that HPHA would be using HUD funds to implement minor repair and rehabilitation improvements for 64 projects throughout the State. In both letters, the HPHA determined that the repair and rehabilitation improvements were not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat. Based on further consultation and a meeting with FWS staff on June 24, 2010, the HPHA determined that repair and rehabilitation improvements for most of their housing projects would not likely adversely affect any listed or proposed species, or existing or proposed designated habitat, subject to various mitigative measures for certain housing projects.

VIII. EXPLOSIVE AND FLAMMABLE OPERATIONS (24 CFR PART 51C)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable

There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. Therefore, this project is located at an acceptable separation distance from above-ground explosive or flammable fuels or chemical containers. Furthermore, repair and rehabilitation improvements would not increase the number of people being exposed to hazardous operations, and thus do not meet the definition of a HUD-assisted project and are not subject to these regulations.

SUPPORTING DOCUMENTATION:

Field: Field inspection was limited to the exterior of residential buildings and associated structures for this housing project. No above-ground explosive or flammable material storage containers in excess of 100 gallons were observed at the site. Therefore, this renovated project area is located at an acceptable separation distance from above-ground explosive or flammable fuels or chemical containers.

Printed: 24 CFR Part 51, Subpart C. Per CFR Title 24 Part 51.201 (Definitions), rehabilitation and modernization improvements that do not increase the number of people being exposed to hazardous operations are not subject to these regulations, and do not meet the definition of a HUD-assisted project. Repair and rehabilitation improvements that may be implemented for this housing project are not planned to increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

IX. FARMLANDS PROTECTION (7 CFR PART 658)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable

The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by repair and rehabilitation improvements that may be implemented.

SUPPORTING DOCUMENTATION:

Field: The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. The property consists of an existing housing development within an urbanized area, and no farmlands would be impacted by repair and rehabilitation improvements that may be implemented.

Printed: The State land use designation for the property is the "Urban District," and the City zoning for the site is A-2 Medium-Density Apartment.

Web page: http://www.state.hi.us/dbedt/gis/miscmaps.htm (Date accessed: 6/11/2015). The State Land Use designation is Urban.

X. FLOODPLAIN MANAGEMENT (EXECUTIVE ORDER 11988, 24 CFR PART 55)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program / No Mitigation or Formal Consultation Required

Project site is located in Zone X and is determined to have minimal flood hazard, and is outside the 500-year flood zone. A field inspection and information obtained from the site manager confirmed no major flooding issues with project site.

SUPPORTING DOCUMENTATION:

Field: A site visit of the project site did not visually show signs of prior flooding problems. A lower lying remnant State-owned parcel along Salt Lake Boulevard (north) along with the City-owned Makalapa Neighborhood Park located adjacently southeast receive stormwater runoff from portions of the of the project site. An interview with the maintenance supervisor also determined that no major ponding or flooding issues have occurred on the project site.

Printed: Flood Insurance Rate Map, City and County of Honolulu, Hawai'i Community Panel Number 15003C0331H, Revised November 5, 2014. A draft Physical Needs Assessment report (January 2015) for the project only identified minor isolated ponding at a few building courtyard areas likely due to undersized drainage inlets and partially clogged drain lines.

XI. HISTORIC PRESERVATION (NATIONAL HISTORIC PRESERVATION ACT OF 1966; SECTIONS 106 AND 110; 36 CFR, PART 800)

CONTACT:

Ms. Suzanne Case, Chairperson
Department of Land and Natural Resources
State of Hawai'i
1151 Punchbowl Street
Honolulu, Hawai'i 96813
Tel. #: 587-0400

SUPPORTING DOCUMENTS	
X	Field
X	Contact
X	Printed
X	Experience
X	Study

DETERMINATION:

Status Category: No Adverse Effect on Historic Properties with Mitigation

Initially occupied in 1969, the project has not reached a 50-year milestone that could make it eligible for placement on the State and National Registers of Historic Places. An architectural inventory survey was conducted for this project in 2015, and determined that it does not meet the criteria for listing on the National Register of Historic Places (NRHP) due to changes to its historic character from renovations completed in 1995. In a letter dated December 7, 2015, the State Historic Preservation Officer (SHPO) provided a determination and set forth conditions for ground-disturbing activities. In responding to this letter, the HPHA concurred with the conditions set forth by the SHPO.

SUPPORTING DOCUMENTATION:

Field: A site visit of the project’s property did not identify any archaeological historic sites (e.g. heiau) or unique site features that could be distinguished as potential historic or archaeological sites. The property has been altered since its initial development with construction of buildings, driveways and parking lots, sidewalks, and other accessory facilities. An interview conducted with the maintenance supervisor indicated no known historic sites being present on the property.

Contact: Based on the findings and recommendations of the 2015 AIS, the HPHA submitted a letter to the SHPO dated August 20, 2015 regarding 28 housing projects, which is included in the Appendix. Of this total, 15 housing projects (including Pu‘uwai Momi) did not meet National Register eligibility criteria, therefore, a “no historic properties affected” determination was proposed for these repair and rehabilitation improvements. Repair and rehabilitation improvements for the other 13 housing projects were determined to meet National Register eligibility criteria and were proposed to have “no adverse effect” on historic properties subject to certain mitigative measures.

In a letter dated December 7, 2015, the SHPO determined that repair and rehabilitation improvements for this housing project would have “no adverse effect” on historic properties instead of “no historic properties” pursuant to NHPA Section 106 and subject to the following mitigative measures. In responding to this letter, the HPHA concurred with the conditions set forth by the SHPO. A copy of these letters is included in Exhibit C.

1. If ground disturbing activity is anticipated, HPHA must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation.

    a. Submit detailed plans, specifications and a detailed scope of work once the plans have been developed.

    b. Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation.

    c. Submit a TMK map showing the full extent of the project area within the affected parcel/s.

    d. Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area.

    e. Summary of land use history, such as previous intensive cultivation, grubbing or grading.

    f. Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

In addition to these mitigation measures, the HPHA would enter into a Programmatic Agreement with the SHPO to address the implementation of future repair and rehabilitation improvements to State housing projects after the current Section 106

review process is completed and prior to the next environmental review process in approximately five years. Furthermore, should subsurface human remains or other traces of human activity greater than 50 years old be encountered during construction, all work in the vicinity of the find would immediately stop and the SHPD would be promptly notified. The treatment of any human remains that are encountered would be conducted in accordance with applicable requirements of Chapter 6E, Hawai‘i Revised Statutes (Historic Preservation) and Chapter 13-300, Hawai‘i Administrative Rules (Rules of Practice and Procedure Relating to Burial Sites and Human Remains).

Printed: Research was conducted of SHPD’s on-line listing of properties on the State Register of Historic Places, and there were no historic properties identified within this project site. Research was conducted of National Park Service’s on-line listing of properties on the National Register of Historic Places and National Historic Landmarks, and this project site was not listed on both these National registers.

Experience: Prior consultations with the SHPD and SHPO were completed in 2011 as part of similar environmental reviews that included this housing project along with 56 other housing projects statewide. HPHA determined that these 57 housing projects would have no effect on historic properties in an April 19, 2011 letter. Concurrence of this determination from the SHPO was received in a May 31, 2011 letter. These documents are included in the Appendices.

Study: An architectural inventory survey was conducted by Fung Associates, Inc. evaluating 17 housing projects that have reached a 50-year milestone or are close to reaching this milestone. The purpose for this study was to evaluate certain housing projects previously evaluated along with other projects to determine whether they would be eligible for listing in the National Register of Historic Places. A copy of the report section covering this project is included in Exhibit C, and the entire report is included in the Appendices.

This study determined that the housing projects evaluated were significant based upon their role in the social history of Hawai‘i as being representative of the efforts of a Territory-wide and State-wide housing reform movement. Their architecture were also reflective of a type, style, method of construction, and type of materials utilized for this housing reform during the period in which they were constructed. However, certain housing projects were determined to not meet the criteria for listing in the National Register of Historic Places because of their loss of architectural integrity due to prior renovations.

The social history of the Pu‘uwai Momi housing project is associated with the redevelopment of the Hālawa area into a place dominated by highway interchanges and the Aloha Stadium, as well as the housing agency’s efforts to accommodate the low-income families displaced by this construction. The 1995 renovation of the project included historic windows replaced with bronzed anodized aluminum windows, replacement of original interior and exterior doors, and the complete renovation of kitchen and bathrooms. These renovations have compromised the historic character of this housing project, and therefore it does not meet the criteria for listing in the National Register of Historic Places. Consequently, repair and rehabilitation improvements should have no effect on historic properties.

XII. NOISE ABATEMENT CONTROL (24 CFR PART 51B)

SUPPORTING DOCUMENTS

X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Consultation with City Needed on Mitigation

This housing project is presently exposed to vehicular noise levels in the Normally Unacceptable category (above 65 Ldn but not exceeding 75 Ldn) along the State’s Kamehameha Highway and Salt Lake Boulevard based upon HUD’s Day-Night Level (DNL) calculator. With the future operation of the City and County of Honolulu’s (City) rail transit (now under construction) and increased traffic volumes along highways and roadways, this housing project is likely to be exposed to higher traffic noise volumes. Repair and rehabilitation improvements would not contribute to increased vehicles and exposure to traffic noise levels. However, appropriate sound attenuation measures should be provided in order to reduce exposure to noise volumes particularly for buildings located along these roadways. The following measures are identified to address this:

1. Conduct a noise assessment study to better analyze existing vehicular noise effects on the project and identify appropriate measures that could be implemented to reduce exposure to traffic noise levels.
2. Consult with the City to provide necessary noise mitigation measures as part of the rail project due to the probable noise effects resulting from operation of the rail system when completed.

SUPPORTING DOCUMENTATION:

Field: Two major roadways are present along the Pu‘uwai Momi housing project. These roads are Kamehameha Highway to the west and Salt Lake Boulevard (off-ramp) to the north. Kamehameha Highway is a multi-lane divided highway serving as a main transport corridor in the area, and was observed having a fairly high number of vehicles. The perimeter of the housing project is set back between 55 to 75 feet away from Kamehameha Highway and about 10 feet along a portion of the Salt Lake Boulevard off-ramp before that ramp turns away from the property. This housing project does not have noise barriers (e.g. solid wall) along the perimeter of the site bordering these roadways. As shown on photos of the area, only a chain link fence is provided along the highway and aluminum fencing along the off-ramp. As a result, several residential buildings, particularly those near the off-ramp, are exposed to higher levels of traffic noise.

Study: The HUD’s Day/Night Noise Level Electronic Assessment Tool (provided on HUD’s website) was used to estimate site day/night traffic noise levels associated with the housing project. The housing project site is approximately three miles from the Honolulu International Airport (HIA) and Hickam Air Force Base, falling within HUD’s assessment guidelines of 15 miles. Both airports have a joint-use agreement in place for use of the shared facilities, including runways. The noise exposure maps for HIA indicate that the

housing project does not lie within any of the identified noise exposure contours. The Honolulu Rail Transit Project corridor along Kamehameha Highway (under construction) will have the elevated rail pass by the Pu‘uwai Momi housing project, and come within 40 feet of the nearest residential buildings. Some railway noise mitigation along the tracks would be incorporated into the design of the fixed guideway structure as well as the train wheels themselves based upon the Final Environmental Impact Statement for this project. Traffic data (2013) obtained from the State Department of Transportation, Highways Division, for these two roads show a heavy volume of peak and non-peak traffic. Volume, distance to roads, vehicle type, average speed, etc. were obtained in order to input them into HUD’s assessment tool.

The tool estimated that this housing project is presently exposed to vehicular noise levels of 68.3 Ldn along Kamehameha Highway and 65.3 Ldn along the Salt Lake Boulevard off-ramp. With the future operation of the City’s rail transit (under construction) and increased traffic volumes along highways and roadways, this housing project would likely be exposed to higher traffic noise volumes. When accounting for the future rail project, the combined DNL was estimated by the tool to be 71.5 Ldn. These noise volumes fall within the Normally Unacceptable category (above 65 Ldn but not exceeding 75 Ldn), and some form of mitigation should be considered to reduce traffic noise exposure.

Repair and rehabilitation improvements would not increase the number of units or significantly increase the resident population, therefore, these activities would not contribute to increased vehicles and exposure to traffic noise levels. However, appropriate sound attenuation measures should be considered and provided in order to reduce exposure to traffic and rail noise volumes, particularly for buildings located along these roadways. Noise barriers such as walls or earthen berms, or a combination of both, are potential solutions to reducing the amount of noise that reaches the buildings. Modifying units to provide air-conditioning, instead of natural ventilation, is another possible measure. Consequently, the following measures are identified:

1. Conduct a noise assessment study to better analyze existing vehicular noise effects on the project and identify appropriate measures that could be implemented to reduce exposure to traffic noise levels. The HUD assessment tool is a simplified calculation based upon certain data inputs. Therefore, a more detailed noise study by an acoustical engineer would provide a more accurate analysis of noise impacts.
2. Consult with the City to provide necessary noise mitigation measures as part of the rail project due to the probable noise effects resulting from operation of the rail system when completed.

XIII. SOLE SOURCE AQUIFER (40 CFR PART 149)

SUPPORTING DOCUMENTS	
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable

The housing project is located within the O'ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation. However, if exceptional circumstances require compliance steps with any of these authorities, such compliance must be established and documented prior to approving the site-specific loan or grant.

SUPPORTING DOCUMENTATION:

Printed: This determination was based upon review of the Sole Source Aquifer Memorandum of 4/30/90 (Sections II.B.1 and II.B.2) and consideration of the type of rehabilitation related improvements that would be conducted for this project.

XIV. WETLANDS PROTECTION (EXECUTIVE ORDER 11990)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable

There are no known wetlands within the housing project's property, and therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: A site visit of the property did not identify any wetlands present.

Printed: Review of the U.S Fish and Wildlife data for wetlands:

http://www.fws.gov/wetlands/data/mapper.HTML (date accessed 6/11/2015)

XV. WILD AND SCENIC RIVERS ACT (16 USC 1271, SECTION 7 (B), (C))

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable

There are no Wild and Scenic Rivers in Hawai'i, which excludes this project from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: http://www.rivers.gov/map.php (Date accessed: 6/11/2015)

XVI. ENVIRONMENTAL JUSTICE (EXECUTIVE ORDER NO. 12898)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable

Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, repair and rehabilitation improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations. Repair and rehabilitation improvements should benefit low-income and minority populations living within this housing project.

SUPPORTING DOCUMENTATION:

Printed: Executive Order 12898

Web page: https://www.hudexchange.info/environmental-review/environmental-justice/ (Date accessed: 6/11/2015)

EXHIBIT A

Location Map, TMK Map, Site Map, Flood Map, and Site Photos

Source: State of Hawaiʻi GIS Data and Google Earth Pro - 1/12/2013

1,000 FT

HONOLULU RAIL TRANSIT

Transit Corridor

Transit Station

HPHA No. 1026 - Puʻuwai Momi (AMP 30)

Figure 1 - Project Location Map

ʻAiea, Oʻahu

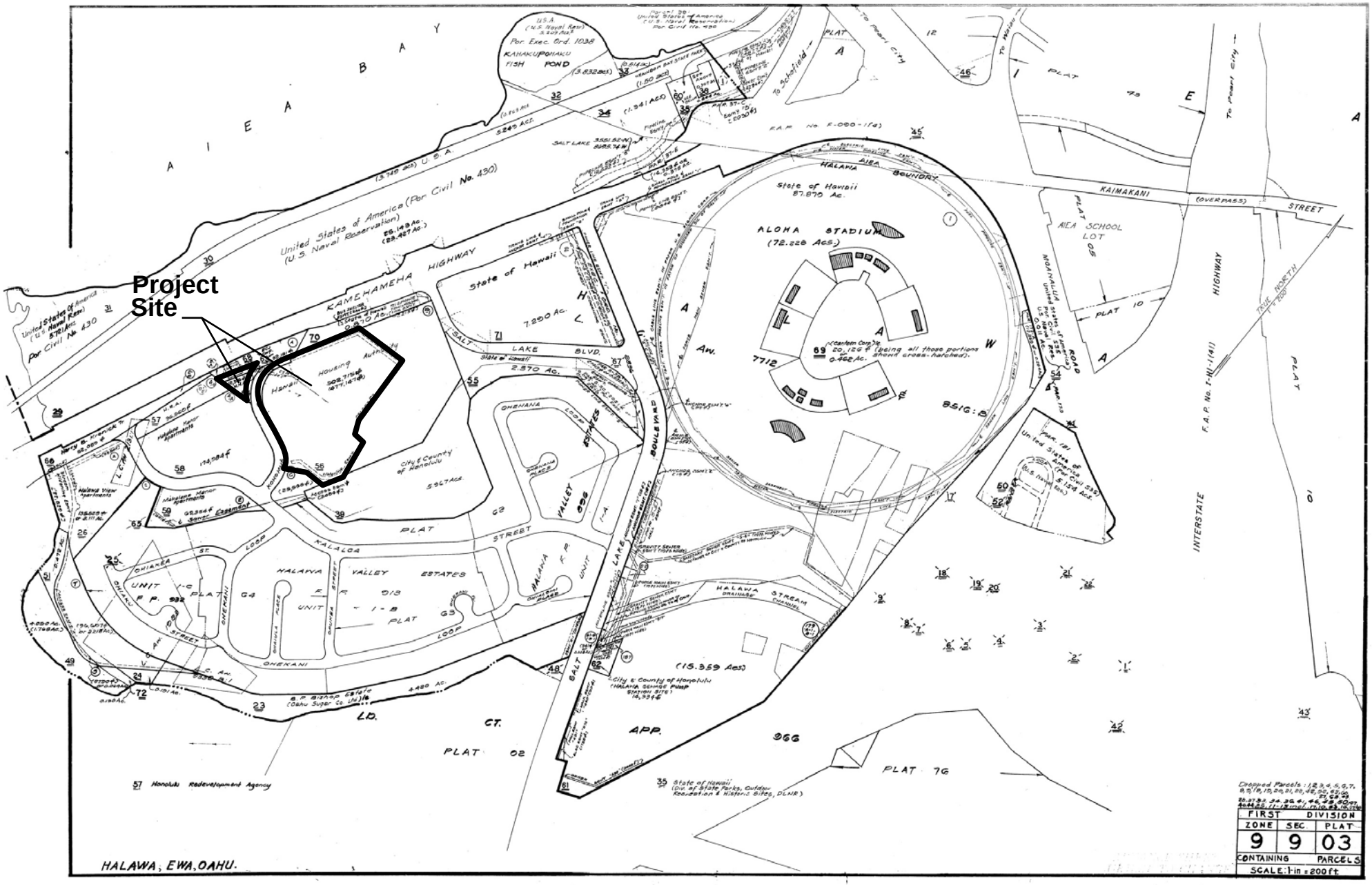
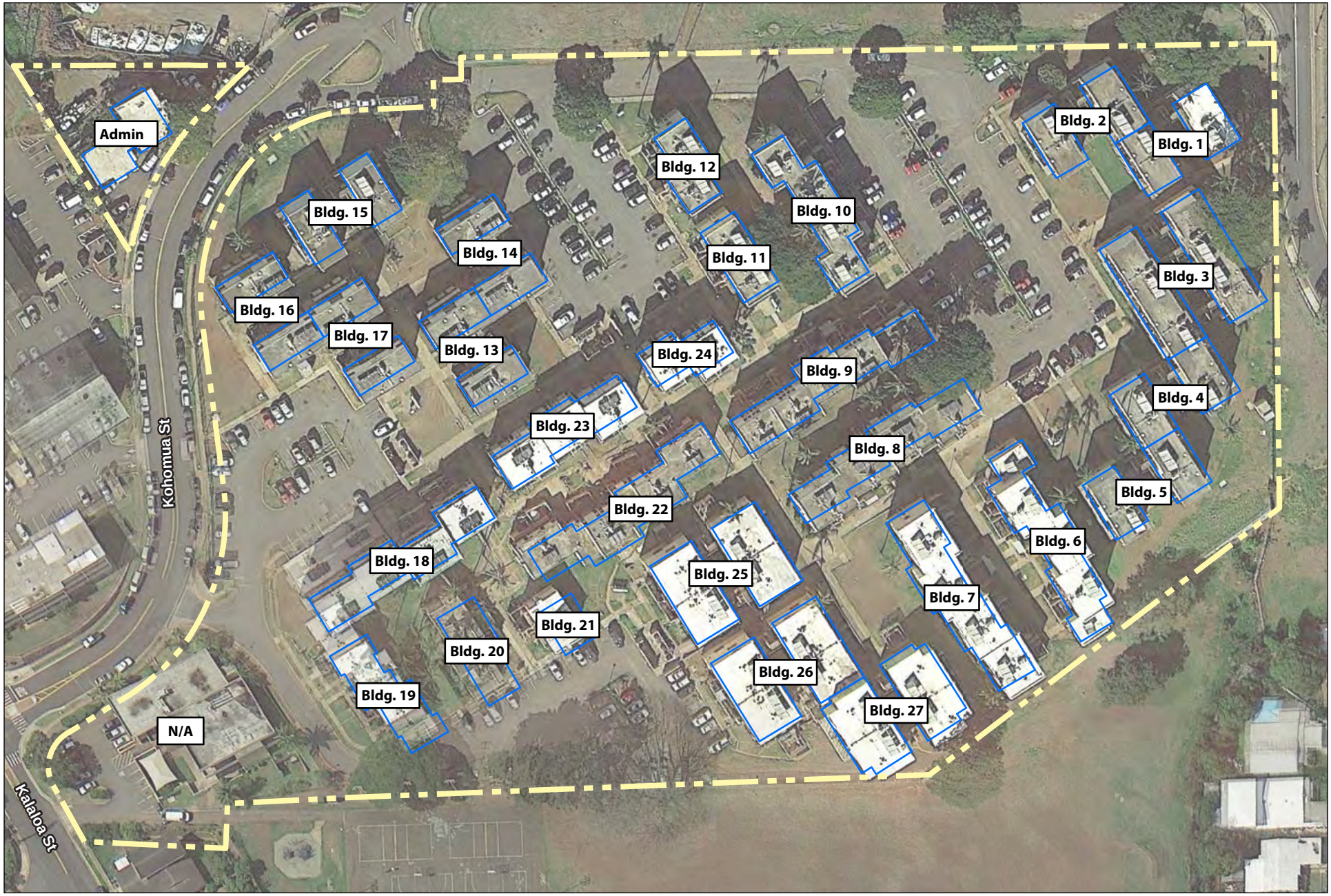


Figure 2 - TMK Map

'Aiea, O'ahu

HHF PLANNERS
places for people



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1026 - Pu'uwai Momi (AMP 30)

Figure 3 - Site Map

'Aiea, O'ahu

80 FT

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

LEGEND

Zone X - Outside the 0.2% Annual Chance of Flood

HPHA No. 1026 - Pu'uwai Momi (AMP 30)

Figure 4 - Flood Map

'Aiea, O'ahu

80 FT

HHF PLANNERS
places for people

West property line (facing south) adjacent to the rail transport right-of-way, along Kamehameha Highway

West property line (facing north) adjacent to the rail transport right-of-way

Construction area adjacent to Pu‘uwai Momi is fenced off

Construction area and hazards adjacent to Pu‘uwai Momi are secure and safeguarded, including this hole in the ground

North property line along Salt Lake Boulevard

North property line and intersection of Salt Lake Boulevard and Kamehameha Highway

East property line (facing north) along Makalapa Neighborhood Park

Flammable materials storage

Hazardous material storage

Abandoned vehicles will be removed according to AMP Manager

Broken refrigerators and other household appliances are removed from the site on a regular basis

Kamehameha Highway Guideway Construction Notification was posted to notify neighboring residents of the construction work in the Aiea area for the Honolulu rail transit project

EXHIBIT B

EDR Radius Map Report

Puuwai Momi
99-132 Kohomua St.
Aiea, HI 96701

Inquiry Number: 4237094.6s
March 18, 2015

The EDR Radius Map™ Report with GeoCheck®

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

FORM-LBE-KKT

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

99-132 KOHOMUA ST.
HONOLULU County, HI 96701

COORDINATES

Latitude (North):	21.3684000 - 21˚ 22' 6.24''
Longitude (West):	157.9345000 - 157˚ 56' 4.20''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	610468.6
UTM Y (Meters):	2363155.5
Elevation:	36 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	21157-C8 PEARL HARBOR, HI
Most Recent Revision:	Not reported
North Map:	21157-D8 WAIPAHU, HI
Most Recent Revision:	Not reported

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 7 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
PUUWAI MOMI 99-132 KOHOMUA STREET AIEA, HI 96701	RCRA-SQG FINDS	HIP000142158

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

Proposed NPL..... Proposed National Priority List Sites

EXECUTIVE SUMMARY

NPL LIENS..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL..... National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY..... Federal Facility Site Information listing

Federal CERCLIS NFRAP site List

CERC-NFRAP..... CERCLIS No Further Remedial Action Planned

Federal RCRA CORRACTS facilities list

CORRACTS..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG..... RCRA - Large Quantity Generators
RCRA-CESQG..... RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

LUCIS..... Land Use Control Information System

Federal ERNS list

ERNS..... Emergency Response Notification System

State and tribal landfill and/or solid waste disposal site lists

SWF/LF..... Permitted Landfills in the State of Hawaii

State and tribal leaking storage tank lists

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

INDIAN UST..... Underground Storage Tanks on Indian Land
FEMA UST..... Underground Storage Tank Listing

State and tribal voluntary cleanup sites

INDIAN VCP..... Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS..... Brownfields Sites

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

ODI..... Open Dump Inventory
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands

Local Lists of Hazardous waste / Contaminated Sites

US CDL..... Clandestine Drug Labs
CDL..... Clandestine Drug Lab Listing
US HIST CDL..... National Clandestine Laboratory Register

Local Land Records

LIENS 2..... CERCLA Lien Information

Records of Emergency Release Reports

HMIRS..... Hazardous Materials Information Reporting System
SPILLS..... Release Notifications
SPILLS 90..... SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR..... RCRA - Non Generators / No Longer Regulated
DOT OPS..... Incident and Accident Data
CONSENT..... Superfund (CERCLA) Consent Decrees
UMTRA..... Uranium Mill Tailings Sites
US MINES..... Mines Master Index File
TRIS..... Toxic Chemical Release Inventory System
TSCA..... Toxic Substances Control Act
FTTS..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing
SSTS..... Section 7 Tracking Systems
ICIS..... Integrated Compliance Information System
PADS..... PCB Activity Database System
MLTS..... Material Licensing Tracking System
RADINFO..... Radiation Information Database
RAATS..... RCRA Administrative Action Tracking System
RMP..... Risk Management Plans
UIC..... Underground Injection Wells Listing
DRYCLEANERS..... Permitted Drycleaner Facility Listing
AIRS..... List of Permitted Facilities
INDIAN RESERV..... Indian Reservations
SCRD DRYCLEANERS..... State Coalition for Remediation of Drycleaners Listing
US AIRS..... Aerometric Information Retrieval System Facility Subsystem

2020 COR ACTION..... 2020 Corrective Action Program List
PRP..... Potentially Responsible Parties
US FIN ASSUR..... Financial Assurance Information
EPA WATCH LIST..... EPA WATCH LIST
LEAD SMELTERS..... Lead Smelter Sites
COAL ASH DOE..... Steam-Electric Plant Operation Data
PCB TRANSFORMER..... PCB Transformer Registration Database
COAL ASH EPA..... Coal Combustion Residues Surface Impoundments List
Financial Assurance..... Financial Assurance Information Listing

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP..... EDR Proprietary Manufactured Gas Plants
EDR US Hist Auto Stat..... EDR Exclusive Historic Gas Stations

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF..... Recovered Government Archive Solid Waste Facilities List
RGA LUST..... Recovered Government Archive Leaking Underground Storage Tank
RGA HWS..... Recovered Government Archive State Hazardous Waste Facilities List

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: Also known as Superfund, the National Priority List database is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund program. The source of this database is the U.S. EPA.

A review of the NPL list, as provided by EDR, and dated 12/16/2014 has revealed that there is 1 NPL site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PEARL HARBOR NAVAL COMPLEX	***US NAVAL COMMAND***	***WNW 0 - 1/8 (0.041 mi.)***	***0***	***9***

Federal CERCLIS list

CERCLIS: The Comprehensive Environmental Response, Compensation and Liability Information System contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the CERCLIS list, as provided by EDR, and dated 10/25/2013 has revealed that there is 1 CERCLIS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PEARL HARBOR NAVAL COMPLEX	***US NAVAL COMMAND***	***WNW 0 - 1/8 (0.041 mi.)***	***0***	***9***

Federal institutional controls / engineering controls registries

US ENG CONTROLS: A listing of sites with engineering controls in place.

A review of the US ENG CONTROLS list, as provided by EDR, and dated 09/18/2014 has revealed that there is 1 US ENG CONTROLS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PEARL HARBOR NAVAL COMPLEX	***US NAVAL COMMAND***	***WNW 0 - 1/8 (0.041 mi.)***	***0***	***9***

US INST CONTROL: A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

A review of the US INST CONTROL list, as provided by EDR, and dated 09/18/2014 has revealed that there is 1 US INST CONTROL site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PEARL HARBOR NAVAL COMPLEX	***US NAVAL COMMAND***	***WNW 0 - 1/8 (0.041 mi.)***	***0***	***9***

State- and tribal - equivalent CERCLIS

SHWS: The State Hazardous Waste Sites records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. The data come from the Department of Health.

A review of the SHWS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 2 SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AIEA STREAM	***99-193 AIEA HEIGHTS DR***	***NNE 1/4 - 1/2 (0.331 mi.)***	***4***	***75***

Lower Elevation	Address	Direction / Distance	Map ID	Page
HICKAM POL ST20, SPILL SITE ST	KAMEHAMEHA HWY & MCGREW	NNW 1/2 - 1 (0.768 mi.)	15	88

State and tribal leaking storage tank lists

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Health's Active Leaking Underground Storage Tank Log Listing.

A review of the LUST list, as provided by EDR, and dated 03/02/2015 has revealed that there are 9 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NAVAL STATION - PEARL HARBOR -	***BLDG 16, TANK 101***	***S 1/4 - 1/2 (0.400 mi.)***	***7***	***82***
Facility Status: Site Cleanup Completed (NFA)				
PEARL HARBOR NAVAL STATION	***BLDG 363 TANK 18***	***S 1/4 - 1/2 (0.455 mi.)***	***11***	***84***
Facility Status: Site Cleanup Completed (NFA)				

Lower Elevation	Address	Direction / Distance	Map ID	Page
CHEVRON SS 208878 DBA SALT LAK	***4561 SALT LAKE BLVD***	***ESE 1/4 - 1/2 (0.377 mi.)***	***5***	***80***
Facility Status: Site Cleanup Completed (NFA)				
KUAHUA PENINSULA	***P.O. BOX 300 BLDG S-921***	***SW 1/4 - 1/2 (0.377 mi.)***	***6***	***81***
Facility Status: Site Cleanup Completed (NFA)				
KUAHUA PENINSULA	***P.O. BOX 300 / BLDG 130***	***WSW 1/4 - 1/2 (0.410 mi.)***	***A8***	***83***
Facility Status: Case Transferred to HEER (DERA)				
KUAHUA PENINSULA	***P.O. BOX 300 / BLDG 130***	***WSW 1/4 - 1/2 (0.410 mi.)***	***A9***	***83***
Facility Status: Case Transferred to HEER (DERA)				
FLEET ACCOUNTING & DISBURSING	***BLDG 499 & 199 TANK 44H***	***WSW 1/4 - 1/2 (0.417 mi.)***	***A10***	***84***
Facility Status: Site Cleanup Completed (NFA)				
FLEET AND INDUSTRIAL SUPPLY CT	***BLDG 480 TANK Y-DOCK AN***	***SW 1/4 - 1/2 (0.457 mi.)***	***12***	***85***
Facility Status: Site Cleanup Completed (NFA)				
GOODYEAR AUTO SERVICE CENTER 8	***4510 SALT LAKE BLVD***	***SE 1/4 - 1/2 (0.494 mi.)***	***13***	***85***
Facility Status: Site Cleanup Completed (NFA)				

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Health's Listing of Underground Storage Tanks.

A review of the UST list, as provided by EDR, and dated 03/02/2015 has revealed that there is 1 UST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ALOHA STADIUM	99-500 SALT LAKE BLVD	NNE 1/8 - 1/4 (0.238 mi.)	3	74

State and tribal institutional control / engineering control registries

ENG CONTROLS: A listing of sites with engineering controls in place.

A review of the ENG CONTROLS list, as provided by EDR, and dated 12/02/2014 has revealed that there is 1 ENG CONTROLS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AIEA STREAM	***99-193 AIEA HEIGHTS DR***	***NNE 1/4 - 1/2 (0.331 mi.)***	***4***	***75***

Voluntary Remediation Program and Brownfields sites with institutional controls in place.

A review of the INST CONTROL list, as provided by EDR, and dated 12/02/2014 has revealed that there is 1 INST CONTROL site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AIEA STREAM	***99-193 AIEA HEIGHTS DR***	***NNE 1/4 - 1/2 (0.331 mi.)***	***4***	***75***

State and tribal voluntary cleanup sites

VCP: Voluntary Response Program Sites.

A review of the VCP list, as provided by EDR, and dated 12/02/2014 has revealed that there is 1 VCP site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AIEA STREAM	***99-193 AIEA HEIGHTS DR***	***NNE 1/4 - 1/2 (0.331 mi.)***	***4***	***75***

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

DOD: Consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

A review of the DOD list, as provided by EDR, and dated 12/31/2005 has revealed that there are 2 DOD sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
FORD ISLAND NAVAL STATION ANNE		WNW 1/2 - 1 (0.593 mi.)	0	8
PEARL HARBOR NAVAL STATION		ESE 0 - 1/8 (0.002 mi.)	0	8

FUDS: The Listing includes locations of Formerly Used Defense Sites Properties where the US Army Corps Of Engineers is actively working or will take necessary cleanup actions.

A review of the FUDS list, as provided by EDR, and dated 06/06/2014 has revealed that there is 1 FUDS site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
AIEA MILITARY RESERVATION		N 1/2 - 1 (0.616 mi.)	14	88

ROD: Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid the cleanup.

A review of the ROD list, as provided by EDR, and dated 11/25/2013 has revealed that there is 1 ROD site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PEARL HARBOR NAVAL COMPLEX	***US NAVAL COMMAND***	***WNW 0 - 1/8 (0.041 mi.)***	***0***	***9***

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Cleaners: EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR US Hist Cleaners list, as provided by EDR, has revealed that there is 1 EDR US Hist Cleaners site within approximately 0.25 miles of the target property.

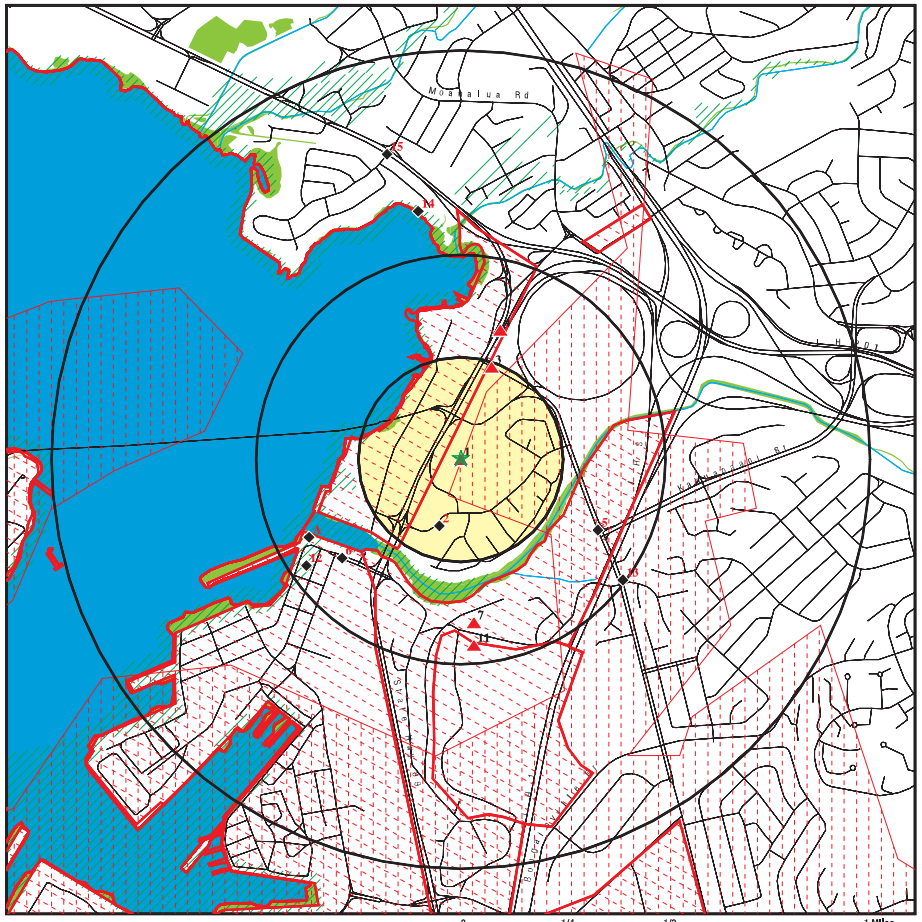
Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	99009 KALALOA ST	SSW 1/8 - 1/4 (0.170 mi.)	2	74

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 9 records.

Site Name	Database(s)
PHFISC, BUILDING 4 & OPEN STORAGE	SHWS, ENG CONTROLS, INST CONTROL
NAVY REGION HAWAII - MAKALAPA COMP	RCRA-TSDF, CERCLIS, RCRA-CESQG
AIEA HEIGHTS TANKS	SHWS, SPILLS
HICKAM POL ST13, SPILL SITE ST13	SHWS, SPILLS, INST CONTROL
PHNC, AIEA LAUNDRY BUILDING 436	SHWS, SPILLS
HICKAM POL ST08, SPILL SITE ST08	SHWS
HICKAM POL ST11, SPILL SITE ST11	SHWS
HICKAM POL ST15, SPILL SITE ST15	SHWS
CAMP H.M. SMITH	CERC-NFRAP, RCRA-SQG, HAZNET

OVERVIEW MAP - 4237094.6S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Puuwai Momi ADDRESS: 99-132 Kohomua St. Alea HI 96701 LAT/LONG: 21.3684 / 157.9345	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.6s DATE: March 18, 2015 7:43 am

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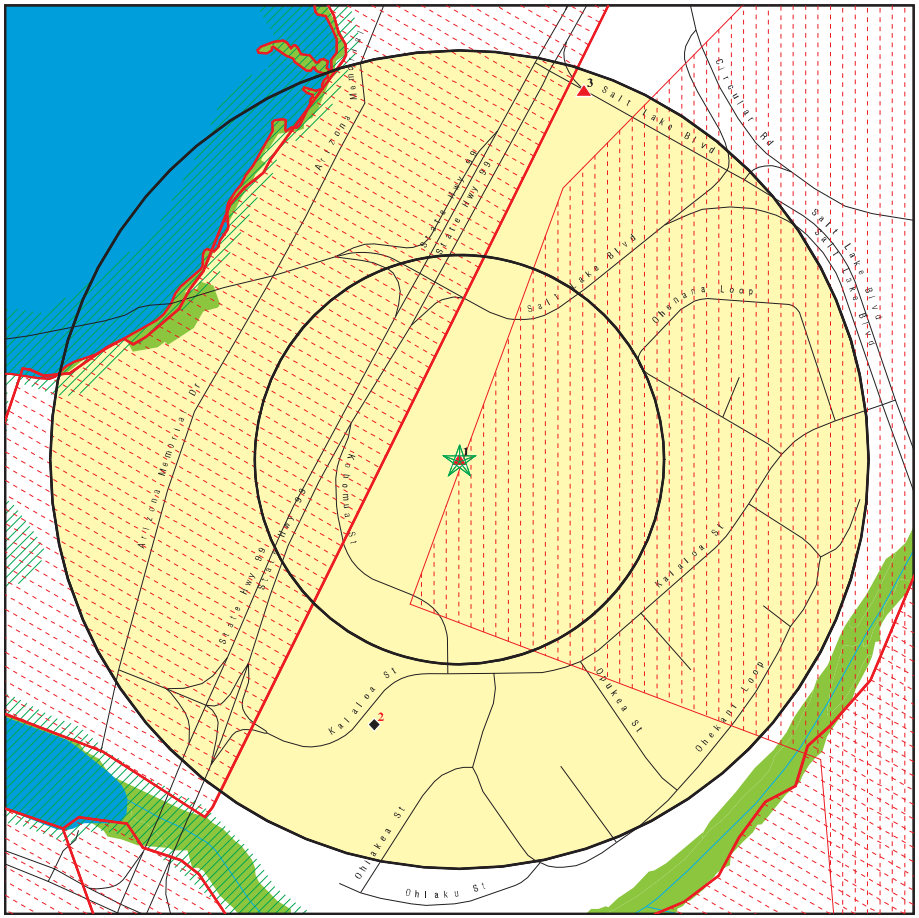
DETAIL MAP - 4237094.6S



0 1/16 1/8 1/4 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		1	0	0	0	NR	1
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		1	0	0	NR	NR	1
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250	1	0	0	NR	NR	NR	1
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		1	0	0	NR	NR	1
US INST CONTROL	0.500		1	0	0	NR	NR	1
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
SHWS	1.000		0	0	1	1	NR	2
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	0	9	NR	NR	9
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250		0	1	NR	NR	NR	1

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		0	0	1	NR	NR	1
INST CONTROL	0.500		0	0	1	NR	NR	1
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	1	NR	NR	1
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		1	0	0	1	NR	2
FUDS	1.000		0	0	0	1	NR	1
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		1	0	0	0	NR	1
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP	1	NR	NR	NR	NR	NR	1
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		0	0	NR	NR	NR	0
EDR US Hist Cleaners	0.250		0	1	NR	NR	NR	1
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
RGA HWS	TP		NR	NR	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

1 Target Property **Actual: 36 ft.**

PUUWAI MOMI
99-132 KOHOMUA STREET
AIEA, HI 96701

RCRA-SQG **1016675602**
FINDS **HIP000142158**

RCRA-SQG:
Date form received by agency: 04/24/2014
Facility name: PUUWAI MOMI
Facility address: 99-132 KOHOMUA STREET
AIEA, HI 96701
EPA ID: HIP000142158
Mailing address: KOHOMUA STREET
AIEA, HI 96701
Contact: MARY JANE P HALL-RAMIRO
Contact address: KOHOMUA STREET
AIEA, HI 96701
Contact country: US
Contact telephone: (808) 483-2550
Contact email: MARYJANE.P.HALL-RAMIRO@HAWAII.GOV
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: HAWAII PUBLIC HOUSING AUTHORITY
Owner/operator address: N. SCHOOL STREET
HONOLULU, 96817
Owner/operator country: US
Owner/operator telephone: (808) 832-6020
Legal status: State
Owner/Operator Type: Owner
Owner/Op start date: 07/15/1969
Owner/Op end date: Not reported

Owner/operator name: HAWAII PUBLIC HOUSING AUTHORITY
Owner/operator address: N. SCHOOL STREET
HONOLULU, 96817
Owner/operator country: US
Owner/operator telephone: (808) 832-6020
Legal status: State
Owner/Operator Type: Operator
Owner/Op start date: 07/15/1969
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No

PUUWAI MOMI (Continued) **1016675602**

User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110059769095

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

DOD Region WNW 1/2-1 3129 ft.

FORD ISLAND NAVAL STATION ANNEX
FORD ISLAND NAVAL STATION (County), HI

DOD **CUSA147750**
N/A

DOD:
Feature 1: Navy DOD
Feature 2: Not reported
Feature 3: Not reported
URL: Not reported
Name 1: Ford Island Naval Station Annex
Name 2: Not reported
Name 3: Not reported
State: HI
DOD Site: Yes
Tile name: HIHONOLULU

DOD Region ESE < 1/8 12 ft.

PEARL HARBOR NAVAL STATION
PEARL HARBOR NAVAL STATIO (County), HI

DOD **CUSA147748**
N/A

DOD:
Feature 1: Navy DOD
Feature 2: Not reported
Feature 3: Not reported
URL: Not reported
Name 1: Pearl Harbor Naval Station
Name 2: Not reported
Name 3: Not reported
State: HI
DOD Site: Yes
Tile name: HIHONOLULU

NPL Region WNW < 1/8 218 ft. | **PEARL HARBOR NAVAL COMPLEX**
US NAVAL COMMAND
PEARL HARBOR, HI 96860 | **NPL, CERCLIS, US ENG CONTROLS, US INST CONTROL, ROD, PRP** | **1000707626**
HI4170090076

NPL:
EPA ID: HI4170090076
EPA Region: 09
Federal: Y
Final Date: 1992-10-14 00:00:00

Category Details:
NPL Status: Currently on the Final NPL
Category Description: Surface Water Adjacent To Site-Other-Unknown
Category Value: WETLAND

Site Details:
Site Name: PEARL HARBOR NAVAL COMPLEX
Site Status: Final
Site Zip: 96860
Site City: PEARL HARBOR
Site State: HI
Federal Site: Yes
Site County: HONOLULU
EPA Region: 09
Date Proposed: 07/29/91
Date Deleted: Not reported
Date Finalized: 10/14/92

Substance Details:
NPL Status: Currently on the Final NPL
Substance ID: Not reported
Substance: Not reported
CAS #: Not reported
Pathway: Not reported
Scoring: Not reported

NPL Status: Currently on the Final NPL
Substance ID: A023
Substance: DDE
CAS #: 72-55-9
Pathway: SURFACE WATER PATHWAY
Scoring: 3

NPL Status: Currently on the Final NPL
Substance ID: A046
Substance: POLYCHLORINATED BIPHENYLS
CAS #: 1336-36-3
Pathway: SURFACE WATER PATHWAY
Scoring: 3

NPL Status: Currently on the Final NPL
Substance ID: A059
Substance: BROMODICHLOROMETHANE
CAS #: 75-27-4
Pathway: AIR PATHWAY

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Scoring: 3

NPL Status: Currently on the Final NPL
Substance ID: A059
Substance: BROMODICHLOROMETHANE
CAS #: 75-27-4
Pathway: SOIL EXPOSURE PATHWAY
Scoring: 4

NPL Status: Currently on the Final NPL
Substance ID: C049
Substance: ETHYLBENZENE
CAS #: 100-41-4
Pathway: SOIL EXPOSURE PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: C315
Substance: CHROMIC ACID
CAS #: 7738-94-5
Pathway: NO PATHWAY INDICATED
Scoring: 1

NPL Status: Currently on the Final NPL
Substance ID: C320
Substance: CHROMIUM, HEXAVALENT
CAS #: 18540-29-9
Pathway: NO PATHWAY INDICATED
Scoring: 1

NPL Status: Currently on the Final NPL
Substance ID: C460
Substance: MERCURY
CAS #: 7439-97-6
Pathway: SURFACE WATER PATHWAY
Scoring: 4

NPL Status: Currently on the Final NPL
Substance ID: C497
Substance: STODDARD SOLVENT
CAS #: 8052-41-3
Pathway: NO PATHWAY INDICATED
Scoring: 1

NPL Status: Currently on the Final NPL
Substance ID: C517
Substance: XYLENE, M-
CAS #: 108-38-3
Pathway: SOIL EXPOSURE PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: C525
Substance: BROMACIL
CAS #: 314-40-9
Pathway: NO PATHWAY INDICATED
Scoring: 1

PEARL HARBOR NAVAL COMPLEX (Continued) **1000707626**

NPL Status: Currently on the Final NPL
Substance ID: C573
Substance: DIAZINON
CAS #: 333-41-5
Pathway: NO PATHWAY INDICATED
Scoring: 1

NPL Status: Currently on the Final NPL
Substance ID: D004
Substance: ARSENIC
CAS #: 7440-38-2
Pathway: GROUND WATER PATHWAY
Scoring: 3

NPL Status: Currently on the Final NPL
Substance ID: P037
Substance: DIELDRIN
CAS #: 60-57-1
Pathway: NO PATHWAY INDICATED
Scoring: 1

NPL Status: Currently on the Final NPL
Substance ID: U028
Substance: BIS(2-ETHYLHEXYL)PHTHALATE
CAS #: 117-81-7
Pathway: SURFACE WATER PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: U036
Substance: CHLORDANE
CAS #: 57-74-9
Pathway: SURFACE WATER PATHWAY
Scoring: 3

NPL Status: Currently on the Final NPL
Substance ID: U037
Substance: CHLOROBENZENE
CAS #: 108-90-7
Pathway: AIR PATHWAY
Scoring: 3

NPL Status: Currently on the Final NPL
Substance ID: U037
Substance: CHLOROBENZENE
CAS #: 108-90-7
Pathway: SURFACE WATER PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: U061
Substance: DDT
CAS #: 50-29-3
Pathway: SURFACE WATER PATHWAY
Scoring: 3

NPL Status: Currently on the Final NPL

PEARL HARBOR NAVAL COMPLEX (Continued) **1000707626**

Substance ID: U079
Substance: TRANS-DICHLOROETHYLENE, 1,2-
CAS #: 156-60-5
Pathway: AIR PATHWAY
Scoring: 3

NPL Status: Currently on the Final NPL
Substance ID: U079
Substance: TRANS-DICHLOROETHYLENE, 1,2-
CAS #: 156-60-5
Pathway: GROUND WATER PATHWAY
Scoring: 3

NPL Status: Currently on the Final NPL
Substance ID: U079
Substance: TRANS-DICHLOROETHYLENE, 1,2-
CAS #: 156-60-5
Pathway: SOIL EXPOSURE PATHWAY
Scoring: 4

NPL Status: Currently on the Final NPL
Substance ID: U210
Substance: TETRACHLOROETHENE
CAS #: 127-18-4
Pathway: AIR PATHWAY
Scoring: 3

NPL Status: Currently on the Final NPL
Substance ID: U210
Substance: TETRACHLOROETHENE
CAS #: 127-18-4
Pathway: SOIL EXPOSURE PATHWAY
Scoring: 4

NPL Status: Currently on the Final NPL
Substance ID: U220
Substance: TOLUENE
CAS #: 108-88-3
Pathway: SOIL EXPOSURE PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: U228
Substance: TRICHLOROETHYLENE (TCE)
CAS #: 79-01-6
Pathway: SOIL EXPOSURE PATHWAY
Scoring: 2

Summary Details:

Conditions at Proposal July 29, 1991): The Pearl Harbor Naval Complex occupies at least 6,300 acres in Pearl Harbor on the Island of Oahu, Honolulu County, Hawaii. Land around the complex supports agriculture, aquaculture, industry, urban,and commercial uses. The complex consists of these major facilities: Naval Shipyard, Naval Supply Center, Naval Station, Submarine Base, Public Works Center, Inactive Ships, and Navy Maga ine Lualualei Westlock Branch and Waipio Peninsula).The Pearl Harbor Naval Complex began operation in 1901 when the Navy received an appropriation to acquire land for

PEARL HARBOR NAVAL COMPLEX (Continued) **1000707626**

a naval station. After the attack by the Japanese on December 7, 1941, industrial activity at the complex skyrocketed, reaching 24,000 civilians by mid-1943. After World War II, activity declined and has fluctuated with the Navy s requirements. In 1983, the Navy identified 30 potential ha ardous waste sources within the six facilities. Subsequently, an additionalsource was identified. The 31 sources include unlined landfills, pesticide disposal pits, chromic acid disposal areas, PCB disposal areas, mercury-contaminated harbor sediments, leaking underground solvent tanks, waste oil facilities, and numerous other types of sources resulting from industrial activities at the complex. Six of the sources were initially evaluated, based primarily on toxicity of contaminants present, availability of waste quantity information, sampling results, affected populations, and a documented release of a ha ardous substance. Many investigations have found ha ardous substances -- including mercury, chromium, PCBs, pesticides, trichloroethene, trans-1,2-dichloroethene, and other volatile organic compounds -- in soil in the six areas, thus exposing workers on the site less than 100) to potential contamination. Many of these chemicals have also been found at the remaining 25 areas identified to date.) Tetrachloroethene was found15.2 feet below ground surface in one area. Soils beneath the site are permeable, facilitating movement of contaminants into ground water. Approximately 110,700 people obtain drinking water from wells within 2 miles of the six sources.In 1988, the Navy detected bis 2-ethylhexyl)phthalate in sediment samples taken from a National Wildlife Refuge that borders an abandoned Navy landfill. The refuge contains habitat for four Federally endangered species, as well as wetlands. Pearl Harbor and nearby portions of the Pacific Ocean contain recreational and commercial fisheries, habitat for endangered species, wetlands, and water-contact recreation areas. The volatile organic compounds in on-site soil also create apotential for gases to be released to the atmosphere. Status October 1992): EPA and the Navy are planning to negotiate a Federal Facilities Agreement under CERCLA Section 120 to cover future activities at the site. The descriptionof the site release) is based on information available at the time the site was scored. The description may change as additional information is gathered on the sources and extent of contamination. See FR 5600, February 11, 1991 or subsequentFR notices.)

Site Status Details:

NPL Status:	Final
Proposed Date:	07/29/1991
Final Date:	10/14/1992
Deleted Date:	Not reported

Narratives Details:

NPL Name:	PEARL HARBOR NAVAL COMPLEX
City:	PEARL HARBOR
State:	HI

CERCLIS:

Site ID:	0904481
EPA ID:	HI4170090076
Facility County:	HONOLULU
Short Name:	PEARL HARBOR NAVAL COMPLE
Congressional District:	1
IFMS ID:	091S
SMSA Number:	Not reported
USGC Hydro Unit:	Not reported

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Federal Facility:	Federal Facility
DMNSN Number:	0.00000
Site Orphan Flag:	N
RCRA ID:	Not reported
USGS Quadrangle:	Not reported
Site Init By Prog:	Not reported
NFRAP Flag:	Not reported
Parent ID:	Not reported
RST Code:	Not reported
EPA Region:	09
Classification:	Not reported
Site Settings Code:	SU
NPL Status:	Currently on the Final NPL
DMNSN Unit Code:	Not reported
RBRAC Code:	Not reported
RResp Fed Agency Code:	USNV
Non NPL Status:	Not reported
Non NPL Status Date:	/ /
Site Fips Code:	15003
CC Concurrence Date:	/ /
CC Concurrence FY:	Not reported
Alias EPA ID:	Not reported
Site FUDS Flag:	Not reported

CERCLIS Site Contact Name(s):

Contact ID:	9000059.00000
Contact Name:	Eugenia Chow
Contact Tel:	(415) 972-3160
Contact Title:	Site Assessment Manager (SAM)
Contact Email:	Not reported
Contact ID:	9270722.00000
Contact Name:	Christopher Lichens
Contact Tel:	(415) 972-3149
Contact Title:	Remedial Project Manager (RPM)
Contact Email:	Not reported
Contact ID:	9271193.00000
Contact Name:	Judy Huang
Contact Tel:	(415) 972-3681
Contact Title:	Remedial Project Manager (RPM)
Contact Email:	Not reported

CERCLIS Site Alias Name(s):

Alias ID:	101
Alias Name:	PEARL HARBOR NAVAL STATION
Alias Address:	Not reported
	HI
Alias ID:	201
Alias Name:	PEARL HARBOR NAVAL SUPPLY CTR
Alias Address:	Not reported
	HI
Alias ID:	301
Alias Name:	PEARL HARBOR NAVY PUBLIC WORKS CTR
Alias Address:	Not reported
	HI

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Alias ID: 401
Alias Name: PEARL HARBOR PWC MAKALAPA PESTICIDE PIT
Alias Address: Not reported
HI
Alias ID: 501
Alias Name: NAVAL SUBMARINE BASE
Alias Address: Not reported
HI
Alias ID: 601
Alias Name: PEARL HARBOR NAVAL SHIPYARD
Alias Address: Not reported
HI
Alias ID: 602
Alias Name: PEARL HARBOR NAVAL COMPLEX
Alias Address: US NAVAL STATION
TRIPLER AMC, HI 96859
Alias ID: 603
Alias Name: PEARL HARBOR NAVAL COMPLEX
Alias Address: US NAVAL STATION
PEARL HARBOR, HI 96782
Alias ID: 9270362
Alias Name: PEARL HARBOR NAVAL COMPLEX
Alias Address: Not reported
PEARL HARBOR, HI 92101-5001
Alias ID: 601
Alias ID: 101
Alias ID: 501
Alias ID: 301
Alias ID: 401
Alias ID: 201
Alias Comments: PREVIOUS EPA ID# AZD 981 416 977PREVIOUS EPA ID# AZD 981 416
977PREVIOUS EPA ID# AZD 981 416 977PREVIOUS EPA ID# AZD 981 416
977PREVIOUS EPA ID# AZD 981 416 977PREVIOUS EPA ID# AZD 981 416 977
Site Description: OU 00: Pearl Harbor Naval Complex (PHNC) encompasses 12,600 acres of land and water on the southern shore of the island of Oahu, Hawaii. PHNC has been subdivided into 18 geographic study areas (GSAs), of which eight GSAs are discussed in this record of decision (ROD) and include: Ford Island, Halawa-Main gate, Naval Housing, Public Works Center (PWC) Main Complex, Pearl Harbor Naval Shipyard, Iroquois Point, Waipio Peninsula, and West Loch.
Ford Island is a 450-acre island surrounded by water, located within Pearl Harbor. Twenty-two transformer sites are located in this GSA: -TA01: Located at Building S286, the site includes the surrounding area of vegetation to the east, concrete to the southeast, and an asphalt patch to the west. -TC01: The site includes a concrete pad located between Buildings 11 and S-32, and its surrounding area. -TC04: This site consists of Building S257 and the surrounding area, which consists of grass, old asphalt, and gravel. -TC06D: The site is located across the street from Building 54 and includes an elevated concrete pad surrounded by pavement and grass. -TC07D: This location consists of Building S258 and the surrounding area including grass and concrete pavement. -TD01: The site is located near Wasp Boulevard and includes the transformer area and surrounding concrete pavement and grass. -TD02: Located adjacent to Building 169. The fenced site includes the transformer pad and surrounding grass. -TD03: The site is adjacent to Building 164 and includes the transformer pad and surrounding area, including grass on the north side of the transformer. -TD05: The site includes Building 176 and surrounding grass and concrete sidewalk. -TD07: This site includes Building 175 and surrounding grass and a concrete sidewalk. -TF01/TF01D: This

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collocated site adjacent to Building 77 includes the concrete pads and surrounding grass and pavement. -TF04: The site includes Building 208 and its surrounding area, including grass to the southwest. -TF05: This site includes Building S295, the concrete sidewalk to the east, and grass to the south and north. -TF07: The site is adjacent to Building 37 and consists of the concrete pad and surrounding grass and concrete. -TF09: This site includes Building S99 and surrounding concrete pavement. -TF17: The site includes Building 75 and surrounding gravel and concrete sidewalk. -TF18: The site is adjacent to Building 87 and includes the concrete pad and surrounding area (a concrete driveway is located northwest, and grass is located southwest). -TG01: This site includes Building S253 and surrounding grass on the north, east, and south sides. -TG03: This site includes Building S254, the surrounding concrete slab to the west and north, and grass to the north and east. Yorktown Boulevard is to the south. -TG06: The site is adjacent to Building 453 and includes a concrete pad and surrounding asphalt. -TI03: The site includes Building S251 and the surrounding area. A concrete slab is located south and southwest of the building; the concrete slab is surrounded by grass. -TI04D: The site includes the area adjacent to Langley Avenue and surrounding concrete. Grass is beyond the concrete. Halawa-Main Gate encompasses the region west of the shoreline of Pearl Harbor to Kamehameha Highway. The 10 transformer sites located in this GSA are listed below: -Former Building 653: The site includes Building 653 and its surrounding soil and grass. -H2: The site is adjacent to Building 1377 and includes a concrete pad surrounded by gravel and grass. -H3: The site is near Building 1333 and includes a concrete pad surrounded by grass and soil and a concrete sidewalk. -J12: The site is adjacent to Building 1613 and includes a concrete pad surrounded by grass and soil. -J16: The site includes Building 662 and surrounding concrete and soil. -J17: The site includes Building S-967, which is located on a concrete pier, and surrounding asphalt and concrete. -J21: This site includes a concrete block building surrounded by soil, vegetation, and gravel. -J29: The site includes a concrete pad surrounded by soil and vegetation and a concrete fence. -K15: The site is next to Building 427 and includes the transformer area and surrounding soil and vegetation. -K20: This site is next to Building 484 and includes the transformer area and surrounding asphalt, vegetation, and gravel. Naval Housing is located between Kamehameha Highway and the H-1 freeway. One transformer site is located in this GSA: -M3: This site includes an outdoor concrete pad surrounded by a fence. The fenced area is bordered by soil on three sides and asphalt on the remaining side. PWC Main Complex is located on the east side of the H-1 freeway in a residential and commercial area of PHNC. One transformer site is located in this GSA: -M5: This site consists of an outdoor concrete pad surrounded by a fence and soil and asphalt drive. Pearl Harbor Naval Shipyard is located within PHNC. It is bounded by the waters of Pearl Harbor on its north and western boundaries and by Hickam Air Force Base to the south. Seven transformer sites are located in this GSA: -A4: The site consists of an outdoor concrete pad and surrounding fence, soil, and grass. -A8: This site consists of an outdoor concrete pad and surrounding asphalt to a fence line, with grass outside the fence. -C8: The site is adjacent to Building 1673 and consists of an outdoor concrete pad and surrounding asphalt. -C13: This site consists of an outdoor concrete pad and surrounding fence. The fence is surrounded by soil. -E11: The site includes Building 53 and surrounding asphalt and concrete. -E25: This site includes an outdoor concrete pad surrounded by asphalt and a fence. -K: This site includes Building 42 and surrounding gravel and grass. Iroquois Point is located on the western side of Pearl Harbor near the mouth of the harbor. It is the location of the Puuloa military housing area. One transformer site is located in this GSA: -I4: The site includes an outdoor concrete pad and surrounding area that is fenced off from the general public. Waipio Peninsula separates

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the Middle and West Lochs of Pearl Harbor. One transformer site is located in this GSA: -W11: The site consists of an outdoor concrete pad and surrounding gravel and fence. West Loch is located on the western side of Pearl Harbor. Two transformer sites are located in this GSA: -FS11: The site includes an outdoor concrete pad surrounded by a tall, concrete brick wall, which is surrounded by grass. -Former Building 33: The site includes Building 33 and its surrounding concrete and soil. Available historical records at PHNC indicate that PCBs were present in the dielectric fluid used in many of the former and existing transformers. The PCB-containing fluids may have been released to concrete surfaces or surface soil by leaking directly from the transformers or during regular transformer testing and maintenance. Transformer maintenance included periodic sampling to test the dielectric properties of the transformer fluid. Once testing was completed, the fluid was reportedly poured onto the adjacent areas, such as the grass, concrete pad, or building wall. All active transformers at PHNC have been replaced or retro filled with non-PCB-containing dielectric fluid. The following investigations were completed for the 45 transformer sites at PHNC: An initial assessment study (IAS) was conducted in 1983 at 30 potentially contaminated sites at PHNC. The assessment of sites was based on records of past hazardous waste storage operations and disposal practices. The study concluded that three sites warranted further investigation to assess potential long-term impacts to human health or the environment. Sampling was not included in the IAS. A site inspection (SI) was conducted at PHNC in December 1990 to inspect 20 transformer locations. The SI identified PCB-contaminated soil at seven transformer locations that required further evaluation. Two additional transformer locations were later investigated by PWC in 1991 as part of a separate SI. Transformer locations TC-01 and J-16 were identified as PCB-contaminated and required further evaluation. In 1996, an engineering evaluation/cost analysis (EE/CA) was prepared for various transformer substations at PHNC. The EE/CA recommended excavation of PCB-contaminated soil at transformer sites TC-01 and J-16. An action memorandum (AM) documented the Navy's decision to conduct removal actions at the transformer sites. This EE/CA and AM did not include the remaining transformers discussed in this ROD. A non-time-critical removal action (NTCRA) was conducted for transformer sites TC-01 and J-16 from December 2000 to August 2001. SI sampling defined the lateral and vertical extent of PCB contamination in soils at concentrations that exceeded the cleanup levels before the removal action. A total of 154 cubic yards (cy) of PCB-containing soil was excavated from TC-01 and J-16. The soil from the two transformer sites was stockpiled at former Naval Air Station (NAS) Barbers Point until it was transported to the thermal desorption unit for treatment in 2003 and 2004. A remedial investigation (RI) for the Ford Island GSA was conducted between December 1999 and June 2000 to evaluate the impact of PCB-contaminated dielectric fluid that may have been released to surface soil and concrete surfaces. The RI concluded that following sites required further evaluation: TA-01, TC-04, TC-06D, TC-07D, TD-01, TD-02, TD-03, TD-05, TD-07, TF-01/TF-01D, TF-04, TF-05, TF-07, TF-09, TF-17, TF-18, TG-01, TG-03, TG-06, TI-03, and TI-04D In 2001, an SI report, field sampling plan, quality assurance project plan, and health and safety plan were prepared for transformer sites located at Halawa-Main Gate GSA, Naval Housing, PWC Main Complex, Waipio Peninsula and West Loch GSAs. The plans include inspection and environmental sampling guidelines that were used to evaluate the presence or absence of PCB contamination. The following sites were identified as requiring further evaluation: - Halawa-Main Gate: Former Building 653, H-2, H-3, J-12, J-17, J-21, J-29, K-15, and K-20 - Naval Housing: M-3 - PWC Main Complex: M-5 - Pearl Harbor Naval Shipyard: A-4, A-8, C-8, C-13, E-11, E-25, and K - Waipio Peninsula: W-11 - West Loch: FS11, Former Building 33 An additional SI of transformer sites was conducted between November and December 2001 at

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PHNC. Biased field sampling was conducted to determine the presence or absence of PCBs at each transformer site. Sampling results were used to classify each site for further evaluation or for "no further action." In addition to the sites listed above at Halawa-Main Gate, PWC Main Complex, and Pearl Harbor Naval Shipyard, site J-16 at Halawa-Main Gate was identified as requiring further evaluation. An SI for Iroquois Point in 2001 concluded the site I-4 required further evaluation. In 2000, the Navy, in consultation with EPA and State of Hawaii Department of Health (DOH), determined that soil from multiple transformer sites from multiple naval facilities across Oahu could be consolidated for treatment and this action could be considered an on-site action. Based on this decision, treatment alternatives were evaluated in a treatment EE/CA prepared in September 2000 for the combined sites. The EE/CA recommended consolidating soils from three facilities (former NAS Barbers Point, PHNC, and Naval Computer and Telecommunications Area Master Station Pacific [NCTAMSPAC]) and treating the soil with thermal desorption. Prior to implementation of the treatment process, soil that was already excavated was stockpiled either at former NAS Barbers Point or Naval Radio Transmitting Facility (NRTF) Lualualei. Once the treatment process began, these stockpiles were transported to the treatment unit at former NAS Barbers Point. An AM documented the Navy's decision to undertake removal actions at these facilities. Various alternatives were evaluated against the nine criteria in the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). Excavation and on-island thermal desorption was the alternative selected to address soil containing PCB concentrations greater than the Toxic Substances Control Act (TSCA) cleanup level for high-occupancy areas (1 milligram per kilogram [mg/kg]) and the DOH Tier 1 soil action level (SAL) (1 mg/kg); it complied with applicable or relevant and appropriate requirements (ARARs) and to-be-considered (TBC) criteria; it was protective; and it was capable of meeting the established treatment objectives for PCB-contaminated media. In 2002, an AM addendum documented procedures for excavation, treatment, and final placement of PCB-contaminated soil and concrete from transformer sites that had not originally been considered in the 2000 AM or any of the previous AMs or EE/CAs prepared for former NAS Barbers Point, PHNC, and NCTAMSPAC. The AM addendum proposed site selection criteria for new sites that will be remediated using the removal action alternatives selected in the previous AMs because the conditions at these new sites are consistent with the conditions at the sites in the previous AMs. The following transformer sites were identified for PHNC: -Ford Island: TA-01, TC-04, TC-06D, TC-07D, TD-01, TD-02, TD-03, TD-05, TD-07, TF-01/TF-01D, TF-04, TF-05, TF-07, TF-09, TF-17, TF-18, TG-01, TG-03, TG-06, TI-03 and TI-04D -Iroquois Point: I-4 The AM addendum presented the aforementioned sites as well as general criteria for inclusion of additional transformer sites. Site-specific information was to be included as an attachment to the AM addendum and thereby "plugged in" to the document. This "plug-in" AM addendum allowed for the selection of a protective, presumptive cleanup action (excavation, treatment, and placement) at future PCB transformer sites, provided that the sites met the selection criteria. In 2003, a "plug-in" to the AM addendum was prepared, recommending that additional sites undergo a NTCRA consisting of excavation of contaminated soil and concrete followed by on-island thermal desorption treatment, and transport and placement of treated media back at the excavation site. The following transformer sites were identified: -Halawa-Main Gate: Former Building 653, H-2, H-3, J-12, J-17, J-21, J-29, K-15, and K-20 - Naval Housing: M-3 - PWC Main Complex: M-5 - Pearl Harbor Naval Shipyard: A-4, A-8, C-8, C-13, E-11, E-25 and K - Waipio Peninsula: W-11 - West Loch: FS11 and Former Building 33 All 45 transformer sites in this ROD were identified by one of the AMs as meeting the site selection criteria for remediation by excavation and thermal desorption treatment. From 2003 to 2004, preliminary sampling was conducted to support

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the design efforts for the removal actions the transformer locations at PHNC. Pre-excavation samples were collected to define the lateral and vertical extent of PCB contamination in soils that exceeded the cleanup level (1 mg/kg) before soil was excavated and treated at former NAS Barbers Point. From January 2004 to July 2004, NTCRAs were conducted for the 43 remaining sites. SI sampling defined the lateral and vertical extent of PCB contamination in soils at concentrations that exceeded the cleanup levels before the removal action. A total of 10,391.5 cy of PCB-containing soil was excavated from these sites. The soil from the transformer sites was transported directly to the thermal desorption unit for treatment. During the thermal desorption treatment process, four confirmation samples of the treated material were collected for every 100 tons treated. Once confirmation was received, the excavated areas were then backfilled with treated soil from the treatment system and then were compacted and restored (such as landscaping, concrete and asphalt paving). All material that initially did not meet cleanup levels was retreated and resampled until cleanup levels were met. In 2006, a SI addendum was prepared to provide an update on removal action activities that had occurred at the various transformer locations at PHNC since 2001. The 2006 SI addendum concluded that cleanup levels for PCBs were met and no further action is necessary for the following transformer sites at PHNC: -Halawa-Main Gate: Former Building 653, H-2, H-3, J-12, J-16, J-17, J-21, J-29, K-15, K-20 - Naval Housing: M-3 - PWC Main Complex: M-5 -Pearl Harbor Naval Shipyard: A-4, A-8, C-8, C-13, E-11, E-25, K After the NTCRAs were completed, two remediation verification reports (RVRs) were prepared to document that the NTCRA were completed successfully and that the cleanup level (1 mg/kg) was achieved at the transformer sites, as established in the AMs and in accordance with the TSCA high-occupancy cleanup level (1 mg/kg) and the DOH Tier 1 SAL (1 mg/kg). Both RVRs were ultimately included in a consolidated RVR prepared to document removal and treatment at all sites included in the treatment system. Initial military development of Pearl Harbor and Ford Island occurred between 1912 and 1919. NAS Ford Island and Army Air Station Luke Field were established on Ford Island in 1917. Ford Island underwent considerable development and expansion in the 1930s and 1940s. Before and during World War II, Ford Island provided moorage and support to most of the Pacific Fleet and was home of the NAS Ford Island. Use of Ford Island as a military air station ceased with the advent of jet aircraft. Pearl Harbor Naval Station assumed ownership of the island when the NAS was deactivated in 1962, and the airfield was leased to the State of Hawaii, Department of Transportation, for limited use by civilian aircraft. The airfield has been inactive since mid-1999, when the state opened Kalaeola Airport (at former NAS Barbers Point). Currently, Ford Island provides housing and recreational facilities for Navy personnel. PHNC is located on the island of Oahu, Hawaii, about 4 miles west of the city of Honolulu. The Waipio and Pearl City peninsulas separate the harbor into three lochs: West Loch, Middle Loch, and Southeast Loch. Activities and land use at PHNC include Naval Shipyard and Intermediate Maintenance Facility (IMF), Naval Submarine Base, Naval Station, Fleet and Industrial Supply Center, Navy PWC, and Inactive Ship Maintenance Facility. The Navy initially subdivided PHNC into 18 GSAs to evaluate the PHNC property. These GSAs were designed and created to manage the large amount of environmental sites that are located in PHNC. By sorting and classifying the sites by geography, field activities from removal actions to confirmation sampling could be carried out in a much more efficient and cost-effective manner. The Navy, EPA, and Hawaii DOH initially concluded that six of the GSAs were adequately addressed under current Navy environmental programs. A site summary evaluation (SSE) was prepared for the remaining 12 GSAs. After the SSE, various response actions have been conducted at the PHNC GSAs. After those response actions, additional evaluation and action was required for transformer sites at eight GSAs that are the subject of this ROD:

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Ford Island, Halawa-Main Gate, Naval Housing, PWC Main Complex, Pearl Harbor Naval Shipyard, Iroquois Point, Waipio Peninsula and West Loch. An EE/CA was prepared in January 1998 to evaluate removal action alternatives to address PCBs in soil and concrete at several transformer sites. The 1998 EE/CA recommended removal actions consisting of excavation of PCB-contaminated soil and concrete and disposal in an off-island landfill; however, since the EE/CA was finalized and after discussions with EPA and DOH, the Navy determined that soil from multiple transformer sites, including at the eight PHNC GSAs could be consolidated for treatment. Based on this decision, treatment alternatives were evaluated in the treatment EE/CA prepared in September 2000. The 45 transformer sites at PHNC that are represented in this ROD were consolidated since they fulfilled the requirements for NTCRAs that were laid out in the AM and its subsequent addendums. As part of the 1998 EE/CA, conceptual site models (CSM) were developed for each of the transformer sites based on the following: - Location and type of transformers located at each site; - Known or suspected mechanism of PCB release into the environment; - Known or suspected media (soil and concrete) that may be affected; and - Potential migration pathways to human and ecological receptors. The CSMs developed for the transformers identified the following site characteristics: The physical setting of the original transformer sites identified in the 1998 EE/CA was based on descriptions provided by previous investigations, reviews of as-built or plan drawings, and site reconnaissance. None of the 45 transformer sites discussed in this ROD was part of this 1998 EE/CA. However, based on similar site characteristics, these transformers were consolidated as part of the PCB treatment EE/CA, and the 1998 CSM was considered applicable to all consolidated sites. Sources of PCB contamination at these transformer sites are a result of: (1) testing and previously disposing of PCB dielectric fluid from the transformers onto the surrounding soils; and (2) leaking PCB dielectric fluid from the transformers onto the surrounding soil or concrete pad. These sources are considered the principal mechanisms that released PCBs at these transformer sites. PCBs are generally insoluble and tend to sorb to soil particles, making PCB transport by leaching unlikely. The primary mechanism for the transport of PCBs was erosion by surface runoff. Transport of PCBs sorbed to soil particles was possible in areas eroded by surface runoff; however, surface erosion was minimal in the areas surrounding these transformers sites because of the gentle slopes and vegetative cover. The potentially affected media were surface and subsurface soil and concrete in the immediate vicinity of the transformer sites. Depth of contamination was measured during excavation and verification sampling. Contamination of surface water and groundwater was considered unlikely because of the low solubility of PCBs and the depth of groundwater. As a result, groundwater samples were not collected because there was no indication that PCBs had migrated to groundwater based on the depth of PCB contamination in soil and the depth to groundwater. Following removal actions at these 45 transformer sites, PCB concentrations do not exceed cleanup levels established for these sites; therefore, there are no affected surface or subsurface soils or concrete at the 45 transformer sites. The primary route of exposure was direct contact with contaminated soil or concrete, either through the skin or by incidental ingestion. Contact with contaminated airborne dust or eroded soil particles in surface runoff was unlikely because of the vegetative or asphalt cover; however, dust generated by construction or removal was of concern. Controls were implemented to minimize airborne PCB transport if vegetation or asphalt was disturbed through construction or removal. Given the low volatility of PCBs, transport in the gaseous phase was not considered a significant mechanism. PCBs are nearly insoluble and have a strong tendency to sorb to soil particles, making it unlikely that PCBs have impacted the groundwater. Exposure to PCB-contaminated groundwater was therefore considered unlikely. Following removal actions at these 45 transformer sites, PCB

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concentrations do not exceed cleanup levels established for these sites; therefore, there are no known or potential routes of exposure at the 45 transformer sites. Access to PHNC is restricted to employees of the Navy, their dependents, and contractors. Employees and contractors who routinely enter the vicinity of the transformer sites were potentially exposed to contaminated soil through incidental ingestion, direct dermal contact, or dust inhalation. Human exposure to contaminated air was possible if work generates fugitive dust. Surrounding areas at PHNC support a limited ecological environment. Following removal actions at these 45 transformer sites, PCB concentrations do not exceed cleanup levels established for these sites; therefore, there are no exposure concerns to any known or potential human or environmental receptors at the 45 transformer sites. The nature and extent of contamination was determined by incorporating the physical setting and conceptual site model for the transformer sites with results of available previous sampling results to estimate the areas of potential contamination (AOPC) at each of the 45 transformer sites. In cases where the sampling data were insufficient or nonexistent, assumptions were made on the extent of contamination. Since the 1998 EE/CA was finalized and after discussions with EPA and DOH, the Navy concluded that soil from multiple transformer sites could be consolidated for treatment based on similar characteristics to the sites evaluated in the 1998 EE/CA. Therefore, the evaluations in the 1998 EE/CA would apply to the additional transformer sites identified for treatment. Removal actions were conducted at these 45 transformer sites. Based on post-excavation confirmation sampling results, PCB concentrations remaining at these sites do not exceed the cleanup levels established for these sites; therefore, the 45 transformer sites are suitable for unrestricted use. Surrounding areas at PHNC support a limited ecological environment. No sensitive plants and animals or protected bird species have been seen in the vicinity of the transformer sites. The pre-removal action land use for the 45 transformer sites at PHNC was low occupancy (restricted) use. PHNC operates as a Naval Shipyard and IMF, Naval Submarine Base, Naval Station, Fleet and Industrial Supply Center, Navy Public Works Center, and Inactive Ship Maintenance Facility. This Naval facility is currently active. All 45 transformer sites at PHNC were active prior to removal actions, although PCBs were no longer used. The post-removal action and future land use of the 45 transformer sites at PHNC is anticipated to remain unchanged from current conditions. The Navy will maintain the current use of PHNC, which is considered low-occupancy (restricted) use; however, the potential for high occupancy (unrestricted) use was also considered at these 45 transformer sites. Potential future onsite populations will be limited to Navy contractor personnel performing routine maintenance and periodic inspections of the transformers, and performing any necessary repairs. Currently, there are no plans to change the current land use status of the 45 transformer sites at PHNC. A RODaddressing Operable Unit (OU) 00 was completed in September 2007. OU1: Ford Island is a 450-acre island surrounded by water, located within Pearl Harbor. One transformer site is located in this GSA: -TD-10: An inactive transformer located near the intersection of Yorktown Boulevard and Wasp Boulevard, at Building S181. The site encompasses the transformer's surrounding concrete slab. Halawa-Main Gate encompasses the region west of the shoreline of Pearl Harbor to Kamehameha Highway. One transformer site is located in this GSA: -K-14: An active transformer in Building S485, located south of Kuahua Avenue and adjacent to Building 445. This site includes a building and surrounding asphalt and gravel. Waipio Peninsula separates the Middle and West Lochs of Pearl Harbor. One transformer site is located in this GSA: -W-4/W-5: Located off of Waipio Point Access Road, active transformers W-4 and W-5 are collocated and considered a single site. The site includes an outdoor concrete pad (surrounded by a chain-link fence) and surrounding soil and gravel, with a concrete

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sidewalk on one side. Previous investigations identified a potential for the three transformer sites to impact the environment, resulting in unacceptable risk to human health and the environment. Polychlorinated biphenyl (PCB) contaminated soil and concrete were found at elevated levels and needed to be removed. The threat of exposure to PCBs warranted action. The Navy served as the lead agency for all of the aforementioned investigations conducted at the PHNC. Throughout these investigations, additional support was provided by the U.S. Environmental Protection Agency (EPA) and State of Hawaii Department of Health (DOH). Navy Environmental Restoration funds provided the monies used to conduct the cleanup and removal actions at the three PHNC transformer sites.
Available historical records at PHNC indicate PCBs were present in the dielectric fluid used in many of the former and existing transformers at the three GSAs. The PCB containing fluids may have been released to concrete surfaces or surface soil by leaking directly from the transformers or during regular testing and maintenance. Transformer maintenance included periodic sampling to test the dielectric properties of the transformer fluid. Once testing was completed, the fluid was reportedly poured onto the adjacent area, such as grass, concrete pads, or along building walls. All of the active transformers at PHNC have been replaced or retrofilled with non-PCB-containing dielectric fluid. After the non-time-critical removal actions (NTCRA) were completed, remediation verification reports (RVR) were prepared to document the NTCRAs activities and verification sampling results for transformer sites. Sixty-three transformer sites achieved the cleanup level of less than or equal to1 milligram per kilogram (mg/kg) for soil at these transformer sites, as established in the AM and in accordance with the TSCA high occupancy action level (less than or equal to 1 mg/kg for soil and less than or equal to 10 micrograms per 100 square centimeters for concrete) and the DOH Tier 1 soil action level (1 mg/kg) and are safe for future unrestricted land use. However, land use controls (LUC) are necessary for protection of human health and the environment for 12 transformer sites, where cleanup levels were not met after contaminated soil was excavated, and concrete was encapsulated. Of the 12 transformer sites, 3 are located at PHNC and are discussed in this ROD. These RVRs were ultimately included in a consolidated RVR prepared to document the removal and treatment activities at all sites included in the treatment system. The remaining 9 transformer sites presented in the consolidated RVR are addressed in other RODs. At PHNC, 6 transformer sites (transformer sites D-02, TF-06, TF-08, TF-10, TG-04, and M-14) previously identified as LUC sites now require further evaluation. In June 2006, a proposed plan was prepared to present the recommended final remedy for 70 individual transformer sites from two installations on Oahu. The proposed plan identified a response action, consisting of removal and treatment of contaminated soil and concrete, for 54 of the 70 sites. The Navy and EPA selected no further action in a 2007 ROD for 52 of the 54 of the transformer sites initially proposed for no further action in the proposed plan. Of the transformer sites previously identified in the proposed plan as no further action sites, 2 now require further evaluation. The proposed plan identified a response action consisting of removal and treatment of soil and concrete along with the implementation of LUCs to address human health risks as the proposed final remedy for 8 transformer sites, including 3 transformer sites at PHNC (TD-10 located at Ford Island, K-14, located at Halawa-Main Gate and W-4/W-5, located at Waipio Peninsula) and 5 transformer sites at Naval Computer and Telecommunications Area Master Station Pacific (NCTAMS PAC). The 5 transformer sites located at NCTAMS PAC that require LUCs are addressed in a separate ROD for NCTAMS PAC. Lastly, 8 transformer sites (Transformers D-02, TF-06, TF-08, TF-10, TG-04, and M-14 located at PHNC; and Transformer Buildings 121 and 242 located at NCTAMS PAC) previously identified in the proposed plan as LUC sites now require further evaluation. No enforcement

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activities have been conducted at the three transformer sites at PHNC, Oahu, Hawaii. A ROD addressing Operable Unit 01, the contaminated soil and buildings and structures at transformer site TD-10, located at Ford Island; K-14, located at Halawa Main Gate; and W-4/5, located at Waipio Peninsula at the Pearl Harbor Naval Complex site was completed in September 2010. OU3: The Site, the subject of this Record of Decision (ROD), has been designated as an individual Site within the Public Works Center (PWC) Main Complex GSA. The lead agencies for this ROD are the U.S. Navy and the EPA. The Former Makalapa Pesticide Rinsate Pit is a U.S. Navy facility, located near the intersection of Nanumea Road and an unnamed access road in the PWC GSA on the island of Oahu in the state of Hawaii. The Site is located to the east of Naval Facilities Engineering Command (NAVFAC), Hawaii Building X-1. It occupies less than half an acre and consists of the former pesticide rinsate pit area, concrete pad, and drainage swales. The Site represents the roughly square area bounded by raised earthen berm to the west, the drainage swales to the south, and the asphalt roadway to the north and east. This roughly square area covers the rinsate pit locations and is approximately 150 feet long by 100 feet wide. The concrete pad is rectangular and approximately 100 feet long by 40 feet wide. This area occurs within the former rinsate pit area. The drainage swale is a long, rectangular area oriented roughly east to west running to the north side and parallel to Nanumea Road. The swales measure approximately 160 feet long by 12 feet wide and 90 feet long by 15 feet wide, respectively. The former rinsate pit was constructed in 1974 to dispose of waste solutions containing herbicides and pesticides, and for routine washing and rinsing of pesticide and herbicide application equipment. The unlined rinsate pit consisted of two cells located 3 to 4 feet below ground surface, occupying a space that measured 20 feet wide by 40 feet long. The pit was used from 1974 to 1978, when it was backfilled. When the pit was in use, equipment was washed two to three times daily, with each washing generating an estimated 25 to 50 gallons of wash water. These practices led to the contamination of nearby soil. The concrete pad east of the rinsate pit was formerly used as a wash area. Polychlorinated biphenyls (PCB) contamination in the soil is possibly a result of stored equipment in this area. A shallow and unlined drainage swale runs parallel to Nanumea Road along the southern margin of the Pit Site and slopes steadily towards the southwest. The portion of the unlined swale directly adjacent to the former pit area is separated from another portion of unlined swale farther from the pit area by the asphalt paved entrance to Building X-1. No subsurface pipe connecting the two swale areas was found during fieldwork. An Initial Assessment Study (IAS) conducted in 1983 (Naval Energy and Environmental Support Activity [NEESA] 1983) for PHNC identified the Site as having potential environmental impacts related to previous activities at the former pesticide rinsate pit. Based on the IAS conclusions, a Site Inspection (SI) was conducted at the Site. Five soil borings were advanced to depths ranging from 10.2 to 10.7 feet below ground surface (bgs) both within and near the approximate pit boundaries. Soil and volcanic tuff samples were collected at 5 and 10 feet bgs in each boring and analyzed for chlorinated pesticides and herbicides, volatile organic compounds (VOCs) and metals. Chlordane, dieldrin, bromacil, dichlorodiphenyldichloroethylene (DDE), dichlorodiphenyltrichloroethane (DDT), and arsenic were detected. The SI report concluded that the bottom of the pit was most likely 3 feet deep, based on the encountered depth of tuff. The report also concluded that the most commonly detected constituents were the chlorinated pesticide compounds DDE, DDT, chlordane, and dieldrin, and that the majority of detections and the highest detected concentrations were found within the pit. An extensive Remedial Investigation (RI) was subsequently conducted at the Site in October 1995. This RI is identified as the "Initial RI" for the Site to differentiate it from subsequent RI work performed at the

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Site in 2005. The RI consisted of 13 trenches dug into and around the former rinsate pits. The trenches were excavated to expose the underlying bedrock tuff residing at depths ranging from 3 to 7 feet bgs. Soil samples were collected from the trenches and analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), organochlorine pesticides and herbicides, organophosphorous pesticides, triazine pesticides, carbamates, PCBs, and metals. Extensive sampling of the shallow subsurface within the boundaries of the former rinsate pit and the surrounding area was conducted. Concentrations of chlorinated, organophosphorus, and carbamate pesticides; PCBs as Aroclor 1260; chlorinated and triazine herbicides; VOCs; cyanide; and metals (mercury, copper, and arsenic) were detected in Initial RI soil samples. The following is a summary of the conclusions of the 1995 RI: -The majority of detected constituents were found in shallow subsurface soil samples collected from trenches dug in the immediate vicinity of the former rinsate pit at depths ranging from 2 to 6 feet bgs. -Based on the observed distribution, the Initial RI report concluded that minimal transport appeared to have occurred away from the original location of equipment rinsate activity within the pit. -Elevated concentrations of arsenic were detected within the pit area. Results for samples collected from outside the pit area demonstrate a much narrower range of detected concentrations for arsenic, at concentrations below natural arsenic background levels determined for Navy sites. -PCBs and pesticides were detected in several surface soil samples collected from the drainage swale adjacent to the Site. -All but one of the elevated pesticide detections were within the former rinsate pits. -The highest concentration of PCB at the Pit Site was detected in a near surface soil sample collected from a depth of less than a foot bgs adjoining the concrete pad. -The potential for significant drinking water impact was evaluated to be minimal based on a Pesticide Root Zone Model. Removal Site Evaluation and Remedial Investigation/Feasibility Study In 2004, the Navy initiated a Removal Site Evaluation (RSE) to complete the lateral and vertical delineation of Site contaminants of concern (COCs) and to evaluate the potential risk to human health and the environment. PCBs, chlorinated pesticides, and arsenic were identified as COCs for the Site. Plans that documented proper procedures for RSE sample collection, contaminant analysis, data quality control, and personnel health and safety procedures were prepared in accordance with CERCLA guidance. In particular, locations and distribution of surface and near surface soil samples were developed using EPA statistical sampling software to ensure adequate coverage of the Site. In June 2004, draft versions of the RSE planning documents were made available to stakeholders for review. The planning documents were finalized in December 2004. In an agreement with the EPA in March 2007, the RSE was converted to a Remedial Investigation/Feasibility Study (RI/FS). The field investigation for the RI/FS was conducted in May 2005. Surface soil samples were collected from 0 to 6 inches bgs at 54 locations to characterize the nature and lateral extent of the Site COCs in the surface area around the former pit area and in the adjoining drainage swale. Soil and rock core samples were collected in the subsurface at two locations directly beneath and adjoining the former rinsate pit locations from approximately 4 to 32 feet bgs to characterize the vertical extent of the Site COCs in the subsurface soil. Soil samples were also collected from ten locations over the concrete pad to a maximum depth of approximately 3 inches. The soil analysis results were compared to both Residential and Industrial Soil PRGs and the TSCA High Occupancy Cleanup Level. The investigation results indicate the following: -Based on regional studies in the area, small pockets of higher-level groundwater perched above lenses of clay or other low permeability strata may be encountered above both caprock water and the basal aquifer. These occurrences of perched groundwater tend to be limited and do not represent potential drinking water sources. Perched groundwater was encountered at

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approximately 29 and 31 feet bgs in two of the boring locations. Groundwater samples from these boreholes were analyzed for chlorinated pesticide compounds, PCBs, and arsenic. No detectable concentrations of any chlorinated pesticide compounds, PCBs, or arsenic were identified in the groundwater samples. -Surface soil concentrations of PCBs show a decrease with distance around the pit and an overall decrease in concentration with distance downgradient (south and east) from the pit area. Although PCBs were detected in the surface soil samples, detections were limited to the surface area immediately surrounding the concrete pad and just north of the former pit area. -Analysis of the distribution of elevated pesticide concentrations, as represented by sample results from both the surface soil sampling and the initial trench sampling, confirm that elevated pesticide concentrations in the surface soil and shallow subsurface soil are limited to the immediate vicinity of the former rinsate pit and confirm that the pits are the source of pesticides for the Site. -Arsenic was uniformly detected in all areas of the Site and the concentrations are similar for all areas in the surface soil. Only four of samples exceeded the conservative background level of arsenic of 16 milligrams per kilogram (mg/kg), and all four exceedances were located in the middle of the former pesticide rinsate pit. -Analysis of the data from both the 2005 RI subsurface soil samples and the 1995 RI soil samples, indicates that elevated pesticide concentrations decrease distinctly and rapidly with depth beyond the bottom depth of the former rinsate pit (approximately 3 to 4 feet bgs). Concentrations of residual pesticides are not detected below 20 feet bgs, therefore, pesticides have not migrated below 20 feet bgs beneath the bottom of the former rinsate pit. -A Human Health Preliminary Risk Evaluation (PRE) was performed as part of the RI/FS based on the soil data from previous Site investigations and the 2005 RI. To determine what the potential risk to human health would be if no removal action were performed, the PRE was performed based on the assumption that no removal action would be implemented at the Site. The initial PRE results indicated that the carcinogenic properties of the COCs which contributed the greatest potential for adverse effects to human health and the highest estimated risk at the Site are concentrated in three main areas: -Surface soil near the former rinsate pit and concrete pad. Primary sources of risk are PCBs around the concrete pad, dieldrin (pesticide) immediately around the former pit, and background arsenic. -Shallow subsurface soil within the former rinsate pit. Risk is represented by elevated concentrations of various pesticides (which include dieldrin, alpha- and gamma- chlordane, and heptachlor), and arsenic. -Shallow subsurface soil. Potential risk is posed by one elevated concentration of DDE (pesticide) near the former rinsate pit and one elevated concentration of PCBs adjoining the concrete pad. CERCLA Enforcement Activities No enforcement actions have been directed at the Site. A ROD addressing Operable Unit 3 of the Pearl Harbor Naval Complex site was completed in September, 2010. Operable Unit 05 Ford Island encompasses approximately 450 acres, located in the Pearl Harbor Navy Complex (PHNC) at Joint Base Pearl Harbor-Hickam (JBPHH), Ford Island on the southern coast of Oahu, Hawaii. PHNC is identified on the National Priorities List (NPL) as EPA CERCLA Information System No. HI4170090076. Executive Order 12580 authorizes the Navy, as the lead agency, to conduct environmental response actions at Navy sites such as the Ford Island Landfill. EPA and the Hawaii Department of Health (DOH) have provided oversight during environmental investigations and remediation activities. Ford Island is approximately 1.25 miles long and 0.62 miles wide. Access to the island is provided by the Admiral Bernard Clarey (Ford Island) Bridge, which spans the channel between the island and the eastern shore of Pearl Harbor. Ford Island was previously used as a military air station and provided moorage and supported most of the Pacific Fleet. Ford Island is presently used for administration, storage, operational, training,

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and maintenance activities for various military tenants. The island also provides housing and recreational facilities for Navy personnel. The island is undergoing redevelopment for base housing, recreational sites, and other commercial and industrial facilities. The Ford Island Landfill Site is a vegetated, undeveloped parcel located along the western edge of Ford Island, along the Pearl Harbor shoreline. It is bordered to the north by the former Camel Refurbishing Area, which has been redeveloped into residential housing and a community recreation area, and the Building 284 Site located to the southeast on the other side of a seaplane ramp. The Camel Refurbishing Area and the Building 284 Site are two Installation Restoration Program sites previously investigated during Ford Island Remedial Investigation and where removal actions were conducted to address soil contamination. Military development around Pearl Harbor and Ford Island began around 1912, and the Naval Air Station (NAS) Ford Island and Army Air Station (AAS) Luke Field were established on the island by 1917. Hangar and support facilities on the southwest side of the island were developed for the AAS, while similar structures on the southeast side of the island were constructed for the NAS. In addition, a row of 22 housing structures, located along the northwest shore of the island, as well as several housing structures and a bachelor's quarters on the northeast tip of the island, were constructed to accommodate the expanding number of naval personnel on-island. An unpaved runway was also constructed for the Army and Navy shared use. Nine 225,000-gallon aboveground storage tanks, with secondary containment, were located in the east-central portion of the island from 1924 to 1954. Ford Island underwent further development and expansion in the 1930s and 1940s. Efforts to expand the island by filling shallow zones along the east and north shores with dredged material from the harbor channel, increased the size of Ford Island by nearly 20 percent. The central portion of the island was cleared and paved for installation of a 4,000-foot runway, and all but two of the original AAS hangars were demolished in favor of open aircraft parking areas, maintenance facilities, and larger hangars. An area near the western shoreline, which later developed into the Ford Island Landfill, was used as a disposal and burn area. During this time, an underground storage tank farm was installed in the east-central portion of the island with an extensive underground aviation gasoline pipeline system to distribute fuel. Bunkers for ordnance storage were built on the north and east sides of the island, the fill area near the north shore, the northeast shore, and the east end of the runway. Following World War II, the use of Ford Island as a military air station ceased with the advent of jet aircraft. Naval Station assumed ownership of the island when the NAS was deactivated in 1962, and the island was given status as a National Historic Landmark in 1964. The airfield was leased to the State of Hawaii Department of Transportation for limited use by civilian aircraft; however, since the state opened Kalaeloa Airport (formerly NAS Barbers Point) in mid-1999, the airfield has remained inactive. Access to the island was improved by construction of the Admiral Bernard Clarey (Ford Island) Bridge in 1998. Ford Island currently hosts several major tenants or commands and provides housing and recreational facilities for Navy personnel. JBPHH controls the waters of Pearl Harbor and the adjacent land areas, including Ford Island. The Ford Island Landfill was used from the mid-1930s until the late 1960s for disposal activities that involved dumping and burning wastes generated by maintenance activities performed on Ford Island. After the aforementioned disposal activities were discontinued, bulk debris was disposed of and covered with soil until these activities were also discontinued in 1982. When the Navy discontinued landfill dumping, they covered approximately 80 percent of the landfill with a final layer of soil. No records of disposal practices or waste quantities are available for any of the periods of waste disposal activity. Historical evidence indicates that the landfill area extends into Pearl Harbor. Several

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investigations of the Ford Island Landfill have been conducted since the 1990s. The Navy conducted a site inspection (SI) in late 1991 and early 1992 as an initial assessment of environmental conditions at the landfill, which included installing four monitoring wells and collecting soil, groundwater, marine sediment, and soil gas samples. The SI identified nine metals, two semivolatile organic compounds (SVOCs), and a single form of polychlorinated biphenyl (PCB) (Aroclor-1260) as contaminants of concern (COCs) in the soil, groundwater, and marine. The SI recommended containment of landfill wastes (i.e., capping). The screening criteria selected for the site include the 95th percentile of the Oahu caprock soil background concentration range, which were agreed upon by EPA Region 9 and DOH and finalized in 2006. The Oahu caprock soil background concentrations are considered protective of both human and terrestrial ecological receptors on Ford Island. In 1994, a second investigation, a removal site evaluation (RSE), was conducted to obtain additional information on the conditions at the landfill. As part of this investigation, six additional monitoring wells were installed; exploratory trenches were excavated to observe the locations of different types of landfill wastes; groundwater samples were collected to establish a water quality baseline; and a tidal study was conducted. The RSE identified low concentrations of three metals (copper, lead, and zinc) and a single SVOC (phenanthrene) as potential COCs in groundwater samples, and found that groundwater beneath the landfill is influenced by tidal variations in Pearl Harbor. Geophysical and trenching activities indicated that the landfill contains metal fragments, concrete rubble, and miscellaneous debris. Ash, discovered below the water table near the current landfill shoreline, suggests that incinerated wastes were dumped into Pearl Harbor. In 1995, an engineering evaluation/cost analysis (EE/CA) was conducted that utilized the EPA presumptive remedy approach to identify and select a landfill containment system. The EE/CA provided a comparative analysis of five different landfill containment system alternatives (Permeable/Vegetative Cap, Resource Conservation and Recovery Act (RCRA) Subtitle D, Modified RCRA Subtitle D, RCRA Subtitle C, and Modified RCRA Subtitle C), and identified the landfill containment system that includes a permeable and vegetative soil cap alternative as the most cost effective containment method that would attain long-term reduction of the risks posed by the landfill. The five alternatives were evaluated against the nine EPA criteria required by 40 CFR Part 300.430(e)(9)(iii) of the NCP. The permeable and vegetative cap was the selected removal action alternative as a result of the alternatives analysis. In December 1996, construction of the landfill containment system was completed as part of a non-time-critical removal action. The permeable and vegetative cap over the landfill was completed to prevent contaminated surface soils from eroding and entering Pearl Harbor, and to minimize infiltration of precipitation into the landfill, reducing the possibility for contaminants to leach to groundwater and enter Pearl Harbor. The landfill cap consisted of three layers (from bottom to top): an engineered fill layer, a vegetation/erosion layer, and a topsoil layer. The engineered fill layer has a varying thickness and comprises construction-grade earthen fill. The principal function of this layer is to cover exposed waste and fill low-lying areas of the landfill, and to provide a smooth transition between uncontained landfill wastes and the cap. It represents the foundation layer for the cap. The vegetation/erosion layer comprises earthen fill with a minimum thickness of 12 inches. The principal function of this layer is to serve as the primary barrier to direct contact with landfill wastes. It holds surface water infiltration to allow for increased evapotranspiration and provides secondary support of vegetative growth. Another principal function of this layer is to act as a buffer layer that can exhibit erosion problem areas needing repair without exposing the waste. The fill soil was compacted to a minimum relative

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density of 90 percent. The topsoil layer is a minimum of 6 to 12 inches thick and was designed to support vegetation. The topsoil was placed on the fill and not compacted. Surface vegetation, consisting of common Bermuda grass (Cynodon dactylon), is intended to stabilize the cap surface and prevent erosion. The cap surface is vegetated with common Bermuda grass (Cynodon dactylon) that is intended to stabilize the cap surface and prevent erosion. Rip-rap was installed along the shoreline to prevent erosion. An irrigation system was installed to maintain the integrity of the cap, and a concrete drainage trench was constructed to direct surface runoff away from the landfill. Monitoring well MW-07 was abandoned in place and replaced with well MW-07A to allow for the construction of the concrete drainage trench. After construction of the landfill containment system along the shoreline of the landfill, three additional monitoring wells were installed in April 1997. The groundwater monitoring well network at the landfill consisted of 13 monitoring wells distributed across the site. In April 1997, a five-year long-term monitoring (LTM) program was initiated. The objective of the monitoring program was to monitor conditions at the landfill to ensure the landfill containment system continues to function as designed, and to evaluate whether potentially harmful levels of metals from the Ford Island Landfill are leaching into the groundwater and surface water of Pearl Harbor. The initial LTM design utilized an intrawell approach, and included 10 landfill monitoring wells (MW-02, MW-03, MW-04, MW-05, MW-06, MW-07A, MW-10, MW-11, MW-12, and MW-13) and one surface water sampling location (SW-01). Aqueous samples were analyzed for two volatile organic compounds (acetone, 1,2-dichloroethane); 10 SVOCs (acenaphthene, benzo(a)pyrene, carbazole, dibenz(a,h)anthracene, dibenzofuran, dimethylphthalate, fluorene, naphthalene, phenanthrene, and 2-methylnapthalene); total petroleum hydrocarbons (TPH); the metals antimony, arsenic, beryllium, copper, lead, mercury, nickel, and zinc; PCBs; dioxins/furans; and general chemistry parameters. Following the six baseline monitoring events, four semiannual monitoring events, and two annual monitoring events were performed at the landfill. The scope of the original groundwater monitoring plan was completed after 5 years and with the 12th monitoring event in April 2002. No analytes exceeded the DOH Tier 1 action levels. Discontinuing the groundwater monitoring program was recommended. Because of regulatory concerns about metals and potential impacts to Pearl Harbor, a draft long-term monitoring plan was prepared in August 2003 that proposed continuing the groundwater monitoring program in detection monitoring for another 5 years. In September 2003, the 13th monitoring event was performed. It included the same locations sampled during the original groundwater monitoring program. Analytical results indicated that elevated metals concentrations are present in groundwater at the landfill (particularly at monitoring wells MW-11, MW-12, and MW-13). The groundwater monitoring plan and program were revised prior to the 14th monitoring event, conducted in April 2005, to include an interwell data comparison approach. The number of wells sampled was reduced to include eight landfill wells (MW-02 through MW-06 and MW-11 through MW-13) and two background wells (AG-MW16 and AG-MW18). One additional surface water sampling point (SW-02), located approximately 50 feet offshore from SW-01, was also added. The list of COCs was reduced to include only metals including antimony, arsenic, beryllium, copper, lead mercury, nickel, and zinc. The State of Hawaii Surface Water Standards were established as conservative screening criteria for groundwater to assess potential impacts to Pearl Harbor. Seven additional surface water sampling locations (SW-03 through SW-09) were added for the 15th monitoring event. Groundwater and surface water samples were collected from the eight landfill wells, two background wells, and nine surface water sampling locations. These changes to the long-term monitoring program were documented in the Draft Revised Long-Term Monitoring Plan, and represent the current configuration of the monitoring program. Analytical results from the 15th

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monitoring event indicated that concentrations of dissolved metals were significantly lower than the concentrations detected in the 14th monitoring event. As of April 2011, a total of 30 monitoring events have been conducted. Data obtained since the 16th monitoring event (August 2006) and previous data indicate that copper is the primary contaminant that exceeds its screening criterion. In addition, copper concentrations vary significantly between different monitoring events and wells. During the 25th monitoring event landfill inspection conducted in June 2009, it was noted that one monitoring well (MW-08) had been filled with cement and is no longer useable. Performance of the 28th monitoring event in April 2010 represented the last of the baseline monitoring events which provided data to establish baseline (background) conditions for the interwell approach. Baseline monitoring was required for eight events before background conditions could be calculated. These eight quarterly baseline sampling events included sampling of only background monitoring well locations (AG-MW16 and AG-MW18, later replaced by MW-14) and background surface water sampling locations (SW-02, SW-04, SW-06, SW-08, and SW-09). In addition, every other sampling event included sampling of all eight landfill wells, nine surface water sampling locations, and background well locations included in the monitoring program. The 29th monitoring event conducted in October 2010 represented the first semiannual assessment monitoring event following conclusion of the baseline monitoring period. Beginning with the 29th monitoring event, EPA Region 9 and DOH concurred with the removal of several metals and general water chemistry parameters from the analytical suite of samples collected as part of the monitoring program. The present monitoring program includes analysis for select dissolved metals (arsenic, copper, lead, mercury, nickel, and zinc), and several general water chemistry parameters (chloride, total dissolved solids (TDS), pH, and specific conductance). In February 2008, a tidal study was conducted to explore the nature and extent of surface water to groundwater tidal interaction at the Ford Island Landfill, and evaluate the tidal effects on copper concentrations in both groundwater and surface water. The study concluded that tidal oscillations have little to no effect on varying copper concentrations. A FFS was conducted in 2010 for the Ford Island Landfill Site. The FFS was conducted to evaluate three potential response action alternatives for the site: (1) no action; (2) LUCs that consist of engineering and institutional (legal) controls to include groundwater monitoring; and (3) cleanup of site contamination to allow for unrestricted land use. The FFS was intended to be a streamlined and focused effort to evaluate these three response action alternatives and recommend an appropriate response action for the site. The FFS recommended LUCs and long-term monitoring and maintenance (LTMM) as the final remedy. In 2010, a proposed plan (PP) was prepared for the Ford Island Landfill Site to present the recommended final site remedy and to facilitate public involvement in the remedy selection process. The PP presented the various alternatives considered, identified LUCs and LTMM as the recommended alternative, explained the rationale for selecting the alternative, and requested public comment. There have been no CERCLA enforcement activities at the Ford Island Landfill Site. A Record of Decision for Operable Unit 05 of the Pearl Harbor Naval Complex was completed in September 2011. The Shoreline Site is located northwest of Dry Dock #3 inside the CIA of the PHNSY & IMF, which is located within the PHNC on the island of Oahu, Hawaii. The initial site boundaries consisted of a flat and narrow piece of land approximately 800-feet-long and 8-feet-wide that is elevated approximately 7- to 10-feet above the open water in the adjacent harbor. The shoreline is made up of a thin layer of coarse sand mixed with shell fragments, which overlays weathered bedrock. The site is sparsely vegetated and bordered by a paved area with office trailers to the east and south, and large, heavy concrete keel blocks and Pearl Harbor to the north and west. The site has subsequently been expanded

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eastward to include the paved area with office trailers. The size of the site is approximately 0.18 acre. Previous investigations identified asbestos-containing cloth and asbestos fibers in soil that resulted in unacceptable risks to human health. These threats warranted a response action at the site. The Navy conducted a soil removal action at the Shoreline Site under the Navy's Environmental Restoration Program. Executive Order 12580 authorizes the Navy to conduct environmental cleanup at Navy sites, such as the remediation activities at the Shoreline Site, with the Navy as the lead agency. The EPA and DOH have provided oversight during environmental investigations and remediation activities at the site. Pearl Harbor was established as a naval base for the Navy by act of Congress in 1908 to provide the United States with a permanent presence in the Pacific region. Construction of the first dry dock began in 1909, and expansions of the harbor facilities continued through the 1940s. In mid-1941, the newly formed Pacific Fleet was permanently based at Pearl Harbor. Historical aerial photographs indicate that the Shoreline Site area of Pearl Harbor may have been used to dock Navy surface vessels during World War II. The open water adjacent to the shoreline was used formerly to test subsurface vessel detection systems. Historically, rubble (including keel blocks and asbestos-containing cloth attached to cement kiln bricks) was used as fill material to stabilize this area. Several environmental investigations and removal actions have been conducted at the Shoreline Site. Previous actions include: -Navy laboratory analysis of suspected ACM during late 1993 -Site Evaluation (Preliminary Assessment and Site Inspection) at the Shoreline Site from June 1994 through April 1995 (Ogden 1998) -Additional ACM sampling in August 1997 (Ogden 1997) -TCRA for ACM and verification sampling from August 1999 to July 2000 (Earth Tech 2001) The initial investigations concluded that potential human health risk at the site existed because of the presence of the asbestos. Site activities that generate dust could result in airborne asbestos fibers despite the placement of a tarpaulin cover in July 1994 over the area of concern, posing an inhalation risk to site workers. Construction activities involving excavation of subsurface soil could also result in a potential for worker exposure to ACM or asbestos-containing kiln bricks that may be present in subsurface rubble adjacent to the previous removal action portions of the Shoreline Site. As a result, the Navy decided to perform a TCRA of the ACM-containing soils. Due to the time-critical nature of the removal action, an engineering evaluation/cost analysis discussing removal action alternatives was not prepared for the site. Nevertheless, four removal action alternatives were developed and evaluated against the nine NCP criteria prior to recommending the removal action: (1) No Action; (2) Maintain the tarpaulin cover and implement additional engineering controls (e.g., fencing, warning signs) and institutional controls restricting future access; (3) Construct a permanent cover (e.g., concrete) over affected area and apply other engineering controls (e.g., fencing, warning signs) and institutional controls restricting future site access; and (4) Excavation and offsite disposal. An Action Memorandum dated 9 February 2001 documents the decision to undertake the TCRA (DON 2001) and the selection of Alternative 4 (excavation and offsite disposal) as the preferred action. Subsequently, the Navy conducted the removal action in several stages between August 1999 and August 2000. The goal of the removal action was to excavate and dispose of all materials with greater than 1 percent asbestos fibers. ACM debris was identified and removed within the initial 8-foot by 2-foot site. Additional ACM debris was identified, and the excavation was expanded to a 3-foot-wide area extending approximately 50 feet along the shoreline. During the removal work, the Navy observed cement kiln bricks and weathered asbestos-containing cloth buried roughly 3 to 5 feet below ground surface. This buried ACM was removed by the Navy Public Works Center in July and August 2000. The extent of the excavation was initially determined based upon the presence of the

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ACM-containing refractory cloth, and was subsequently confirmed through the collection of soil samples for analysis of asbestos. The total volume of asbestos-contaminated cloth, attached cement kiln brick, and surrounding soil removed from the site was 30 cubic yards (DON 2000). All ACM waste was transported off island to a facility approved to receive CERCLA/Toxic Substances Control Act (TSCA) wastes. The excavation was then backfilled with clean imported fill material. As a result of the TCRA, Alternative 1 No Action was recommended as the final remedy in the 2006 Proposed Plan Time-Critical Removal Action at the Shoreline Site Northwest of Dry Dock #3, Pearl Harbor Naval Shipyard and Intermediate Maintenance Facility, Oahu, Hawaii (DON 2006). A public comment period was held, and no comments that would impact the no further action (NFA) decision were received. Following the Proposed Plan and public comment period, EPA issued a letter (Attachment D) which raised concerns about the protectiveness of the 1 percent asbestos fibers cleanup goal. Subsequent discussions and meetings among the Navy, EPA, and DOH led to the conclusion that the proposed NFA remedy may not be protective of human health. There was also a question whether the rubble fill underlying the paved areas with office trailers located east and south of the excavation may also contain ACM. As a result of these concerns and as a conservative measure, site boundaries were expanded to include these areas, and the removal action alternatives were re-evaluated. A final re-evaluation of the removal action alternatives has resulted in the recommendation for Alternative 3 as the preferred remedy for the Shoreline Site. Alternative 3, which was previously evaluated and determined to meet the evaluation criteria for effectiveness, implementability and cost, is deemed more protective of human health and the environment than the previously proposed NFA remedy. A Record of Decision for Operable Unit 6 of the Pearl Harbor Naval Complex was completed in July 2010. OU 8: The Building 49 site is located within the Naval Magazine Pearl Harbor (NAVMAG PH), West Loch Branch (West Loch), which in turn is an operable unit within the Pearl Harbor Naval Complex (PHNC). NAVMAG PH West Loch encompasses 3,240 acres and serves as a military shipping-and-receiving facility. Building 49 is located on Arizona Road, approximately 1,300 feet north of the First Street entry gate to NAVMAG PH West Loch. The building is a 672-square-foot concrete block structure constructed in 1943. Arizona Road borders the building to the north, and a concrete sidewalk borders the building to the south. An exterior concrete apron, measuring 4 feet wide by 15 feet long, lies on the west side of the building. The nearest additional structure is an abandoned administration building to the southwest. No other facilities or structures exist in the immediate vicinity. The area soil is classified as being either rock or a thin (less than 20 inches) cover of borderline clay-silt overlying rock. Thick grass surrounds the structure. NAVMAG PH receives, renovates, maintains, stores, and issues ammunition, explosives, expendable ordnance items, weapons, and technical ordnance material, and also performs additional tasks as required. Nearly all ammunition used by the military services in Hawaii is stored or handled by NAVMAG PH. As part of ordnance-handling tasks, West Loch provides marine terminal services for all loading and unloading of ocean-transported Department of Defense ordnance at its wharf facilities. Building 49 previously housed an emergency generator and transformer that provided auxiliary power for West Loch. An Underground Storage Tank (UST) was used to store hydrocarbon fuel for the generator. The underground storage tank (UST) WL-49 was removed in June 1992. The petroleum-contaminated soil associated with the UST was remediated in May 1995. In the past, in-service electrical transformers were filled with dielectric fluid known to contain polychlorinated biphenyls (PCBs). Historical maintenance practices included periodic sampling of the transformer oil, testing for dielectric properties, and disposing of these samples on the ground immediately adjacent to the transformer or the building housing the

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transformer. In 1998, the Navy investigated soil immediately adjacent to various sites with transformers known to contain PCB oils. Although there is no record of transformer leaks or transformer oil spills at Building 49, analytical results from the 1998 investigation reported elevated concentrations of PCBs within and surrounding Building 49. PCBs were detected in soil immediately adjacent to Building 49 at concentrations ranging from less than 1 milligrams per kilogram (mg/kg) to 11 mg/kg. The contamination is attributed to historical Navy transformer oil testing practices. There have been no enforcement activities at Building 49. Based on the reported concentrations of PCBs, a time-critical removal action was undertaken to remove and dispose of PCB-contaminated soil from areas immediately adjacent to the building and in the drain system associated with the building, and to remediate, as necessary, exterior concrete surfaces impacted by PCBs. The project-specific cleanup levels were established at 1 mg/kg for soil and 10 micrograms per 100 square centimeters (ug/100 cm2) for concrete and steel surfaces, in accordance with the Toxic Substance Control Act (TSCA) as specified in the approved Final Work Plan. Analytical results from samples collected at the concrete apron fronting the building indicated remediation of the concrete surface was not required. Excavation of exterior soil was conducted in August 1999. Activities were guided using field immunoassay screening to delineate the vertical and lateral extent of PCB contamination. The final depth of excavation ranged from 1 foot to 1-1/2 feet. When the lateral and vertical limits of excavation were reached, verification soil samples were collected and submitted to an approved offsite laboratory to confirm that in-place soil concentrations of PCBs did not exceed the project cleanup level of 1 mg/kg. Analytical results of samples representing post-excavation conditions are below the project cleanup levels, with the exception of a single soil sample result of 1.1 mg/kg. A risk evaluation was performed that shows the 95 per cent upper confidence limit of the mean exposure point concentration is well below the project cleanup level of 1.0 mg/kg. A total of 10 cubic yards of soil contaminated with PCBs were removed from the vicinity of Building 49 and disposed of at an off-island facility approved to accept TSCA and CERCLA wastes. A layer of well-graded crushed rock was placed on the floor of the excavation area to delineate the limit of the excavation. The excavation was then backfilled and restored to match surrounding areas. In 2000, an injection well and associated piping fed by a floor trench drain in the building were also investigated and subsequently removed. The floor trench drain discharged to a 4-inchdiameter steel pipe through the rear (east) wall of the building to an unregistered injection well located approximately 3 feet from the rear wall. Sediment was observed at the bottom of the well at a depth of 16.5 feet below ground surface (bgs). In addition, an 8-inch black steel pipe entered the well from the east, extending approximately 40 feet from the building. Wipe samples collected from the floor drains and 4-inch discharge pipe contained PCB concentrations below the remediation goal of 10 ug/100 cm2. Soil/sludge samples collected from the injection well contained PCB concentrations up to 3.5 mg/kg, which is in excess of the remediation goal of 1 mg/kg. The drain box, the 4-inch steel pipe, and the 8-inch pipe were excavated and disposed of as construction debris. Soil samples collected from the resulting excavation trench for field screening contained concentrations of PCBs less than 1 mg/kg. An offsite laboratory confirmed these screening results. The State of Hawaii Department of Health (DOH), Safe Drinking Water Branch, underground injection control (UIC) Program was consulted in order to determine requirements for injection well abandonment. Closure of the well required that sediment be removed and the total depth of the well recorded prior to abandonment. A drill rig was used to remove sediment from the injection well. Removed sediment was placed directly into tri-wall boxes for transport and disposal. Groundwater was encountered at 20.5 feet bgs. Saturated sediment was contained in 55-gallon Department of

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Transportation (DOT)-approved steel drums pending disposal. The sediment had a strong petroleum odor. Sediment removal continued to a depth of 33 feet bgs, where native material was encountered. The Navy Public Works Center (PWC) Pearl Harbor conducted the investigation and remediation of the interior of the building between April 1997 and September 2002. The cleanup consisted of the transformer removal and the concrete and soil removal. Following removal of the transformer at Building 49, wipe samples were taken to detect the presence of PCB contamination. Only one of nine concrete floor wipe samples reported a PCB concentration (300 ug/100 cm2) above the cleanup goal of 10 ug/ 100 cm2. The sample was located at the southeast corner of the building below the former Electrical Cabinet location. As a result, the impacted section of the concrete slab was removed, and a sample was collected from the soil beneath the slab. PCBs were reported in the soil at a concentration of 1.9 mg/kg. After the removal of approximately 12 inches of soil, three confirmation soil samples indicated that all PCB concentrations greater than 1 mg/kg had been removed. Based on the analytical results, no further action is required within or beneath Building 49. The area of excavation was backfilled with inert material. The building is not in use, and it has been locked to restrict entry. PCB-contaminated soil and concrete were loaded into 55-gallon drums and disposed of at an off-island facility approved to accept TSCA and CERCLA wastes. West Loch is a naval magazine, which is considered industrial/commercial use. Building 49 is not currently in use. Equipment and machinery are still present within the building, and there are currently no plans to remove them. No residual staining was observed on concrete surfaces within the building. The interior concrete surfaces appeared to be in good condition, with no cracks or voids. There is no power supplied to the equipment in the building. The transformer and electrical cabinet have been removed and disposed of. West Loch will be maintained by the Navy for use as a naval magazine, which is considered an industrial/commercial use; however, the potential for unrestricted use was also considered. There is no current plan for building demolition. A Record of Decision (ROD) addressing Building 14 at West Loch (Operable Unit 8) was completed in September of 2006. OU10: The former Manana Storage Area (MSA) at the Pearl Harbor Naval Complex site is located in Pearl City, Oahu, Hawaii. The southern boundary of the site is approximately 1.2 miles northeast of the shoreline of the Middle Loch of Pearl Harbor. The site occupies a 109-acre parcel west of Waimano Home Road, approximately 0.4 miles northwest of the intersection with Kamehameha Highway. The former MSA is currently the site of 5 warehouses, 3 other buildings (including a Wal Mart retail facility), a community center and park, and a maintenance facility for The Bus transit system. Throughout the history of the site, 32 Navy buildings and warehouses have been demolished. The former MSA site is located on the south flank of the Koolau Range. Interbedded alluvial and marine deposits form layers that overlay the Koolau basalt beneath the former MSA. The ground surface at the site slopes southwest toward Pearl Harbor, with elevations ranging from 77 to 132 feet. After the City and County of Honolulu (CCH) acquired the property in 1993, various CCH agencies began to use the site for general warehouse and maintenance operations. A maintenance facility for The Bus transit system is currently located in the central portion of the site. After the remedial action (RA) was completed and cleanup was verified in 1996, the northeast corner of the site was redeveloped for use as a community park. The majority of the former MSA is zoned for a combination of light commercial and industrial development. In 2006, Wal-Mart Stores, Inc. opened a retail facility adjacent to the former Bldg. 1 area. Current land use surrounding the former MSA is predominantly residential with a commercial area to the southwest of the site. Future land use will likely include continued development for industrial/commercial purposes. In addition, the current offsite residential areas could be expanded

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into the former MSA. Groundwater beneath the former MSA is encountered at depths below approximately 100 feet below ground surface (bgs) within the regional basal basalt aquifer, and is classified as a currently used, irreplaceable source of drinking-quality water, which is highly vulnerable to contamination. Because the basal aquifer underlying the former MSA is currently used as a drinking water source current offsite and future onsite residents could potentially be exposed to chemicals in groundwater derived from the former MSA. None of the chemical concentrations detected in the basal groundwater exceeded drinking water standards. After the Navy acquired the MSA property in 1944, the Navy Fleet and Industrial Supply Center (FISC) constructed warehouses on the site. FISC and other Navy tenants used Parcels A, B, and C for general storage until approximately 1973. In 1973, the Defense Reutilization and Marketing Office (DRMO) began operations at the site, including the collection, storage, and transfer of materials recovered from Pacific Rim military facilities. The DRMO used the warehouses on Parcels A and C primarily to store surplus records, supplies, and equipment. In 1980, the DRMO began to redistribute, transfer, sell, donate, and facilitate offsite disposal of both hazardous and non-hazardous materials located in Bldgs. 18 and 26 on Parcel B. Because both hazardous and non-hazardous materials were staged in warehouses and on open concrete foundations within Parcel B, various chemicals could have been released to the ground surface in this portion of the site. From 1982 until 1993, many of the warehouse buildings were demolished, and the concrete foundations were used as open storage areas. In the 1980s, the Navy began to implement preventive and mitigative procedures in conjunction with its base operations to prevent the releases of hazardous chemicals to the environment. However, chemical releases to the harbor, soil, and groundwater in some areas of the base resulted from previous military operations at PHNC. Concern over these historical releases led the Navy to identify 30 potential sources of hazardous waste in 1983. Based on the historical data, the PHNC was added to the National Priorities List on 14 October 1992 after completion of Hazard Ranking System screening, public solicitation of comments, and after all comments had been addressed. In March 1994, EPA, Department of Health (DOH), and the Navy signed a Federal Facility Agreement which identified procedures for addressing contamination at the PHNC. In 1983, the Naval Facilities Engineering Services Center (NFESC) performed an initial assessment study (IAS) of the Pearl Harbor Naval Base to locate and report hazardous materials stored or disposed of on base. The IAS report concluded that Parcels A and C at the former MSA were free of environmental contamination because no hazardous materials had been stored on these parcels. However, because DRMO activities conducted in buildings on Parcel B included storage and transfer of hazardous materials, Parcel B was identified as potentially contaminated. In August 1993, the Department of the Navy entered into a memorandum of understanding to sell the former MSA to the CCH. The Navy agreed to "deliver property free of all surface and subsurface hazardous materials". A non-time critical RA was conducted in March and April 1996. Arsenic- and lead-contaminated soil was excavated and disposed from 13 isolated locations within the 6 exposure areas identified during the Remedial Investigation (RI). Soil was removed to achieve cleanup goals based on 1995 EPA Region 9 residential soil non-cancer preliminary remediation goal (PRG) values for arsenic (22 milligrams per kilogram [mg/kg]). A total of approximately 272 tons of soil was removed from the 13 excavations, which reached maximum dimensions of approximately 15-by-15 feet horizontally, and 4.5 feet bgs. The excavated soil was disposed of at an approved offsite facility. The excavated areas were backfilled with clean fill material after the EPA and DOH reviewed and approved the Navy's remediation verification report. A regional groundwater assessment (RGA) was conducted from 2001 to 2003 after the completion of the RA at the former MSA. The objective of the RGA was to confirm that chemicals released at the former MSA

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did not impact, and are not likely to impact, groundwater beneath or downgradient of the site. The RGA objectives included confirming the conclusions of previous investigations and the effectiveness of the RA. To address these objectives, groundwater chemical data and hydrogeologic information were collected and evaluated to identify potential site-related contamination and assess the groundwater systems underlying the former MSA. A human health screening preliminary risk evaluation (PRE) conducted during the RGA compared the former MSA groundwater data to EPA Region 9 tap water PRGs. All detected chemical of potential concern (COPC) concentrations were below the tap water PRGs, and the screening PRE results indicated minimal potential risks associated with the residential exposure pathway. Comparison to the current tap water PRGs confirms the conclusion that all COPC concentrations detected in groundwater beneath the former MSA are below the tap water PRGs. Because no COPCs were detected at concentrations above drinking water criteria in groundwater beneath the former MSA, the RGA report concluded that chemicals released at the former MSA did not impact, and will not impact, groundwater. Therefore, NFA is recommended to address groundwater at the site. The former MSA monitoring wells were abandoned in 2005 and sealed to prevent chemicals potentially released near the well heads in the future from reaching the underlying groundwater. A Record of Decision addressing OU 10 was completed in September 2006. OU12: The Bldg. 284 Site and Former Bldgs. 80 and 302 Site have been the subject of the following environmental investigations: Initial Assessment Study. In 1983, the Naval Energy and Environmental Support Activity conducted an initial assessment study (IAS) at PHNC. The IAS report identified potentially contaminated sites at PHNC and recommended further investigation to determine the nature and extent of contamination and develop recommendations for further action. Site Summary Report. A site evaluation of Ford Island was performed in 1998 to identify and classify sites with suspected environmental contamination. Results of the site evaluation were presented in the Site Summary Report (SSR), Ford Island Geographic Study Area . Investigators systematically evaluated the entire island to identify sites where historic activities may have resulted in the release of hazardous substances or petroleum products. Information was obtained through record searches, interviews with current and former employees, and visual site inspections. Based on analysis of the available data, eight hazardous substance sites, 55 transformer sites, and four inactive AVGAS pipeline sites were classified as areas that had not been evaluated or required additional evaluation because hazardous substances or petroleum were known to have been stored or used there and may have been released to soil, sediment, surface water, and groundwater. Remedial Investigation. From 1999 to 2003, a remedial investigation (RI) was conducted to characterize the nature and extent of contamination at the eight hazardous substance sites, 55 transformer sites, and four inactive AVGAS pipeline sites and recommend further action, as necessary, to protect human health and the environment. Soil, sediment, and groundwater samples were collected and analyzed for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), pesticides, herbicides, and metals. Removal actions for the four inactive AVGAS pipeline sites are documented in the Remediation Verification Report, Non-Time Critical Removal Action, Ford Island Inactive AVGAS Pipeline, Pearl Harbor Naval Complex, Hawaii. Of the 55 transformer sites, 23 required non-timecritical removal actions (NTCRAs) that were conducted between 2003 and 2004 and are documented in the Remediation Verification Report, Thermal Desorption Treatment of PCB Contaminated Soil, Various Navy Transformer Sites, Oahu, Hawaii. The other 32 transformer sites and five of the eight hazardous substance sites that are recommended for no further action are addressed in another Ford Island ROD. The other three hazardous substance sites are the subject of this Record of Decision (ROD) and include the Bldg. 284 Site and

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former Bldgs. 80 and 302, which have been combined due to their close proximity and are referred to as the Former Bldgs. 80 and 302 Site. Several metals of concern were identified in soil samples taken in the vicinity of the Bldg. 284 Site and a soil cleanup was recommended. Although metals concentrations above background levels were detected in subsurface soil, no further action was recommended for the Former Bldgs. 80 and 302 Site because the site was covered with asphaltpavement or a concrete foundation, which prevent direct exposure to the underlying soil. Engineering Evaluation/Cost Analysis. An engineering evaluation/cost analysis (EE/CA) was prepared as part of a NTCRA for hazardous substance sites on Ford Island to mitigate potential threats to human health and the environment. The EE/CA recommended removal actions for five of the hazardous substance sites, including a portion of the Bldg. 284 Site located adjacent to Bldg. 284. The removal actions included excavation of contaminated soil and off-island disposal at facilities approved to accept Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)- or Toxic Substances Control Act (TSCA)-regulated waste; jet-flushing of contaminated sediment from storm drain lines at two sites and off-island disposal of the sediment at a facility approved to accept CERCLA-regulated waste, and the cleaning and closure of two oil-water separators at Bldg. 284. Action Memorandum for Non-Time Critical Removal Action. The decision to conduct a NTCRA at the five hazardous substance sites evaluated in the EE/CA was documented in an Action Memorandum. The removal action included excavation of contaminated soil from the area adjacent to Bldg. 284 and off-island disposal at a CERCLA-approved disposal facility. Removal Action and Final Remediation Verification Report. Based on recommendations provided in the EE/CA, NTCRAs were conducted at five Ford Island Hazardous Substance Sites, including the Building 284 Site. The June 2003 to October 2003 Bldg. 284 Site NTCRA included soil removal and closure of two oil-water separators. Soil was removed from the area immediately adjacent to Bldg. 284 until contaminant concentrations in confirmation samples were below soil cleanup levels. However, confirmation sampling results indicated that metals contamination was present in soil in the sloped area northwest of Bldg. 284 and the contaminated soil extended beyond the excavation limits. Due to planned redevelopment, additional subsurface soil sampling was conducted at the Former Bldgs. 80 and 302 Site in conjunction with the removal action to further delineate the extent of metals detected during the RI at concentrations above background levels. The additional delineation was conducted to ensure areas with elevated metals concentrations in soil were identified and appropriately managed so that impacted soil would not remain exposed at the land surface as a result of construction activities. Additional sampling results indicated that metals were present to the south of the Former Bldgs. 80 and 302 locations and to the east across Independence Street at concentrations that exceed background levels and EPA Region 9 residential and industrial preliminary remediation goals (PRGs). Additional sampling conducted in conjunction with the removal actions continued until the extent of contamination was delineated to the south and the sampling results were presented in the remediation verification report. Action Memorandums for TCRAs. TCRAs were conducted at the Bldg. 284 Site and the Former Bldgs. 80 and 302 Site. Prior to evaluating removal action alternatives for the Former Bldgs. 80 and 302 Site, additional sampling was conducted until the extent of contamination was delineated in the area east of Independence Street. The additional sampling results are documented in action memorandums for the Former Bldgs. 80 and 302 Site. The alternatives evaluated and remedies selected are documented in one action memorandum for the Bldg. 284 Site and two action memorandums and an action memorandum addendum for the Former Bldgs. 80 and 302 Site. The action memorandum for the Bldg. 284 Site documented the decision to construct a vegetative soil cap and shoreline protection including a riprap revetment. The action memorandums and action memorandum addendum for the Former

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Bldg. 80 and 302 Site documented the decision to conduct soil removal to facilitate planned construction activities, "hot spot" surface soil removal, and construction of a vegetative soil cap. Performance Design Packages. Performance design packages were prepared for the TCRA at the Bldg. 284 Site and Former Bldgs. 80 and 302. The performance design packages provided detailed designs for the vegetative soil cap and the rip-rap revetment shoreline protection at the Bldg. 284 Site and the vegetative cap at the Former Bldgs. 80 and 302 Site. Remediation Verification Reports for TCRAs. Based on recommendations provided in the action memorandums for the TCRAs and the specifications provided in the performance design packages, TCRAs were completed at the Bldg. 284 and the Former Bldgs. 80 and 302 Sites. Details regarding the activities conducted during the TCRAs are presented in the remediation verification reports. The TCRA at the Bldg. 284 Site was conducted from July 2006 to September 2006 and included consolidation of construction debris along the Pearl Harbor shoreline and construction of a vegetative cap and rip-rap shoreline protection. The TCRA conducted at the Former Bldgs. 80 and 302 Site was conducted in two phases. The first phase was conducted from December 2005 to March 2006 to accommodate construction of a planned Pacific Warfighting Center. The second phase was conducted from June 2006 to December 2006 and included hot spot surface soil removal and construction of a vegetative cap in the area east of Independence Street. Focused Feasibility Studies (FFSs). A FFS was conducted in July 2007 for the sloped area at the Bldg. 284 Site and in September 2007 for the Former Bldgs. 80 and 302 Site. The studies recommended LUCs and long term monitoring and maintenance (LTMM) as the final remedy for both sites. Proposed Plan. In 2008, a proposed plan (PP) was prepared for the Bldg. 284 Site and the Former Bldgs. 80 and 302 Site to present the recommended final site remedy and to facilitate public involvement in the remedy selection process. The PP presented the various alternatives considered, identified LUCs and LTMM as the recommended alternative, explained the rationale for selecting the alternative, and requested public comment. There have been no enforcement activities at the Bldg. 284 Site or the Former Bldgs. 80 and 302 Site. A ROD addressing OU 12 at the Pearl Harbor Naval Complex site was completed in September 2009. OU14: The United States (U.S.) Navy (Navy) has prepared this Record of Decision (ROD) for the Former Pearl City Junction (PCJ) Site, Pearl City, Oahu, Hawaii. The Former PCJ Site occupies 13.7 acres south of Kamehameha Highway and west of the intersection of Kamehameha Highway and Waimano Home Road on the island of Oahu, Hawaii. The southern boundary of the site is approximately 0.9 mile from the shoreline of the Middle Loch of Pearl Harbor. The Former PCJ Site is administered by Naval Facilities Engineering Command, Hawaii (NAVFAC Hawaii), and is part of the Pearl Harbor Naval Complex (PHNC). The PHNC was added to the National Priority List (NPL) on 14 October 1992. The NPL identifies priorities among sites of known or threatened releases of hazardous substances, pollutants, or contaminants throughout the United States (U.S.) and its territories. The PHNC is identified as site number (no.) HI4170090076 in the U.S. Environmental Protection Agency (EPA) Comprehensive Environmental Response, Compensation, and Liability Information System. The Navy's Fleet and Industrial Supply Center (FISC) acquired the PCJ property in 1944, and constructed four warehouse buildings at the site. The FISC used the site to store nonhazardous war supplies until 1962, when the Defense and Reutilization Marketing Office (DRMO) began using the site to store and distribute excess materials. The DRMO used buildings (Bldgs.) 1, 2, and 3 primarily for storage of general cargo. Approximately one-third of Bldg. 4 was used to receive excess materials that were sold to the public; the remaining portion was used for offices and a public auction bidding area. Although products including lime, fuel, hydraulic fluid, photographic chemicals, and paints were stored in Bldg. 4, no spills were reported. In 1984, the DRMO vacated Bldg. 2, and the Navy

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Exchange began using it as a rental storage facility for military personnel. In 1988, the DRMO vacated Bldgs. 1 and 3 and the eastern and central portions of Bldg. 4. From 1988 through 1989, various tenants used the warehouse buildings for nonhazardous material storage. From 1962 through 1989, the DRMO used the open area south of Bldg. 4 for storage of tires and surplus vehicles that were later sold to the public. Transformers containing PCBs and other deteriorating and leaking containers were also stored in the open area. All the warehouse buildings have been demolished. In 1994, the Navy submitted an Environmental Baseline Survey for Transfer and a Finding of Suitability to Transfer the PCJ Site. The property then transferred from the Navy to the State of Hawaii on 29 July 1994 pursuant to a Quitclaim Deed recorded in the State of Hawaii, Bureau of Conveyances, as Document no. 94-127207. Immediately following recording of the Navy Quitclaim Deed, the property again transferred to the City and County of Honolulu (CCH) pursuant to a Quitclaim Deed recorded in the State of Hawaii, Bureau of Conveyances, as Document no. 94-127208. The Quitclaim Deed reserves right of access to the property for the Navy for the purpose of performing environmental remediation. In early 2000, the CCH sold the property to the commercial firm Home Depot, Inc. An Environmental Agreement and Modification of Reserved Access Right between the Navy and Home Depot documents covenants that restrict land use to commercial or industrial, and grants right of access to the property to the Navy for the purpose of performing environmental remediation. By Special Warranty Deed recorded in the State of Hawaii Bureau of Conveyances, as Document No. 2003-01959, Home Depot conveyed the eastern end of the property to Public Storage, LLC. The results of the environmental investigations and response actions performed to address hazardous substances and petroleum potentially released at the Former PCJ Site are summarized below. The Navy and U.S. Air Force have investigated the site to evaluate the nature and extent of contamination, assess potential risks to human health, and design the response actions required to ensure that the Former PCJ Site does not pose unacceptable risk to human health or the environment. -1988: Preliminary Assessment (PA) -1990 - 1991: Site Inspection (SI) -1993: Baseline Risk Assessment -2001 - 2002: Regional Groundwater Assessment (RGA) -2007 - present: Air Force Remedial Investigation (RI) In 1988, the Naval Facilities Engineering Command, Pacific (NAVFAC Pacific) conducted a Preliminary Assessment to identify potential threats to human health or the environment associated with chemicals potentially released at the site. Based on a records search, interviews, and the lack of evidence of hazardous substance release, the PA report recommended no further action for the site under the NAVFAC Pacific ER Program; however, the EPA Region 9 did not concur with this recommendation. The Navy Public Works Center initially sampled soil at the PCJ Site in November 1990. The analytical results indicated that elevated levels of PCBs occurred in soils within the open storage area in front of Bldg. 4. This sampling was followed by a Site Inspection to assess whether hazardous substances had been released at the site, identify the types of chemicals that were released, and evaluate potential risks to human health and the environment. Soil samples collected from the eastern third of Bldg. 4 and the open storage area were submitted for analysis of total petroleum hydrocarbons (TPH), total fuel hydrocarbons (TFH), volatile organic compounds (VOCs), semivolatile organic compounds, PCBs, chlorinated pesticides, metals, and hydrogen ion concentration. Because results indicated elevated levels of PCBs, dieldrin, metals, and TPH/TFH in the soil, the Site Inspection report recommended further evaluation of the site and delineation and remediation of dieldrin, beryllium, copper and TPH/TFH (removal of PCBs was already scheduled). Because TPH/TFH was detected only at locations with elevated PCB or dieldrin concentrations, the TPH were considered to be associated with these chemicals. After reviewing the SI report, the DOH recommended soil remediation with site-specific cleanup goals for PCBs, dieldrin, TPH, and metals. In

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1993 and 1994, soil with PCB concentrations exceeding the DOH-approved cleanup goal for total PCBs 10 milligrams per kilogram (mg/kg) was removed from the western section of the open storage area, and the excavated areas were backfilled with clean soil. The results of verification sampling conducted to confirm removal of the PCB-impacted soil are presented in a Verification Sampling Report. The 1993-1994 removal action also included excavation and disposal of soil with dieldrin concentrations exceeding the DOH-approved cleanup goal for dieldrin (1 mg/kg). The dieldrin-impacted soil was generally restricted to depths of 1 foot or less, and was removed from an area in the southeast corner of the open storage area. The excavation area was backfilled with clean soil, and the contaminated soil was disposed of at a CERCLA-approved facility on the U.S. mainland. Successful completion of the dieldrin removal is documented in a Closure Report. An Action Memorandum was prepared to request and document approval of the dieldrin removal action. In July 1997, Home Depot, Inc., as a prospective buyer, collected soil samples from the west-central area of the open storage area, and detected PCB concentrations above the DOH-approved cleanup goal for total PCBs (10 mg/kg). The Navy then performed an initial round of soil sampling to confirm the presence of soil with PCB concentrations above the cleanup goal, and conducted delineation sampling to define the extent of the PCB-impacted soil. The impacted soil was then excavated and disposed of at a CERCLA-approved facility on the U.S. mainland. Verification soil samples collected from the excavation indicated that soil with PCB concentrations above the cleanup goal remained; further delineation and excavation were therefore performed to remove the impacted soil. A second set of post-excavation verification soil samples was collected, and the analytical results showed that the cleanup goal had been achieved. The excavation area was backfilled with clean soil and the impacted soil was disposed of at a CERCLA-approved U.S. mainland facility. Successful completion of the removal action is documented in a Remediation Verification Report. U.S. Air Force documents identify a former Air Force fuel pipeline that ran generally east-west along the northern boundary of the Former PCJ Site. The Air Force indicated that this pipeline historically carried aviation fuels and automotive gasoline. Home Depot, Inc. removed this pipeline in June-July 2000. No apparent impact (odors or field equipment readings) was observed in soil during the removal. The abandoned pipeline also reportedly carried aviation fuels and automotive gasoline. This ROD documents for the Administrative Record the decision by the Navy and the U.S. Environmental Protection Agency (EPA), with concurrence from the Hawaii Department of Health (DOH), to implement land use controls (LUCs) as the final remedy for the Former PCJ Site. The final remedy for the Former PCJ Site has been selected in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (as amended by the Superfund Amendments and Reauthorization Act [SARA]), the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 Code of Federal Regulations [CFR] 300.430(e)(a)(iii)), and Presidential Executive Order 12580. Information supporting the decisions leading to the selected remedy is contained in the Administrative Record file for the site. The decision to implement the final remedy identified in this ROD is based on and relies on the entire Administrative Record for the Former PCJ Site. Information not specifically summarized in this ROD or its references but contained in the Administrative Record has thus been considered and is relevant to selection of the remedy. A ROD for Operable Unit 14 at the Pearl Harbor Naval Complex Site was completed in September 2010. Operable Unit 16: The Site, the subject of this ROD, has been designated as an individual site within the Richardson GSA. The Site is located along the shoreline area of the PHNC and is bounded by the northern and eastern shoreline of East Loch and Arizona Memorial Drive. The Site is located in the Richardson GSA on the island of Oahu in the state of

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Hawaii. It is currently a Pearl Harbor Morale, Welfare, and Recreation Department recreational area. The Site occupies a flat area with very little relief or slope. The southern and central portion of the Site comprise a large grassy lawn area surrounding a large open-air picnic pavilion. A canoe shed area occupies the northwestern third of the Site. Buildings 97 and 103, and an asphalt parking lot are located in the northeast portion of the Site. Building 97 is currently used as a store room/restroom. Building 103 is used by a commercial dive shop and as storeroom/classroom. Two small sheds to the west of Building 103 are used by the dive shop for equipment and supply storage. The Site features were built in the 1940s, and were used to train Navy firefighting students by simulating fire situations likely to be encountered on a ship. Site features included structures built on concrete pads and lined with firebrick in order to create a simulated boiler room, aircraft carrier flight deck, aircraft carrier hangar compartment, ship forecastle area, and airplane. Other former features (Ref. 07) include an incinerator, an electrical transformer, fuel lines, fuel tanks, drainpipes, sumps, and oil-water separators that were associated with these structures. Reportedly, gasoline, diesel fuel, waste oil, and paints were used or handled from the early 1940s to 1976. The Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) stated that water and ignited materials washed into drains during firefighting training operations. These practices, along with the storage of petroleum, led to contamination of the soil and groundwater at the Site. In 1976, Site operations were transferred to another location within the Pearl Harbor Shipyard, and the majority of surface structures were removed. The approximate limits of the Site are marked by a chain stanchion surrounding the current Site. An RFI was conducted in 1992 to identify potential sites at PHNC that may require further investigation. The RFI included an assessment of the presence or absence of fuel or fuel related contamination at the Site based on the historical use of the Site. Geophysical surveying results indicated that sub-surface structures still existed and could be a source of any fuel based contamination. Free-phase petroleum product was observed in the lawn area (former oil-water separator locations), and between Buildings 97 and 103. A soil gas survey revealed detectable concentrations of toluene, methane and total volatile hydrocarbons in three areas. Limited subsurface soil and groundwater samples were collected at nine locations chosen to investigate potential source features like oil-water separators, sumps, and fuel storage tanks. Groundwater samples were collected directly from each boring. Soil and groundwater samples were analyzed for polychlorinated biphenyls (PCB), semi-volatile organic compounds (SVOCs), volatile organic compounds (VOCs), and total fuel hydrocarbons (TFHs). The VOC benzene was detected in one groundwater sample at 56 micrograms per liter (ug/L). This concentration exceeded the EPA Risk-Based Screening Levels for Soil to Groundwater migration of 5 ug/L. Subsurface soil samples collected from two locations were found to have concentrations of TFH that exceeded the investigation screening levels. The investigation concluded that releases originated from a series of residual point sources irregularly distributed across the Site. Based on low permeability of the soil throughout the Site it was suggested that the rate of contaminant movement was low and that contaminants degrade slowly in place. Further Investigation was recommended to determine the extent of petroleum contamination. A Removal Site Evaluation (RSE) was initiated in 2005 to further investigate the findings of the 1992 RFI, and to evaluate if any contaminated media at the Site was a result of previous Site activities. The RSE was conducted as the first phase of the engineering evaluation / cost analysis (EE/CA). The RSE results were also used to evaluate the need for further action at the Site. Several Site features were identified by the RSE: -Potential subsurface features were identified by a geophysical survey of the Site. The features were located at suspected locations of historic fuel

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storage features where free-phase product was observed. -Levels above initial screening criteria were found for PCBs (one sample), dioxins (31 samples), total petroleum hydrocarbon as diesel range organics (TPH-DRO) (one sample), PAHs (18 samples) and lead (one sample) in near-surface and surface soil. The highest PAH concentrations were found closest to the picnic pavilion. --The concentrations for PAHs and lead exceeding EPAs Regional Screening Levels (RSL (formerly 2004 EPA Region 9 Preliminary Remediation Goals) for soil were found in isolated locations at the Site. --Concentrations above the Toxic Substances Control Act (TSCA) level for PCBs (1 milligram per kilogram [mg/kg]) in soil were found at one location at the Site. --Concentrations of dioxins over the Office of Solid Waste and Emergency Response (OSWER) toxicity equivalent quotient (TEQ) level (1 microgram per kilogram [ug/kg]) for Residential Soils was detected in one soil sample location. -Levels above initial screening criteria were found for dioxins (six samples), total petroleum hydrocarbon as gasoline range organics (TPH-GRO) (two samples), TPH-DRO (19 samples), total petroleum hydrocarbon as lubricating oil range organics (TPH-LRO) (20 samples), PAHs (25 samples), cadmium (one sample), and lead (12 samples) in groundwater. Elevated concentrations for PAHs, dioxins, cadmium, and lead were likely due to adherence to suspended particulate matter. -Free-phase petroleum product was observed in two general areas: the Canoe Shed/Building 97/103 area and the lawn area in the southern area of the Site in an inferred location of a previous oil/water separator. These were two of the three locations identified for the later removal of petroleum-impacted soil. A Human Health and a Screening Ecological Risk Assessment were conducted as part of the RSE. Based on the risk assessment, a soil Removal Action (RA) was recommended based on the results of high lead and dioxin concentrations at the Site. An EE/CA of the findings presented in the RSE was completed in 2007. The EE/CA evaluated three future response alternatives. The preferred alternative was to remove four hazardous substance management areas, and three petroleum-impacted areas. It was recommended that the Site undergo a RA, in order to address the contaminants of concern (COCs), risks and subsurface features discovered during the RSE. Based on the findings of the EE/CA, a Non-Time Critical RA was performed at the Site. The purpose of the RA was to characterize, remove, transport, and dispose of soil from four hazardous substance management areas (Areas 1, 2, 6 and 7), and three petroleum-impacted areas (Areas, 3, 4 and 5). Samples collected/analyzed during the RA completed delineation of the impacted areas. Areas 1 and 2 were selected based on the risk posed by dioxin and lead concentrations. Areas 6 and 7 were selected as a measure of caution to remove PCBs (exceeding Applicable or Relevant and Appropriate Requirements [ARAR]) and PAHs (at the request of EPA Region 9). The RA activities have been documented in the Remediation Verification Report (RVR). The four COCs that drove the RA of the four hazardous substances management sites, described in the RVR, were: dioxins, lead, PAHs, and PCBs. Cleanup goals, recommended in the EE/CA, were determined for: dioxins in soil, from the EPA OSWER toxicity equivalent quotient for Residential Levels, and dioxin TEQs in groundwater from the dioxin congener (2,3,7,8-TCDD) State of Hawaii Department of Health (DOH) EAL cleanup goal for groundwater; lead, and PCBs, from the EPA Residential RSLs (formerly 2004 EPA Region 9 Preliminary Remediation Goals). The project cleanup goals for PAHs were raised from the Residential Soil RSLs recommended in the EE/CA; however, still result in acceptable risk that is within the EPA target risk range for PAHs. Some PAHs can be related to combustion from barbecue activity. The raised cleanup goals were permissible because the areas sampled for PAHs were surrounding the Site barbeque pit, and are likely attributed to the current Site use (recreational barbeque activities), not to the former fire training activities. Among the four sites excavated, two separate locations were specifically excavated to eliminate exposure pathways to elevated

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near-surface and shallow subsurface concentrations of dioxin and lead, and two additional locations were excavated as a measure of caution. One of these was excavated to remove PCBs exceeding ARAR cleanup goals. The other was excavated to remove two locations of PAHs, based on an EPA Region 9 request, even though PAH concentrations did not exceed ARARs, or represent any significant risk. Subsurface soil samples were collected from each hazardous substance management and petroleum-impacted areas to delineate subsurface contamination. The four hazardous substances management sites were excavated to 0.5 feet below the deepest sample depth at each location. Only one sample, nearest MW-04, contained PAH concentrations above the site-specific cleanup goals. Following the excavation, an outward, sidewall, MI soil sample was collected from the respective location between ground surface (0.0 feet) and 2.0 feet below ground surface, and analyzed for the Site PAHs. According to the laboratory results, the PAH concentrations were below the site-specific cleanup goals; therefore, the excavation extents had been delineated. None of the other COCs exceeded the site-specific cleanup goals. Thirty-five, loose cubic yards of soil were removed from the four hazardous substance management areas. The excavated soil was characterized for proper disposal and shipped to a U.S. Mainland CERCLA and RCRA approved landfill for disposal. Six hundred twelve, loose cubic yards of petroleum contaminated soil were removed from the three petroleum impacted areas. The petroleum-related soil was, after characterization, disposed off-site at an on-island RCRA Subtitle D landfill. Free phase petroleum product was observed floating on the groundwater indicating a petroleum contamination source is still present at the Site. The distribution of free phase petroleum should be evaluated to determine the potential for the residual petroleum and/or related dissolved-phased constituents in groundwater to migrate toward Pearl Harbor. The results of the Site delineation were presented to representatives from the Navy, DOH, and EPA Region 9, and the excavation limits for hazardous substance management and petroleum-related areas were agreed upon. A ROD addressing Operable Unit 16, the contaminated soil and groundwater at the Former Firefighting Training Facility located in the Richardson Geographic Study Area at the Pearl Harbor Naval Complex site was completed in September 2010. Operable Unit 17 - Building 6: Bldg. 6 is a 52,000-ft2 building located within the Controlled Industrial Area (CIA) of Joint Base Pearl Harbor-Hickam (JBPHH), Pearl Harbor Naval Shipyard and Intermediate Maintenance Facility (PHNSY & IMF), which is part of the Pearl Harbor Naval Complex (PHNC). The PHNC is a 2,100-acre Navy installation located approximately 7.5 miles west of Honolulu on the island of Oahu, Hawaii. JBPHH, PHNSY & IMF is one of the six major components of the PHNC and comprises approximately 350 acres within the PHNC. Bldg. 6 has five parallel rows of columns supporting the structure. The majority of the building floor area is a patchwork of concrete paved areas with intermittent unpaved areas scattered throughout. These unpaved areas were typically located near furnaces. Historically, molten metals were transferred from the furnaces to molds held in place in the unpaved areas by a sand/clay mixture. During the transfer of the molten metal to the molds, metals may have been released to the sand/clay mixture and to the soil in the unpaved areas. Presently, plastic sheeting and plywood cover the exposed sand/clay mixture and soil. The largest unpaved area encompasses approximately 2,100 ft2 and is located in the central portion of the building. This large unpaved area is roped off with signs warning of elevated concentrations of lead. Within this unpaved area is a subsurface concrete vault approximately 160 ft2 in area and 8 feet in depth, which was used as a drip pit for molten metal-pouring activities. This unpaved area, including the concrete vault, has been backfilled with soil and sand. The north side of the building is lined with unoccupied offices, a restroom, a locker room, storage rooms, and workshops. Two active electrical substations are located inside Bldg. 6, one in the southwest corner of the

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building and one in the northeast corner of the building. A third active electrical substation is located outside of the north side of the building. Some equipment used in past foundry operations has been removed, but many furnaces and other equipment remain in place. Three mullers are located on the north side of the building. Mullers were typically used in foundry operations to "knead" or mix sand before being packed into wooden molds. Two large ovens and small drying ovens are located southeast of the largest unpaved area. A high temperature oven is located on the north side of the building. Six induction furnaces surround a generator room toward the south side of Bldg. 6. A large mechanical device (shaker) is located in the central portion of the building and was historically used to mix sand with other material to line the casting molds to ensure smooth surfaces for casting. Extending north of the large shaker is a long catwalk with a series of drop chutes that extend down to approximately 5 feet above the ground. Access to the facility is strictly controlled. In addition, access to JBPHH, PHNSY & IMF facilities is restricted to authorized personnel only, and security personnel at facility entrances and exits prohibit unauthorized trespassing by civilians to the Bldg. 6 area. Buildings 11, 12, and 315 are adjacent to Bldg. 6 to the north and west, and Seventh Street lies to the immediate east. To the immediate south, adjacent to the south wall of Bldg. 6, is the hydroblast area, consisting of an unroofed area with a grated floor, a hydroblast equipment room, and a walled sand recovery pit. The Bldg. 6 Foundry Shop, constructed in 1915 to cast new or replacement parts for naval vessels, is located within the CIA of JBPHH, PHNSY & IMF along 7th Street, approximately 1,000 feet south of Pearl Harbor. Foundry operations began during World War I and reached a peak during and shortly after World War II. More recently, foundry operations were limited to casting small replacement metal parts. Casting operations were conducted at multiple locations throughout Bldg. 6. Most of the foundry equipment is still in place; however, foundry operations ceased altogether in 1997. Since that time, the only industrial activities that have taken place inside Bldg. 6 are the following: -Periodic operation and maintenance of three electrical substations -Temporary storage of equipment -Temporary storage of CERCLA remediation wastes consisting of asbestos-containing material in 29 tri-wall boxes, which were removed after the expanded site inspection (SI) field investigation in 2002 No employees work within the building on a regular basis. Occasionally, Navy personnel go inside the building for maintenance and operation of the electrical substations and for access to the storage areas. The following environmental investigations related to the Bldg. 6 site have been conducted since 1993: -1987 Facility Assessment -1993: Investigation by Navy personnel -1995: SI -1998: Navy Maintenance and Cleanup -2001 and 2002: Expanded SI -2009 and 2010: remedial investigation/feasibility study (RI/FS) In 1987, a Facility Assessment was performed at the PHNC that recommended investigation of several solid waste management units and areas of concern within Bldg. 6. Navy personnel conducted an investigation in 1993 after soil suspected to be contaminated was discovered during construction work within Bldg. 6. In February 1993, discolored soil was observed during excavation of the largest unpaved area in the eastern portion of the building, as part of construction work to install new equipment at the Foundry Shop. Initial sampling indicated that toxicity characteristic leaching procedure (TCLP) lead levels exceeded the 5.0 milligrams per liter (mg/L) regulatory limit in 4 of the 8 soil samples collected. An additional 36 soil samples were collected for total lead analysis. Of the additional 36 samples, 2 were collected from the former unpaved grassy area (which has since been paved), just outside of the southeast side of Bldg. 6 between columns 15 and 17; the rest were collected in and around the unpaved areas inside the building. The detected concentrations of total lead ranged from 24 milligrams per kilogram (mg/kg) to 9,550 mg/kg inside

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the building and from 99 to 1,305 mg/kg in the former unpaved grassy area just outside the building. In 1995, the Navy conducted a SI of three sites at the JBPHH, PHNSY & IMF. One of these investigations focused on the Bldg. 6 Foundry Shop, specifically the largest unpaved area inside the building and the former unpaved grassy area adjacent to the southwest side of the building. Surface soil from 13 areas was collected from the open areas inside and outside Bldg. 6. Of the surface soil samples collected, two were from the grassy unpaved area on the south side of Bldg. 6, and the remaining samples were collected in the large open area inside Bldg. 6 and at the former furnace and drip pan locations. All samples were analyzed for metals, and five of the samples were also analyzed for polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and total petroleum hydrocarbons (TPH). Metals were detected in all of the surface soil samples. The highest concentration of metals detected in the surface soil appeared to be in specific hot-spot locations, including the grassy area outside Bldg. 6 and within the large unpaved interior sampling area. PAHs were detected in all five samples analyzed for organic chemicals of potential concern (COPCs). The 16 PAH analytes had combined total concentrations ranging from 2 micrograms per kilogram (ug/kg) to 563 ug/kg. The highest concentrations of PAHs were detected on the south side of the large unpaved sampling area inside Bldg. 6. PCBs were detected in all five samples at concentrations ranging from 26 to 3,200 ug/kg. The maximum PCB concentrations were detected in the surface soil samples from the north side of the large unpaved sampling area inside Bldg. 6. TPH-gasoline range organics and TPH-lube oil range organics (LRO) were detected in the surface soil samples from the northern portion of the large unpaved sampling area, but the TPH concentrations were below the screening criteria, with a maximum of 330 mg/kg. A total of 12 subsurface soil samples were collected from six soil borings drilled inside Bldg. 6 at depths ranging from 2 to 8 feet below ground surface (bgs). The subsurface soil samples were analyzed for metals; PAHs; PCBs; benzene, toluene, ethylbenzene, and xylenes; and TPH. Two soil borings were also drilled approximately 40 feet north of Bldg. 6 and two borings were drilled approximately 20 feet south of Bldg. 6 to evaluate background concentrations. All 23 metals analyzed for were detected in 1 or more of the subsurface soil samples obtained from borings inside Bldg. 6. Lead, copper, and zinc were present in subsurface soils at concentrations generally an order of magnitude greater than those observed in the background borings. These metals were attributed to past metal-casting operations in Bldg. 6. The highest concentrations of metals in soil within the building were located in the subsurface vault area in the north-central portion of the large unpaved sampling area. Metals contamination was observed to depths of at least 8 feet bgs. PAH concentrations in soil were significantly higher in subsurface soils than in surface soils in the large unpaved sampling area of Bldg. 6. Total PAH levels in subsurface soils ranged from 1.6 to 161,559 ug/kg, with the highest levels occurring in the center of the unpaved area. PAHs also increased with depth in this area, with the highest concentrations occurring in samples at 8 feet bgs. PCB concentrations in subsurface soil samples were similar to those found in surface soils from the unpaved area of Bldg. 6, with the highest concentrations located in the northern portion of the large unpaved sampling area. However, PCB concentrations did decrease with depth to non-detectable levels at the bottom of the borings. Detected concentrations of PCBs ranged from 73 to 1,000 ug/kg. TPH concentrations were higher in subsurface soil than in surface soils in the large unpaved sampling area of Bldg. 6. At the time of the sampling, there were no screening criteria identified for TPH; however, the maximum concentration of 1,400 mg/kg is below the 2007 DOH Environmental Action Level (EAL) established subsequently. The highest concentrations of TPH were present in the center portion of the unpaved area, with three locations exhibiting TPH levels increasing with depth. Based

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on the analytical results of the soil sampling, the SI recommended further action because of elevated concentrations of lead. After foundry operations ceased, Navy personnel conducted a housekeeping effort in 1998, which was limited to removing dust from floors and surfaces, and covering the interior unpaved areas with plastic sheeting. Surface soil and floor-dust sweep samples were collected and analyzed for TCLP lead. Analytical results indicated leachable lead concentrations above the 5.0 mg/L hazardous waste regulatory limit in many areas of the building. In addition, under a time-critical removal action (TCRA) completed in 1998 to address environmental concerns in the catch basins at Bldg. 6, the Navy also removed and disposed of approximately 0.5 cubic yard of contaminated sediment from two catch basins associated with storm drains on the southeast side of Bldg. 6. Furthermore, the unpaved grassy area just outside of Bldg. 6 was paved over with concrete to prevent soil from entering the storm drains. A third feature, previously identified on facility drawings as a storm drain, was found to be a utility vault that did not receive discharges from the foundry operations. The removal action activities are documented in an action memorandum. In 2001, the Navy collected surface soil and subsurface soil samples during an expanded SI. Soil sampling was performed from 1 to 4 October 2001 throughout the Bldg. 6 site in accordance with the approved Work Plan and Sampling and Analysis Plan. A total of 92 soil samples were collected from 45 locations. Of these 45 locations, 39 were randomly selected based on a statistical sampling plan. A total of 80 soil samples were collected from these 39 locations and analyzed for PAHs, PCBs, and metals. Of the 45 locations, 5 locations were selected to target the areas where organic contaminants of potential concern (COPCs) were likely to occur, near the furnace and electrical substations; 10 soil samples collected from these 5 locations were analyzed for PAHs and PCBs. Based on field observations, TPH-diesel range organics (DRO) and TPH-LRO analyses were also conducted on 13 soil samples at 8 of the soil sampling locations. The final sample location was added adjacent to the boring for a monitoring well due to observed petroleum staining. Two soil samples were collected from this location and analyzed for PAHs, PCBs, metals, and TPH-DRO/LRO. Five PAHs were detected in surface soil at concentrations exceeding both industrial and residential soil screening criteria: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene. Benzo(a)anthracene concentrations ranged from 71 to 4,600 ug/kg, benzo(a)pyrene concentrations ranged from 2 to 6,800 ug/kg, and benzo(b)fluoranthene concentrations ranged from 55 to 8,100 ug/kg, with the maximum concentration detected in the large unpaved area in the eastern end of Bldg. 6. Dibenz(a,h)anthracene concentrations ranged from 2 to 1,700 ug/kg and indeno(1,2,3-cd)pyrene concentrations ranged from 45 to 3,700 ug/kg with the maximum concentration detected in the large unpaved area south of the electrical substation in the eastern end of Bldg. 6. For the subsurface soil data set, the same five PAHs as those found in surface soil samples were detected at concentrations exceeding screening criteria: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene. Maximum concentrations of several PAHs were located in the large unpaved area in the eastern end of Bldg. 6, including benzo(a)anthracene (1,000 ug/kg), benzo(a)pyrene (1,500 ug/kg), benzo(b)fluoranthene (2,100 ug/kg), dibenz(a,h)anthracene (360 ug/kg), and indeno(1,2,3-cd)pyrene (810 ug/kg). Two PCBs were detected in soil samples during the 2001 sampling effort: Aroclor-1254 and Aroclor-1260. At the southwestern end of Bldg. 6 in the open hydroblast area, Aroclor-1254 was detected at concentrations of 23 and 29 ug/kg (both at depths from 1.0 to 1.5 feet bgs). At the eastern end of Bldg. 6 adjacent to the unpaved area and the electrical substation, Aroclor-1260 was detected at a concentration of 190 ug/kg. These concentrations, however, did not exceed their respective risk based screening criteria. The only PCB detection (Aroclor-1248) in the 2001

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subsurface soil data set occurred in a paved area at the eastern corner of Bldg. 6, near two large ovens and another set of drying ovens. The concentration of Aroclor-1248 (1.6 ug/kg) did not exceed any screening criterion. Metal concentrations in surface soil were higher than those detected in subsurface soil. For the 2001 dataset, metals exceeding industrial preliminary remediation goals (PRGs) occurred near equipment or the large unpaved area in the eastern end of Bldg. 6. A sample containing lead at 11,000 mg/kg, was located within the large unpaved area in the eastern end of Bldg. Unlike the metals and PAHs, the TPH-DRO and TPH-LRO concentrations were found to be higher in subsurface soil than in the surface soil. TPH- DRO concentration ranged from 11 to 13 mg/kg. TPH-LRO concentrations ranged from 35 to 250 mg/kg. These soil samples were isolated to the eastern end of Bldg. 6 located near oil furnaces and an unpaved area. In 2002 the Navy collected additional surface soil and subsurface soil samples as part of the expanded SI. Soil sampling was performed on 5 November 2002 throughout the Bldg. 6 site in accordance with the approved Work Plan and Sampling and Analysis Plan. Seven soil samples were collected from four locations. All soil samples were surface and shallow subsurface soil samples, because refusal was encountered at depths of 1.5 to 2.0 feet bgs. Six of the seven soil samples were analyzed for PAHs, PCBs, metals, and TPH-DRO/LRO. The remaining soil sample was analyzed for PAHs, PCBs, and TPH-DRO/LRO only, because it was collected in an unpaved area adjacent to an electrical substation where COPCs did not include metals. Benzo(a)pyrene in surface soil exceeded both industrial and residential screening criteria. Benzo(a)pyrene concentrations ranged from 62 to 290 ug/kg, of which the maximum concentration was detected in the furnace area in the western portion of Bldg. 6. The only other PAH exceedance in the 2002 data set was for dibenz(a,h)anthracene, also in the furnace area in the western portion of Bldg. 6. Aroclor-1260, ranging from 64 to 5,100 ug/kg, was the only PCB detected in any of the soil samples collected during the 2002 fieldwork. It was detected in five of six surface soil samples, but the detections were all in unpaved areas adjacent to electrical substations. The maximum concentration of 5,100 ug/kg occurred in the unpaved area in the western end of Bldg. 6. Sampling points surrounding this maximum detection (from the 2001 fieldwork) did not have PCB detections, indicating a limited lateral extent of contamination. PCB soil sampling results under a separate investigation from the area just outside the third electrical substation (designated as E-13) showed Aroclor-1260 concentrations ranging between 1,200 and 2,600 ug/kg. These detections were found in soil samples collected on the north end of E-13. Though soil sampling results under this separate investigation revealed PCB detections above screening criteria, soil sampling points located just south of E-13 did not have PCB detections. Therefore, the PCB detections for E-13 were isolated to soil areas outside of Bldg. 6. In the 2002 shallow subsurface soil samples, Aroclor-1260 was detected in one sample from the unpaved area located north of an electrical substation (located in the southwestern corner of Bldg. 6) at a concentration of 320 ug/kg, which exceeded the residential screening criteria. The majority of the elevated metal concentrations detected in 2002 (maximum lead concentration of 247,000 mg/kg) occurred in samples collected from the paved area at the western end of Bldg. 6, adjacent to one set of induction furnaces, the likely source of the metal contamination. When the metal concentrations in soil were compared to estimated background concentrations, several metals were found at Bldg. 6 within respective estimated background concentration ranges and were concluded not to reflect impacts from previous foundry operations. However, 13 metals (antimony, arsenic, barium, cadmium, cobalt, copper, lead, mercury, nickel, silver, thallium, vanadium, and zinc) did exceed the estimated background ranges. Unlike the metals and PAHs, the TPH-DRO and TPH-LRO concentrations were found to be higher in subsurface soil than in the surface soil. TPH-DRO

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concentrations range from 41 to 52 mg/kg. Groundwater samples were collected from four previously installed wells and two new wells during the 2001 and 2002 Expanded SI. Groundwater samples were also collected from two existing underground storage tank (UST) wells located southeast of Bldg. 6, and one grab sample each of sediment and water was collected from both the sub-floor vault and pour pit. Groundwater samples were analyzed for total and dissolved metals, PAHs, PCBs, TPH-DRO, TPH-LRO, and general water chemistry. PAH and dissolved aluminum were detected in groundwater at concentrations that exceeded 2002 EPA Region 9 PRGs. The dissolved aluminum exceedances (ranging from 399 ug/L to 1,020 ug/L), however, occurred only in one monitoring well (MW-01) located downgradient of Bldg. 6. The PAH exceedances included dibenz(a,h)anthracene (4 micrograms per liter [ug/L]), benzo(g,h,i)perylene (6 ug/L), fluorine (ranging from 0.243 to 1.5 ug/L), and acenaphthene (ranging from 0.31 to 2.3 ug/L) and only occurred in wells that also contained TPH DRO and TPH-LRO for which the source appears to be upgradient of Bldg. 6 (i.e., leaks from the former UST or other upgradient petroleum sources). PCBs were not detected in any of the groundwater samples collected. A RI/FS was conducted in 2009/2010 to determine whether further action is required for the Bldg. 6 site. The RI/FS was initiated in response to unresolved federal and state regulator comments on the Expanded SI report. The scope of the RI included collecting confirmation groundwater samples, reevaluating risks to human health and ecological receptors, and addressing unresolved federal and state regulatory comments and concerns. Because human health risks were determined to be unacceptable, the FS was conducted to develop and evaluate remedial alternatives, and recommend a remedial alternative that, if implemented, will reduce, control, or mitigate unacceptable risks. Two rounds of confirmation groundwater samples were collected to establish the current concentration of dissolved vanadium at the site and evaluate how the current data compared with previously collected data during the 2001 and 2002 collection events. The previous investigations identified elevated concentrations of PAHs and metals in the groundwater (attributed to upgradient sources). However, during the RI, the groundwater concentrations were compared to more recent DOH EALs. As a result of this comparison, the EPA and DOH agreed that the only remaining concern for groundwater was vanadium, and determined that more information was necessary to accurately characterize dissolved vanadium in the groundwater at the Bldg. 6 site. One groundwater sampling round was conducted during the 2009 "dry season" and one round during the 2010 "wet or rainy season" to determine whether seasonal variability affected the concentration of dissolved vanadium present beneath the Bldg. 6 site. Groundwater samples were collected at eight wells (MW-01 through MW-06 and UST MW-08 and MW-09) in and around Bldg. 6. Dissolved vanadium was detected in all eight wells sampled with a maximum concentration of 140 microgram per liter (ug/L) detected at MW-01. No DOH water quality standard for saltwater acute toxicity exists for vanadium but the DOH EAL of 19 ug/L was exceeded at six wells (MW-01, MW-02, MW-03, MW-04, MW-06, and UST MW-08). Dissolved vanadium concentrations detected during the 2009 sampling event were similar to concentrations detected in 2001 and 2002. The reported concentrations of vanadium over several monitoring events indicate that vanadium in the groundwater is stable and there are no apparent migration pathways to Pearl Harbor. In addition, the regulators have concurred that concentrations of vanadium observed in the groundwater are likely attributable to background concentrations reflected by the vanadium concentrations naturally occurring in volcanic soils such as those found under Bldg. 6. Therefore, the RI recommended no further action for groundwater. Risks to human health and ecological receptors were re-evaluated by initially screening historical data with the 2007 DOH Tier 1 EALs and Oahu-wide background concentration ranges for metals. Chemicals that exceeded both background (metals only) and risk-based screening levels were further evaluated in a revised human health screening

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risk assessment (SRA). The results of the SRA concluded that metals (primarily antimony, arsenic, and lead), PAHs, and PCBs in surface and subsurface soil could pose risk to potential future residents or industrial workers. TPH-DRO and LRO were also detected at concentrations exceeding the DOH EAL. Because contaminants exceeding industrial scenario cleanup goals are present in surface soils, the RI recommended that a response action be conducted to ensure that unacceptable worker and hypothetic future resident exposure does not occur and to allow future industrial or commercial reuse of the building. Proper closure of the vaults and pit were also recommended for worker safety, to prevent potential future exposure to contaminants in residual water (if present) or sediment, and to eliminate a potential source of soil or groundwater contamination should cracks develop in the vault or pit in the future. The site is used for industrial purposes. Most areas are paved with no critical ecological habitat in or adjacent to the building. The ecological risk assessment concluded that chemicals detected pose no threat to wildlife or ecology because the contaminated soil is contained within a closed building, which is surrounded by a paved area, and dispersion and natural attenuation would occur along the potential offsite transport pathways (e.g., groundwater flow, storm water runoff, and wind transport). A SI was conducted by the Navy Comprehensive Long-Term Environmental Action Navy (CLEAN) II contractor under contract task order (CTO) 087 to investigate several Navy transformer sites on Oahu, Hawaii (Earth Tech 2003). Concrete and soil samples were collected at Transformer E-13 (an electrical substation located in the northeast corner of Bldg. 6). The concrete samples were all non-detect; however, soil samples collected immediately below the asphalt adjacent to Transformer E-13 were found to contain PCB concentrations above the Toxic Substances Control Act (TSCA) screening criterion of 1 mg/kg. The SI recommended further evaluation of this transformer site, which is being conducted under the Navy CLEAN III contract, contract task order (CTO) HC42 for the base-wide PCB program. The Navy will coordinate the projects to ensure that the remedies for Bldg. 6 and the base-wide PCB program will not conflict with each other, and that all remedies implemented will be protective of human health and the environment. A ROD addressing OU17 at the Pearl Harbor Naval Complex Site was completed in July 2012.

CERCLIS Assessment History:

Action Code:	001
Action:	DISCOVERY
Date Started:	/ /
Date Completed:	10/01/80
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	PRELIMINARY ASSESSMENT
Date Started:	/ /
Date Completed:	04/01/86
Priority Level:	Low priority for further assessment
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Facilities

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Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: SITE INSPECTION
Date Started: / /
Date Completed: 08/21/89
Priority Level: Higher priority for further assessment
Operable Unit: SITEWIDE
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: HAZARD RANKING SYSTEM PACKAGE
Date Started: / /
Date Completed: 07/25/91
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: PROPOSAL TO NATIONAL PRIORITIES LIST
Date Started: / /
Date Completed: 07/29/91
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: FINAL LISTING ON NATIONAL PRIORITIES LIST
Date Started: / /
Date Completed: 10/14/92
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Facilities
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

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For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: INTERAGENCY AGREEMENT NEGOTIATIONS
Date Started: 03/11/93
Date Completed: 09/30/93
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: FEDERAL INTERAGENCY AGREEMENT
Date Started: 09/30/93
Date Completed: 09/30/93
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 004
Action: FEDERAL FACILITY REMOVAL
Date Started: 04/01/93
Date Completed: 04/01/94
Priority Level: Stabilized
Operable Unit: AIEA
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Non-Time Critical
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: FEDERAL FACILITY REMOVAL
Date Started: 07/17/95
Date Completed: 08/23/96
Priority Level: Partially Cleaned up
Operable Unit: NSY DRY DOCK #3
Primary Responsibility: Federal Facilities
Planning Status: Primary
Urgency Indicator: Non-Time Critical
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

PEARL HARBOR NAVAL COMPLEX (Continued) **1000707626**

Action Code: 002
Action: FEDERAL FACILITY REMOVAL
Date Started: 03/13/95
Date Completed: 10/30/96
Priority Level: Partially Cleaned up
Operable Unit: AIEA
Primary Responsibility: Federal Facilities
Planning Status: Primary
Urgency Indicator: Non-Time Critical
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 003
Action: FEDERAL FACILITY REMOVAL
Date Started: 02/23/95
Date Completed: 04/01/97
Priority Level: Partially Cleaned up
Operable Unit: FORD IS HAZ SITES (SANS LF)
Primary Responsibility: Federal Facilities
Planning Status: Primary
Urgency Indicator: Non-Time Critical
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: UNILATERAL ADMIN ORDER
Date Started: / /
Date Completed: 03/28/05
Priority Level: Not reported
Operable Unit: OAHU SUGAR, WAIPIO PENN
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 007
Action: FEDERAL FACILITY REMOVAL
Date Started: 12/14/05
Date Completed: 07/19/06
Priority Level: Not reported
Operable Unit: FORD IS HAZ SITES (SANS LF)
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 008
Action: FEDERAL FACILITY REMOVAL
Date Started: 06/02/06
Date Completed: 08/22/06

PEARL HARBOR NAVAL COMPLEX (Continued) **1000707626**

Priority Level: Not reported
Operable Unit: FORD IS HAZ SITES (SANS LF)
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 010
Action: FEDERAL FACILITY REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 09/30/93
Date Completed: 09/28/06
Priority Level: Not reported
Operable Unit: WESTLOCH BLDG 49
Primary Responsibility: Federal Facilities
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: FEDERAL FACILITY REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 08/23/94
Date Completed: 09/28/06
Priority Level: Not reported
Operable Unit: MANANA STORAGE
Primary Responsibility: Federal Facilities
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 002
Action: RECORD OF DECISION
Date Started: / /
Date Completed: 09/28/06
Priority Level: Not reported
Operable Unit: WESTLOCH BLDG 49
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 003
Action: RECORD OF DECISION
Date Started: / /
Date Completed: 09/28/06
Priority Level: Not reported
Operable Unit: MANANA STORAGE
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported

PEARL HARBOR NAVAL COMPLEX (Continued) **1000707626**

Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 009
Action: FEDERAL FACILITY REMOVAL
Date Started: 08/24/07
Date Completed: 09/27/07
Priority Level: Not reported
Operable Unit: RICHARDSON- FFTF
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 012
Action: RECORD OF DECISION
Date Started: / /
Date Completed: 09/28/07
Priority Level: Not reported
Operable Unit: PCB THERMAL DESORPTION SITES
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 012
Action: FEDERAL FACILITY REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 06/10/99
Date Completed: 09/29/09
Priority Level: Not reported
Operable Unit: FORD IS HAZ SITES (SANS LF)
Primary Responsibility: Federal Facilities
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 017
Action: RECORD OF DECISION
Date Started: / /
Date Completed: 09/29/09
Priority Level: Not reported
Operable Unit: FORD IS HAZ SITES (SANS LF)
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

PEARL HARBOR NAVAL COMPLEX (Continued) **1000707626**

Action Code: 005
Action: RECORD OF DECISION
Date Started: / /
Date Completed: 09/29/09
Priority Level: Not reported
Operable Unit: FORD IS HAZ SITES (SANS LF)
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 002
Action: UNILATERAL ADMIN ORDER
Date Started: / /
Date Completed: 09/30/09
Priority Level: Not reported
Operable Unit: KAANAPALI OAHU SUGAR WAIPIO
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: Notice of Intent by All Parties
Date Started: / /
Date Completed: 10/30/09
Priority Level: Not reported
Operable Unit: KAANAPALI OAHU SUGAR WAIPIO
Primary Responsibility: Not reported
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 002
Action: ENGINEERING EVALUATION/COST ANALYSIS
Date Started: / /
Date Completed: 03/18/10
Priority Level: Not reported
Operable Unit: MOANALUA CHURCH SITE
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 008
Action: FEDERAL FACILITY REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 09/30/93

PEARL HARBOR NAVAL COMPLEX (Continued) **1000707626**

Date Completed: 07/02/10
Priority Level: Not reported
Operable Unit: NSY DRY DOCK #3
Primary Responsibility: Federal Facilities
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 004
Action: RECORD OF DECISION
Date Started: / /
Date Completed: 07/02/10
Priority Level: Not reported
Operable Unit: NSY DRY DOCK #3
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 005
Action: FEDERAL FACILITY REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 09/30/93
Date Completed: 09/14/10
Priority Level: Not reported
Operable Unit: PCB THERMAL DESORPTION SITES
Primary Responsibility: Federal Facilities
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 005
Action: FEDERAL FACILITY REMOVAL
Date Started: 01/03/00
Date Completed: 09/14/10
Priority Level: Not reported
Operable Unit: PCB THERMAL DESORPTION SITES
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 013
Action: RECORD OF DECISION
Date Started: / /
Date Completed: 09/14/10
Priority Level: Not reported
Operable Unit: PCB THERMAL DESORPTION SITES
Primary Responsibility: Federal Facilities
Planning Status: Not reported

PEARL HARBOR NAVAL COMPLEX (Continued) **1000707626**

Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 017
Action: FEDERAL FACILITY REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 09/30/93
Date Completed: 09/27/10
Priority Level: Not reported
Operable Unit: RICHARDSON- FFTF
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 004
Action: FEDERAL FACILITY REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 09/30/93
Date Completed: 09/27/10
Priority Level: Not reported
Operable Unit: PWC- MAKALAPA RINSATE PIT
Primary Responsibility: Federal Facilities
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 014
Action: FEDERAL FACILITY REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 05/15/99
Date Completed: 09/27/10
Priority Level: Not reported
Operable Unit: PEARL CITY JUNCTION
Primary Responsibility: Federal Facilities
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 010
Action: RECORD OF DECISION
Date Started: / /
Date Completed: 09/27/10
Priority Level: Not reported
Operable Unit: PWC- MAKALAPA RINSATE PIT
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 018

PEARL HARBOR NAVAL COMPLEX (Continued) **1000707626**

Action: RECORD OF DECISION
Date Started: / /
Date Completed: 09/27/10
Priority Level: Not reported
Operable Unit: PEARL CITY JUNCTION
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 014
Action: RECORD OF DECISION
Date Started: / /
Date Completed: 09/27/10
Priority Level: Not reported
Operable Unit: RICHARDSON- FFTF
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: FEDERAL FACILITY REMEDIAL DESIGN
Date Started: 09/27/10
Date Completed: 10/25/10
Priority Level: Not reported
Operable Unit: PWC- MAKALAPA RINSATE PIT
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 002
Action: FEDERAL FACILITY REMEDIAL ACTION
Date Started: 09/29/09
Date Completed: 01/20/11
Priority Level: Not reported
Operable Unit: FORD IS HAZ SITES (SANS LF)
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Limited Action
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 010
Action: FEDERAL FACILITY REMOVAL
Date Started: 05/07/10
Date Completed: 05/27/11

PEARL HARBOR NAVAL COMPLEX (Continued) **1000707626**

Priority Level: Not reported
Operable Unit: MOANALUA CHURCH SITE
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 007
Action: FEDERAL FACILITY REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 09/30/93
Date Completed: 09/23/11
Priority Level: Not reported
Operable Unit: FORD ISLAND LANDFILL
Primary Responsibility: Federal Facilities
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 015
Action: RECORD OF DECISION
Date Started: / /
Date Completed: 09/23/11
Priority Level: Not reported
Operable Unit: FORD ISLAND LANDFILL
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 004
Action: FEDERAL FACILITY REMEDIAL ACTION
Date Started: 06/09/11
Date Completed: 07/11/12
Priority Level: Not reported
Operable Unit: PCB THERMAL DESORPTION SITES
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Limited Action
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 016
Action: FEDERAL FACILITY REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 09/30/93
Date Completed: 07/12/12
Priority Level: Not reported
Operable Unit: NSY BLDG 6, FORMER FOUNDRY
Primary Responsibility: Federal Facilities
Planning Status: Not reported

PEARL HARBOR NAVAL COMPLEX (Continued) **1000707626**

Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 021
Action: RECORD OF DECISION
Date Started: / /
Date Completed: 07/12/12
Priority Level: Not reported
Operable Unit: NSY BLDG 6, FORMER FOUNDRY
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 003
Action: FEDERAL FACILITY REMEDIAL ACTION
Date Started: 08/10/11
Date Completed: 08/27/12
Priority Level: Not reported
Operable Unit: NSY DRY DOCK #3
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 025
Action: RECORD OF DECISION
Date Started: / /
Date Completed: 03/29/13
Priority Level: Not reported
Operable Unit: RAA 11 AND 13
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 021
Action: FEDERAL FACILITY REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 03/13/09
Date Completed: 09/23/13
Priority Level: Not reported
Operable Unit: PWC BUILDING 35 - PAINT SHOP
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

PEARL HARBOR NAVAL COMPLEX (Continued) **1000707626**

Action Code: 026
Action: RECORD OF DECISION
Date Started: / /
Date Completed: 09/23/13
Priority Level: Not reported
Operable Unit: PWC BUILDING 35 - PAINT SHOP
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 006
Action: FEDERAL FACILITY REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 09/30/93
Date Completed: / /
Priority Level: Not reported
Operable Unit: NAVAL HOUSING
Primary Responsibility: Federal Facilities
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Other Completion Anomaly

For detailed financial records, contact EDR for a Site Report.:

Action Code: 015
Action: FEDERAL FACILITY REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 09/30/93
Date Completed: / /
Priority Level: Not reported
Operable Unit: PEARL CITY LF/BURN AREA
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 009
Action: FEDERAL FACILITY REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 09/30/93
Date Completed: / /
Priority Level: Not reported
Operable Unit: PEARL CITY FUEL ANNEX
Primary Responsibility: Federal Facilities
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 003
Action: FEDERAL FACILITY REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 09/30/93
Date Completed: / /
Priority Level: Not reported

PEARL HARBOR NAVAL COMPLEX (Continued) **1000707626**

Operable Unit: HALAWA B-60 SLUDGE DISP PIT
Primary Responsibility: Federal Facilities
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 002
Action: FEDERAL FACILITY REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 09/30/93
Date Completed: / /
Priority Level: Not reported
Operable Unit: WAIPIO PENINSULA
Primary Responsibility: Federal Facilities
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: Restoration Advisory Board
Date Started: 04/01/95
Date Completed: / /
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 011
Action: FEDERAL FACILITY REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 08/01/95
Date Completed: / /
Priority Level: Not reported
Operable Unit: AIEA
Primary Responsibility: Federal Facilities
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 013
Action: FEDERAL FACILITY REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 09/19/95
Date Completed: / /
Priority Level: Not reported
Operable Unit: PH SEDIMENT
Primary Responsibility: Federal Facilities
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

PEARL HARBOR NAVAL COMPLEX (Continued) **1000707626**

For detailed financial records, contact EDR for a Site Report.:

Action Code: 002
Action: POTENTIALLY RESPONSIBLE PARTY REMOVAL
Date Started: 04/07/05
Date Completed: / /
Priority Level: Not reported
Operable Unit: OAHU SUGAR, WAIPIO PENN
Primary Responsibility: Responsible Party
Planning Status: Project Suspended
Urgency Indicator: Time Critical
Action Anomaly: Other Start and Completion Anomaly

For detailed financial records, contact EDR for a Site Report.:

Action Code: 018
Action: FEDERAL FACILITY REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 06/26/06
Date Completed: / /
Priority Level: Not reported
Operable Unit: PWC INDUSTRIAL WWTP
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 019
Action: FEDERAL FACILITY REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 04/28/08
Date Completed: / /
Priority Level: Not reported
Operable Unit: NSY BLDG 394, FORM BATTACIDPIT
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 020
Action: FEDERAL FACILITY REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 03/03/09
Date Completed: / /
Priority Level: Not reported
Operable Unit: WEST LOCH 4TH ST. CORAL PIT LF
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 022
Action: FEDERAL FACILITY REMEDIAL INVESTIGATION/FEASIBILITY STUDY

PEARL HARBOR NAVAL COMPLEX (Continued) **1000707626**

Date Started: 05/29/09
Date Completed: / /
Priority Level: Not reported
Operable Unit: WAIPIO PENINSULA
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: ENGINEERING EVALUATION/COST ANALYSIS
Date Started: 09/28/09
Date Completed: / /
Priority Level: Not reported
Operable Unit: KAANAPALI OAHU SUGAR WAIPIO
Primary Responsibility: Responsible Party
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: FEDERAL FACILITY REMEDIAL ACTION
Date Started: 11/22/10
Date Completed: / /
Priority Level: Not reported
Operable Unit: PWC- MAKALAPA RINSATE PIT
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 023
Action: FEDERAL FACILITY REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 03/29/11
Date Completed: / /
Priority Level: Not reported
Operable Unit: ADDITIONAL TRANSFORMERS
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 024
Action: FEDERAL FACILITY REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 07/21/11
Date Completed: / /
Priority Level: Not reported
Operable Unit: WEST LOCH OTTO FUEL WASTE STOR

PEARL HARBOR NAVAL COMPLEX (Continued) **1000707626**

Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 025
Action: FEDERAL FACILITY REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 08/17/11
Date Completed: / /
Priority Level: Not reported
Operable Unit: BUILDING 992 OPEN AREA
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 002
Action: FEDERAL FACILITY REMEDIAL DESIGN
Date Started: 07/12/12
Date Completed: / /
Priority Level: Not reported
Operable Unit: NSY BLDG 6, FORMER FOUNDRY
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Federal Register Details:
Fed Register Date: 10/14/92
Fed Register Volume: 57
Page Number: 47181

Fed Register Date: 07/29/91
Fed Register Volume: 56
Page Number: 35840

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512 additional US CERCLIS Financial: record(s) in the EDR Site Report.

US ENG CONTROLS:
EPA ID: HI4170090076
Site ID: 0904481
Name: PEARL HARBOR NAVAL COMPLEX
Address: US NAVAL COMMAND
PEARL HARBOR, HI 96860
EPA Region: 09
County: HONOLULU
Event Code: Not reported
Actual Date: 06/30/2013

PEARL HARBOR NAVAL COMPLEX (Continued) **1000707626**

Action ID: 002
Action Name: RECORD OF DECISION
Action Completion date: 09/28/2006
Operable Unit: 08
Contaminated Media : Groundwater
Engineering Control: No Further Action

Action ID: 002
Action Name: RECORD OF DECISION
Action Completion date: 09/28/2006
Operable Unit: 08
Contaminated Media : Soil
Engineering Control: No Further Action

Action ID: 003
Action Name: RECORD OF DECISION
Action Completion date: 09/28/2006
Operable Unit: 10
Contaminated Media : Groundwater
Engineering Control: No Further Action

Action ID: 003
Action Name: RECORD OF DECISION
Action Completion date: 09/28/2006
Operable Unit: 10
Contaminated Media : Soil
Engineering Control: No Further Action

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 07/02/2010
Operable Unit: 06
Contaminated Media : Soil
Engineering Control: Cap

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 07/02/2010
Operable Unit: 06
Contaminated Media : Soil
Engineering Control: Impermeable Barrier

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 07/02/2010
Operable Unit: 06
Contaminated Media : Soil
Engineering Control: Operations & Maintenance (O&M)

Action ID: 005
Action Name: RECORD OF DECISION
Action Completion date: 09/29/2009
Operable Unit: 12
Contaminated Media : Groundwater
Engineering Control: Monitoring

Action ID: 005

PEARL HARBOR NAVAL COMPLEX (Continued) **1000707626**

Action Name: RECORD OF DECISION
Action Completion date: 09/29/2009
Operable Unit: 12
Contaminated Media : Soil
Engineering Control: Impermeable Barrier

Action ID: 005
Action Name: RECORD OF DECISION
Action Completion date: 09/29/2009
Operable Unit: 12
Contaminated Media : Soil
Engineering Control: Operations & Maintenance (O&M)

Action ID: 010
Action Name: RECORD OF DECISION
Action Completion date: 09/27/2010
Operable Unit: 03
Contaminated Media : Soil
Engineering Control: Disposal

Action ID: 010
Action Name: RECORD OF DECISION
Action Completion date: 09/27/2010
Operable Unit: 03
Contaminated Media : Soil
Engineering Control: Excavation

Action ID: 012
Action Name: RECORD OF DECISION
Action Completion date: 09/28/2007
Operable Unit: 01
Contaminated Media : Debris
Engineering Control: No Further Action

Action ID: 012
Action Name: RECORD OF DECISION
Action Completion date: 09/28/2007
Operable Unit: 01
Contaminated Media : Soil
Engineering Control: No Further Action

Action ID: 014
Action Name: RECORD OF DECISION
Action Completion date: 09/27/2010
Operable Unit: 16
Contaminated Media : Groundwater
Engineering Control: No Further Action

Action ID: 014
Action Name: RECORD OF DECISION
Action Completion date: 09/27/2010
Operable Unit: 16
Contaminated Media : Soil
Engineering Control: No Further Action

Action ID: 015
Action Name: RECORD OF DECISION

PEARL HARBOR NAVAL COMPLEX (Continued) **1000707626**

Action Completion date: 09/23/2011
Operable Unit: 05
Contaminated Media : Groundwater
Engineering Control: Monitoring

Action ID: 015
Action Name: RECORD OF DECISION
Action Completion date: 09/23/2011
Operable Unit: 05
Contaminated Media : Soil
Engineering Control: Impermeable Barrier

Action ID: 015
Action Name: RECORD OF DECISION
Action Completion date: 09/23/2011
Operable Unit: 05
Contaminated Media : Soil
Engineering Control: Monitoring

Action ID: 015
Action Name: RECORD OF DECISION
Action Completion date: 09/23/2011
Operable Unit: 05
Contaminated Media : Soil
Engineering Control: Operations & Maintenance (O&M)

Action ID: 015
Action Name: RECORD OF DECISION
Action Completion date: 09/23/2011
Operable Unit: 05
Contaminated Media : Soil Gas
Engineering Control: Monitoring

Action ID: 015
Action Name: RECORD OF DECISION
Action Completion date: 09/23/2011
Operable Unit: 05
Contaminated Media : Surface Water
Engineering Control: Monitoring

Action ID: 017
Action Name: RECORD OF DECISION
Action Completion date: 09/29/2009
Operable Unit: 12
Contaminated Media : Groundwater
Engineering Control: No Further Action

Action ID: 017
Action Name: RECORD OF DECISION
Action Completion date: 09/29/2009
Operable Unit: 12
Contaminated Media : Liquid Waste
Engineering Control: No Further Action

Action ID: 017
Action Name: RECORD OF DECISION
Action Completion date: 09/29/2009

PEARL HARBOR NAVAL COMPLEX (Continued) **1000707626**

Operable Unit: 12
Contaminated Media : Soil
Engineering Control: No Further Action

Action ID: 021
Action Name: RECORD OF DECISION
Action Completion date: 07/12/2012
Operable Unit: 17
Contaminated Media : Soil
Engineering Control: Cap

US INST CONTROL:
EPA ID: HI4170090076
Site ID: 0904481
Name: PEARL HARBOR NAVAL COMPLEX
Action Name: RECORD OF DECISION
Address: US NAVAL COMMAND
PEARL HARBOR, HI 96860
EPA Region: 09
County: HONOLULU
Event Code: Not reported
Inst. Control: Land Use Restriction
Actual Date: 09/30/2010
Complet. Date: 07/02/2010
Operable Unit: 06
Contaminated Media : Soil

EPA ID: HI4170090076
Site ID: 0904481
Name: PEARL HARBOR NAVAL COMPLEX
Action Name: RECORD OF DECISION
Address: US NAVAL COMMAND
PEARL HARBOR, HI 96860
EPA Region: 09
County: HONOLULU
Event Code: Not reported
Inst. Control: Groundwater use/well drilling regulation
Actual Date: 09/30/2009
Complet. Date: 09/29/2009
Operable Unit: 12
Contaminated Media : Groundwater

EPA ID: HI4170090076
Site ID: 0904481
Name: PEARL HARBOR NAVAL COMPLEX
Action Name: RECORD OF DECISION
Address: US NAVAL COMMAND
PEARL HARBOR, HI 96860
EPA Region: 09
County: HONOLULU
Event Code: Not reported
Inst. Control: Access Restriction
Actual Date: 09/30/2009
Complet. Date: 09/29/2009
Operable Unit: 12
Contaminated Media : Soil

PEARL HARBOR NAVAL COMPLEX (Continued) **1000707626**

EPA ID: HI4170090076
Site ID: 0904481
Name: PEARL HARBOR NAVAL COMPLEX
Action Name: RECORD OF DECISION
Address: US NAVAL COMMAND
PEARL HARBOR, HI 96860
EPA Region: 09
County: HONOLULU
Event Code: Not reported
Inst. Control: Building, demolition, or excavation regulation
Actual Date: 09/30/2009
Complet. Date: 09/29/2009
Operable Unit: 12
Contaminated Media : Soil

EPA ID: HI4170090076
Site ID: 0904481
Name: PEARL HARBOR NAVAL COMPLEX
Action Name: RECORD OF DECISION
Address: US NAVAL COMMAND
PEARL HARBOR, HI 96860
EPA Region: 09
County: HONOLULU
Event Code: Not reported
Inst. Control: Deed Restriction
Actual Date: 09/30/2009
Complet. Date: 09/29/2009
Operable Unit: 12
Contaminated Media : Soil

EPA ID: HI4170090076
Site ID: 0904481
Name: PEARL HARBOR NAVAL COMPLEX
Action Name: RECORD OF DECISION
Address: US NAVAL COMMAND
PEARL HARBOR, HI 96860
EPA Region: 09
County: HONOLULU
Event Code: Not reported
Inst. Control: Deed Restriction
Actual Date: 09/30/2010
Complet. Date: 09/14/2010
Operable Unit: 01
Contaminated Media : Buildings/Structures

EPA ID: HI4170090076
Site ID: 0904481
Name: PEARL HARBOR NAVAL COMPLEX
Action Name: RECORD OF DECISION
Address: US NAVAL COMMAND
PEARL HARBOR, HI 96860
EPA Region: 09
County: HONOLULU
Event Code: Not reported
Inst. Control: Land Use Restriction
Actual Date: 09/30/2010
Complet. Date: 09/14/2010

PEARL HARBOR NAVAL COMPLEX (Continued) **1000707626**

Operable Unit: 01
Contaminated Media : Buildings/Structures

EPA ID: HI4170090076
Site ID: 0904481
Name: PEARL HARBOR NAVAL COMPLEX
Action Name: RECORD OF DECISION
Address: US NAVAL COMMAND
PEARL HARBOR, HI 96860
EPA Region: 09
County: HONOLULU
Event Code: Not reported
Inst. Control: Deed Restriction
Actual Date: 09/30/2010
Complet. Date: 09/14/2010
Operable Unit: 01
Contaminated Media : Soil

EPA ID: HI4170090076
Site ID: 0904481
Name: PEARL HARBOR NAVAL COMPLEX
Action Name: RECORD OF DECISION
Address: US NAVAL COMMAND
PEARL HARBOR, HI 96860
EPA Region: 09
County: HONOLULU
Event Code: Not reported
Inst. Control: Land Use Restriction
Actual Date: 09/30/2010
Complet. Date: 09/14/2010
Operable Unit: 01
Contaminated Media : Soil

EPA ID: HI4170090076
Site ID: 0904481
Name: PEARL HARBOR NAVAL COMPLEX
Action Name: RECORD OF DECISION
Address: US NAVAL COMMAND
PEARL HARBOR, HI 96860
EPA Region: 09
County: HONOLULU
Event Code: Not reported
Inst. Control: Covenant
Actual Date: 09/30/2011
Complet. Date: 09/23/2011
Operable Unit: 05
Contaminated Media : Soil

EPA ID: HI4170090076
Site ID: 0904481
Name: PEARL HARBOR NAVAL COMPLEX
Action Name: RECORD OF DECISION
Address: US NAVAL COMMAND
PEARL HARBOR, HI 96860
EPA Region: 09
County: HONOLULU
Event Code: Not reported

PEARL HARBOR NAVAL COMPLEX (Continued) **1000707626**

Inst. Control: Institutional Controls, (N.O.S.)
Actual Date: 09/30/2011
Complet. Date: 09/23/2011
Operable Unit: 05
Contaminated Media : Soil

EPA ID: HI4170090076
Site ID: 0904481
Name: PEARL HARBOR NAVAL COMPLEX
Action Name: RECORD OF DECISION
Address: US NAVAL COMMAND
PEARL HARBOR, HI 96860
EPA Region: 09
County: HONOLULU
Event Code: Not reported
Inst. Control: Land Use Restriction
Actual Date: 09/30/2011
Complet. Date: 09/23/2011
Operable Unit: 05
Contaminated Media : Soil

EPA ID: HI4170090076
Site ID: 0904481
Name: PEARL HARBOR NAVAL COMPLEX
Action Name: RECORD OF DECISION
Address: US NAVAL COMMAND
PEARL HARBOR, HI 96860
EPA Region: 09
County: HONOLULU
Event Code: Not reported
Inst. Control: Access Restriction, Fencing
Actual Date: 09/30/2010
Complet. Date: 09/27/2010
Operable Unit: 14
Contaminated Media : Groundwater

EPA ID: HI4170090076
Site ID: 0904481
Name: PEARL HARBOR NAVAL COMPLEX
Action Name: RECORD OF DECISION
Address: US NAVAL COMMAND
PEARL HARBOR, HI 96860
EPA Region: 09
County: HONOLULU
Event Code: Not reported
Inst. Control: Access Restriction, Guards
Actual Date: 09/30/2010
Complet. Date: 09/27/2010
Operable Unit: 14
Contaminated Media : Groundwater

EPA ID: HI4170090076
Site ID: 0904481
Name: PEARL HARBOR NAVAL COMPLEX
Action Name: RECORD OF DECISION
Address: US NAVAL COMMAND
PEARL HARBOR, HI 96860

PEARL HARBOR NAVAL COMPLEX (Continued) **1000707626**

EPA Region: 09
County: HONOLULU
Event Code: Not reported
Inst. Control: Covenant
Actual Date: 09/30/2010
Complet. Date: 09/27/2010
Operable Unit: 14
Contaminated Media : Groundwater

EPA ID: HI4170090076
Site ID: 0904481
Name: PEARL HARBOR NAVAL COMPLEX
Action Name: RECORD OF DECISION
Address: US NAVAL COMMAND
PEARL HARBOR, HI 96860
EPA Region: 09
County: HONOLULU
Event Code: Not reported
Inst. Control: Deed Notices
Actual Date: 09/30/2010
Complet. Date: 09/27/2010
Operable Unit: 14
Contaminated Media : Groundwater

EPA ID: HI4170090076
Site ID: 0904481
Name: PEARL HARBOR NAVAL COMPLEX
Action Name: RECORD OF DECISION
Address: US NAVAL COMMAND
PEARL HARBOR, HI 96860
EPA Region: 09
County: HONOLULU
Event Code: Not reported
Inst. Control: Deed Restriction
Actual Date: 09/30/2010
Complet. Date: 09/27/2010
Operable Unit: 14
Contaminated Media : Groundwater

EPA ID: HI4170090076
Site ID: 0904481
Name: PEARL HARBOR NAVAL COMPLEX
Action Name: RECORD OF DECISION
Address: US NAVAL COMMAND
PEARL HARBOR, HI 96860
EPA Region: 09
County: HONOLULU
Event Code: Not reported
Inst. Control: Access Restriction, Fencing
Actual Date: 09/30/2010
Complet. Date: 09/27/2010
Operable Unit: 14
Contaminated Media : Soil

EPA ID: HI4170090076
Site ID: 0904481
Name: PEARL HARBOR NAVAL COMPLEX

PEARL HARBOR NAVAL COMPLEX (Continued) **1000707626**

Action Name: RECORD OF DECISION
Address: US NAVAL COMMAND
PEARL HARBOR, HI 96860
EPA Region: 09
County: HONOLULU
Event Code: Not reported
Inst. Control: Access Restriction, Guards
Actual Date: 09/30/2010
Complet. Date: 09/27/2010
Operable Unit: 14
Contaminated Media : Soil

EPA ID: HI4170090076
Site ID: 0904481
Name: PEARL HARBOR NAVAL COMPLEX
Action Name: RECORD OF DECISION
Address: US NAVAL COMMAND
PEARL HARBOR, HI 96860
EPA Region: 09
County: HONOLULU
Event Code: Not reported
Inst. Control: Covenant
Actual Date: 09/30/2010
Complet. Date: 09/27/2010
Operable Unit: 14
Contaminated Media : Soil

EPA ID: HI4170090076
Site ID: 0904481
Name: PEARL HARBOR NAVAL COMPLEX
Action Name: RECORD OF DECISION
Address: US NAVAL COMMAND
PEARL HARBOR, HI 96860
EPA Region: 09
County: HONOLULU
Event Code: Not reported
Inst. Control: Deed Notices
Actual Date: 09/30/2010
Complet. Date: 09/27/2010
Operable Unit: 14
Contaminated Media : Soil

EPA ID: HI4170090076
Site ID: 0904481
Name: PEARL HARBOR NAVAL COMPLEX
Action Name: RECORD OF DECISION
Address: US NAVAL COMMAND
PEARL HARBOR, HI 96860
EPA Region: 09
County: HONOLULU
Event Code: Not reported
Inst. Control: Deed Restriction
Actual Date: 09/30/2010
Complet. Date: 09/27/2010
Operable Unit: 14
Contaminated Media : Soil

PEARL HARBOR NAVAL COMPLEX (Continued) **1000707626**

EPA ID: HI4170090076
Site ID: 0904481
Name: PEARL HARBOR NAVAL COMPLEX
Action Name: RECORD OF DECISION
Address: US NAVAL COMMAND
PEARL HARBOR, HI 96860
EPA Region: 09
County: HONOLULU
Event Code: Not reported
Inst. Control: Land Use Restriction
Actual Date: 06/30/2013
Complet. Date: 07/12/2012
Operable Unit: 17
Contaminated Media : Soil

ROD:
Full-text of USEPA Record of Decision(s) is available from EDR.

PRP:
PRP name: OAHU SUGAR COMPANY, LLC
OAHU SUGAR COMPANY, LLC

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2 **EDR US Hist Cleaners** **1015109961**
SSW **N/A**
1/8-1/4 **99009 KALALOA ST**
0.170 mi. **AIEA, HI 96701**
898 ft.

Relative:
Lower

Actual:
19 ft.

EDR Historical Cleaners:
Name: A 1 ALOHA PRO CARPET CLNR
Year: 2004
Address: 99009 KALALOA ST

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3 **ALOHA STADIUM** **UST** **U003832860**
NNE **99-500 SALT LAKE BLVD** **N/A**
1/8-1/4 **HONOLULU, HI 96818**
0.238 mi.
1256 ft.

Relative:
Higher

Actual:
45 ft.

UST:
Facility ID: 9-103739
Owner: STATE DAGS - DIVISION OF PUBLIC WORK
Owner Address: P.O. BOX 119
Owner City,St,Zip: Honolulu, 96818 96818
Latitude: Not reported
Longitude: Not reported
Horizontal Reference Datum Name: Not reported
Horizontal Collection Method Name: Not reported

Tank ID: r-M-1
Date Installed: 07/01/1975
Tank Status: **Permanently out of Use**
Date Closed: 02/11/2002
Tank Capacity: 225
Substance: Diesel

ALOHA STADIUM (Continued) **U003832860**

Tank ID:	r-M-1
Date Installed:	07/01/1975
Tank Status:	**Permanently out of Use**
Date Closed:	02/11/2002
Tank Capacity:	225
Substance:	Diesel

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4 NNE 1/4-1/2 0.331 mi. 1747 ft. | **AIEA STREAM** | **99-193 AIEA HEIGHTS DR** | **AIEA, HI 96701** | **SHWS** | **ENG CONTROLS** | **INST CONTROL** | **VCP** | **S110061250** | **N/A**

Relative: Higher

Actual: 49 ft.

SHWS:

Organization:	Not reported
Supplemental Location:	Not reported
Island:	Oahu
Environmental Interest:	Aiea Stream
HID Number:	Not reported
Facility Registry Identifier:	Not reported
Lead Agency:	HEER
Program:	State
Project Manager:	Jordan Nakayama
Hazard Priority:	Low
Potential Hazards And Controls:	Hazard Managed With Controls
Organization:	Not reported
Island:	Oahu
Supplemental Location Text:	Not reported
SDAR Environmental Interest Name:	Aiea Stream
HID Number:	Not reported
Facility Registry Identifier:	Not reported
Lead Agency:	HEER
Progran Name:	State
Potential Hazard And Controls:	Hazard Managed With Controls
Priority:	Low
Assessment:	Response Necessary
Response:	Response Ongoing
Nature of Contamination:	Found: Lead in soil.
Nature of Residual Contamination:	Not reported
Use Restrictions:	Controls Required to Manage Contamination
Engineering Control:	Engineering Control Required
Description of Restrictions:	Prevent trespass
Institutional Control:	Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination:	Not reported
Site Closure Type:	No Further Action Letter - Restricted Use
Document Date:	11/14/2013
Document Number:	2013-578-JQN
Document Subject:	No Further Action with institutional controls determination for Aiea Stream based upon review of the
Project Manager:	Jordan Nakayama
Contact Information:	(808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814
Organization:	Not reported
Supplemental Location:	Not reported
Island:	Oahu
Environmental Interest:	Former Aiea Sugar Mill Remedial Lot 15
HID Number:	Not reported
Facility Registry Identifier:	110013788669

AIEA STREAM (Continued) **S110061250**

Lead Agency:	HEER
Program:	Voluntary Response Program
Project Manager:	Cal Miyahara
Hazard Priority:	High
Potential Hazards And Controls:	Hazard Managed With Controls
Organization:	Not reported
Island:	Oahu
Supplemental Location Text:	Not reported
SDAR Environmental Interest Name:	Former Aiea Sugar Mill Remedial Lot 15
HID Number:	Not reported
Facility Registry Identifier:	110013788669
Lead Agency:	HEER
Progran Name:	Voluntary Response Program
Potential Hazard And Controls:	Hazard Managed With Controls
Priority:	High
Assessment:	Response Necessary
Response:	Response Ongoing
Nature of Contamination:	Found: Lead, PAHs, tar.
Nature of Residual Contamination:	Lead and TPH in soil.
Use Restrictions:	Controls Required to Manage Contamination
Engineering Control:	Engineering Control Required
Description of Restrictions:	No use restrictions for Lots 1-5 and 16 or 19. Any soil removed on lots 6-14 and 17-18 must go to a landfill. Lot 15 requires further remediation for lead and benzo(a)pyrene. The VRP agreement is to be transferred over to A&B for lot 15.
Institutional Control:	Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination:	Not reported
Site Closure Type:	Not reported
Document Date:	Not reported
Document Number:	Not reported
Document Subject:	Not reported
Project Manager:	Cal Miyahara
Contact Information:	(808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814
Organization:	Not reported
Supplemental Location:	Not reported
Island:	Oahu
Environmental Interest:	Former Aiea Sugar Mill Remedial Lots 1-5
HID Number:	Not reported
Facility Registry Identifier:	Not reported
Lead Agency:	Not reported
Program:	Voluntary Response Program
Project Manager:	Mark Sutterfield
Hazard Priority:	NFA
Potential Hazards And Controls:	Hazard Managed With Controls
Organization:	Not reported
Island:	Oahu
Supplemental Location Text:	Not reported
SDAR Environmental Interest Name:	Former Aiea Sugar Mill Remedial Lots 1-5
HID Number:	Not reported
Facility Registry Identifier:	Not reported
Lead Agency:	Not reported
Progran Name:	Voluntary Response Program
Potential Hazard And Controls:	Hazard Managed With Controls
Priority:	NFA
Assessment:	Response Necessary
Response:	Response Complete

AIEA STREAM (Continued) **S110061250**

Nature of Contamination: Found: Lead
Nature of Residual Contamination: Not reported
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Not reported
Description of Restrictions: No use restrictions for Lots 1-5 and 16 or 19. Any soil removed on lots 6-14 and 17-18 must go to a landfill. Lot 15 requires further remediation for lead and benzo(a)pyrene. The VRP agreement is to be transferred over to A&B for lot 15.
Institutional Control: Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination: Not reported
Site Closure Type: Letter of Completion - Restricted Use
Document Date: 07/14/2004
Document Number: Not reported
Document Subject: Final Remedial Investigation Report Lots 15 and 17, 99-193 Aiea Heights Dr, Aiea, Oahu HI, TMK 1-9-9
Project Manager: Mark Sutterfield
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: Former Aiea Sugar Mill Remedial Lots 16-19
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: Not reported
Program: Voluntary Response Program
Project Manager: Mark Sutterfield
Hazard Priority: NFA
Potential Hazards And Controls: Hazard Managed With Controls
Organization: Not reported
Island: Oahu
Supplemental Location Text: Not reported
SDAR Environmental Interest Name: Former Aiea Sugar Mill Remedial Lots 16-19
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: Not reported
Progran Name: Voluntary Response Program
Potential Hazard And Controls: Hazard Managed With Controls
Priority: NFA
Assessment: Assessment Ongoing
Response: Response Complete
Nature of Contamination: Found: Lead under roadway
Nature of Residual Contamination: Not reported
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Engineering Control Required
Description of Restrictions: No use restrictions for Lots 1-5 and 16 or 19. Any soil removed on lots 6-14 and 17-18 must go to a landfill. Lot 15 requires further remediation for lead and benzo(a)pyrene. The VRP agreement is to be transferred over to A&B for lot 15.
Institutional Control: Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination: Not reported
Site Closure Type: Letter of Completion - Restricted Use
Document Date: 11/14/2003
Document Number: 2003-374-MS
Document Subject: LOC for lots 16-19
Project Manager: Mark Sutterfield
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

AIEA STREAM (Continued) **S110061250**

Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: Former Aiea Sugar Mill Remedial Lots 6-14
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Program: Voluntary Response Program
Project Manager: Mark Sutterfield
Hazard Priority: NFA
Potential Hazards And Controls: Hazard Managed With Controls
Organization: Not reported
Island: Oahu
Supplemental Location Text: Not reported
SDAR Environmental Interest Name: Former Aiea Sugar Mill Remedial Lots 6-14
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Progran Name: Voluntary Response Program
Potential Hazard And Controls: Hazard Managed With Controls
Priority: NFA
Assessment: Response Necessary
Response: Response Complete
Nature of Contamination: Not reported
Nature of Residual Contamination: Lead.
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Not reported
Description of Restrictions: No use restrictions for Lots 1-5 and 16 or 19. Any soil removed on lots 6-14 and 17-18 must go to a landfill. Lot 15 requires further remediation for lead and benzo(a)pyrene. The VRP agreement is to be transferred over to A&B for lot 15.
Institutional Control: Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination: Not reported
Site Closure Type: Letter of Completion
Document Date: 11/18/2002
Document Number: 2002-295-MS
Document Subject: LOC Phase one Aiea Mill
Project Manager: Mark Sutterfield
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

ENG CONTROLS:
Supplemental Location Text: Not reported
Zip Suffix: Not reported
Island: Oahu
Potential Hazards And Controls: Hazard Managed With Controls
Engineering Control: Engineering Control Required

Supplemental Location Text: Not reported
Zip Suffix: Not reported
Island: Oahu
Potential Hazards And Controls: Hazard Managed With Controls
Engineering Control: Engineering Control Required

Supplemental Location Text: Not reported
Zip Suffix: Not reported
Island: Oahu
Potential Hazards And Controls: Hazard Managed With Controls

AIEA STREAM (Continued) **S110061250**

Engineering Control: Engineering Control Required

INST CONTROL:

Potential hazards and controls:	Hazard Managed With Controls
Supplemental Location:	Not reported
Zip Suffix:	Not reported
Island:	Oahu
Institutional Control:	Government - Hawaii Dept. of Health Letter Issued

Potential hazards and controls:	Hazard Managed With Controls
Supplemental Location:	Not reported
Zip Suffix:	Not reported
Island:	Oahu
Institutional Control:	Government - Hawaii Dept. of Health Letter Issued

Potential hazards and controls:	Hazard Managed With Controls
Supplemental Location:	Not reported
Zip Suffix:	Not reported
Island:	Oahu
Institutional Control:	Government - Hawaii Dept. of Health Letter Issued

Potential hazards and controls:	Hazard Managed With Controls
Supplemental Location:	Not reported
Zip Suffix:	Not reported
Island:	Oahu
Institutional Control:	Government - Hawaii Dept. of Health Letter Issued

Potential hazards and controls:	Hazard Managed With Controls
Supplemental Location:	Not reported
Zip Suffix:	Not reported
Island:	Oahu
Institutional Control:	Government - Hawaii Dept. of Health Letter Issued

VCP:

Program:	Voluntary Response Program
Zip Suffix:	Not reported
Supplemental Location:	Not reported
Island:	Oahu

Program:	Voluntary Response Program
Zip Suffix:	Not reported
Supplemental Location:	Not reported
Island:	Oahu

Program:	Voluntary Response Program
Zip Suffix:	Not reported
Supplemental Location:	Not reported
Island:	Oahu

Program:	Voluntary Response Program
Zip Suffix:	Not reported
Supplemental Location:	Not reported
Island:	Oahu

5 ESE 1/4-1/2 0.377 mi. 1988 ft. **CHEVRON SS 208878 DBA SALT LAKE CHEVRON** **LUST** **U001235257**
4561 SALT LAKE BLVD **UST** **N/A**
HONOLULU, HI 96818 **SPILLS**
Financial Assurance

Relative: Lower

Actual: 7 ft.

LUST:

Facility ID:	9-100849
Facility Status:	Site Cleanup Completed (NFA)
Facility Status Date:	09/09/1997
Release ID:	980041
Project Officer:	Not Assigned

UST:

Facility ID:	9-100849
Owner:	CHEVRON PRODUCTS COMPANY
Owner Address:	91-480 MALAKOLE ST.
Owner City,St,Zip:	Honolulu, 96818 96818
Latitude:	21.364950
Longitude:	-157.929150
Horizontal Reference Datum Name:	NAD27
Horizontal Collection Method Name:	GPS

Tank ID:	87
Date Installed:	09/01/1999
Tank Status:	**Currently In Use**
Date Closed:	Not reported
Tank Capacity:	20000
Substance:	Gasoline

Tank ID:	92
Date Installed:	09/01/1999
Tank Status:	**Currently In Use**
Date Closed:	Not reported
Tank Capacity:	15000
Substance:	Gasoline

Tank ID:	R-1
Date Installed:	04/03/1980
Tank Status:	**Permanently Out of Use**
Date Closed:	03/01/1988
Tank Capacity:	6000
Substance:	Gasoline

HI SPILLS:

Island:	Oahu
Supplemental Loc. Text:	Chevron - Salt Lake
Case Number:	20100330-1008
HID Number:	Not reported
Facility Registry Id:	Not reported
Lead and Program:	HEER EP&R
ER:	None
Units:	4561 Salt Lake Boulevard incident
Substances:	Gasoline
Less Or Greater Than:	Not reported
Numerical Quantity:	1

CHEVRON SS 208878 DBA SALT LAKE CHEVRON (Continued) **U001235257**

Units: Gallons
Activity Type: Response
Activity Lead: Liz Galvez
Assignment End Date: 2010-03-30 00:00:00
Result: SOSC NFA
File Under: Not reported

HI Financial Assurance:
Alt Facility ID: 9-100849
Tank Id: 87
Tank Status: Currently In Use
FRTYPE: Trust Fund
Expiration Date: Not reported

Alt Facility ID: 9-100849
Tank Id: 92
Tank Status: Currently In Use
FRTYPE: Trust Fund
Expiration Date: Not reported

Alt Facility ID: 9-100849
Tank Id: R-1
Tank Status: Permanently Out of Use
FRTYPE: Trust Fund
Expiration Date: Not reported

Alt Facility ID: 9-100849
Tank Id: R-1
Tank Status: Permanently Out of Use
FRTYPE: Guarantee
Expiration Date: 04/23/2013

Alt Facility ID: 9-100849
Tank Id: 87
Tank Status: Currently In Use
FRTYPE: Guarantee
Expiration Date: 04/23/2013

Alt Facility ID: 9-100849
Tank Id: 92
Tank Status: Currently In Use
FRTYPE: Guarantee
Expiration Date: 04/23/2013

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6 SW 1/4-1/2 0.377 mi. 1990 ft.

Relative: Lower

Actual: 3 ft.

KUAHUA PENINSULA **LUST U001235824**
P.O. BOX 300 BLDG S-921TANK MLR-1, MLR-2 **UST N/A**
PEARL HARBOR, HI 96860

LUST:
Facility ID: 9-102279
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 02/03/2000
Release ID: 980201
Project Officer: Shaobin Li

KUAHUA PENINSULA (Continued) **U001235824**

UST:
Facility ID: 9-102279
Owner: U.S. DEPT OF THE NAVY
Owner Address: Not reported
Owner City,St,Zip: Pearl Harbor, 96860 96860
Latitude: 21.364937
Longitude: -157.939221
Horizontal Reference Datum Name: NAD83
Horizontal Collection Method Name: Map

Tank ID: R-1
Date Installed: 05/01/2049
Tank Status: Permanently Out of Use
Date Closed: 05/09/1996
Tank Capacity: 8000
Substance: Gasoline

Tank ID: R-2
Date Installed: 05/01/2049
Tank Status: Permanently Out of Use
Date Closed: 05/09/1996
Tank Capacity: 5000
Substance: Gasoline

---

7 South 1/4-1/2 0.400 mi. 2113 ft.

Relative: Higher

Actual: 53 ft.

NAVAL STATION - PEARL HARBOR - MAKALAPA CRATER **LUST U003346408**
BLDG 16, TANK 101 **UST N/A**
PEARL HARBOR, HI 96860

LUST:
Facility ID: 9-203371
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 05/06/1999
Release ID: 980157
Project Officer: Renato Maniulit

UST:
Facility ID: 9-203371
Owner: US NAVY - COMNAVREG - HI
Owner Address: 517 RUSSELL AVE, SUITE 110
Owner City,St,Zip: Pearl Harbor, 96860 96860
Latitude: 21.362639
Longitude: -157.934458
Horizontal Reference Datum Name: NAD83
Horizontal Collection Method Name: Map

Tank ID: R-101
Date Installed: Not reported
Tank Status: Permanently Out of Use
Date Closed: 05/21/1998
Tank Capacity: Not reported
Substance: Not Listed

A8
WSW
1/4-1/2
0.410 mi.
2165 ft.

KUAHUA PENINSULA
P.O. BOX 300 / BLDG 1309, TANK 6-2H
PEARL HARBOR, HI 96860

LUST **U001235836**
UST **N/A**

Site 1 of 3 in cluster A

Relative:
Lower

Actual:
3 ft.

LUST:

Facility ID:	9-102293
Facility Status:	Case Transferred to HEER (DERA)
Facility Status Date:	11/05/2007
Release ID:	080007
Project Officer:	To DERA

UST:

Facility ID:	9-102293
Owner:	U.S. DEPT OF THE NAVY
Owner Address:	Not reported
Owner City,St,Zip:	Pearl Harbor, 96860 96860
Latitude:	21.365435
Longitude:	-157.940007
Horizontal Reference Datum Name:	NAD83
Horizontal Collection Method Name:	Map
Tank ID:	r-6-2H
Date Installed:	05/01/2044
Tank Status:	**Permanently out of Use**
Date Closed:	05/01/1997
Tank Capacity:	5000
Substance:	Other

A9
WSW
1/4-1/2
0.410 mi.
2165 ft.

KUAHUA PENINSULA
P.O. BOX 300 / BLDG 1308, TANK H6-1
PEARL HARBOR, HI 96860

LUST **U003154578**
UST **N/A**

Site 2 of 3 in cluster A

Relative:
Lower

Actual:
3 ft.

LUST:

Facility ID:	9-102292
Facility Status:	Case Transferred to HEER (DERA)
Facility Status Date:	11/05/2007
Release ID:	080006
Project Officer:	To DERA

UST:

Facility ID:	9-102292
Owner:	U.S. DEPT OF THE NAVY
Owner Address:	Not reported
Owner City,St,Zip:	Pearl Harbor, 96860 96860
Latitude:	21.365435
Longitude:	-157.940007
Horizontal Reference Datum Name:	NAD83
Horizontal Collection Method Name:	Map
Tank ID:	r-6-1H
Date Installed:	05/01/2044
Tank Status:	**Permanently out of Use**
Date Closed:	05/01/1997
Tank Capacity:	5000
Substance:	Other

A10
WSW
1/4-1/2
0.417 mi.
2200 ft.

FLEET ACCOUNTING & DISBURSING
BLDG 499 & 199 TANK 44HALE MOKU
PEARL HARBOR, HI 96860

LUST **U001235314**
UST **N/A**

Site 3 of 3 in cluster A

Relative:
Lower

Actual:
3 ft.

LUST:

Facility ID:	9-100970
Facility Status:	Site Cleanup Completed (NFA)
Facility Status Date:	09/27/1999
Release ID:	980188
Project Officer:	Renato Maniulit

UST:

Facility ID:	9-100970
Owner:	DEFENSE FINANCE AND ACCOUNTING SERVICE
Owner Address:	1025 QUINCY AVE, SUITE 200
Owner City,St,Zip:	Pearl Harbor, 96860 96860
Latitude:	21.349271
Longitude:	-157.934991
Horizontal Reference Datum Name:	NAD83
Horizontal Collection Method Name:	Map
Tank ID:	R-44
Date Installed:	01/28/1960
Tank Status:	**Permanently Out of Use**
Date Closed:	09/24/1993
Tank Capacity:	1500
Substance:	Diesel

11
South
1/4-1/2
0.455 mi.
2403 ft.

PEARL HARBOR NAVAL STATION
BLDG 363 TANK 18
PEARL HARBOR, HI 96860

LUST **U001235883**
UST **N/A**

Relative:
Higher

Actual:
50 ft.

LUST:

Facility ID:	9-102382
Facility Status:	Site Cleanup Completed (NFA)
Facility Status Date:	08/29/2001
Release ID:	900094
Project Officer:	Jose Ruiz

UST:

Facility ID:	9-102382
Owner:	US NAVY - COMNAVREG - HI
Owner Address:	517 RUSSELL AVE, SUITE 110
Owner City,St,Zip:	Pearl Harbor, 96860 96860
Latitude:	21.361751
Longitude:	-157.933822
Horizontal Reference Datum Name:	NAD83
Horizontal Collection Method Name:	Map
Tank ID:	R-18
Date Installed:	05/01/2042
Tank Status:	**Permanently Out of Use**
Date Closed:	12/06/1996
Tank Capacity:	2500
Substance:	Gasoline

12 SW 1/4-1/2 0.457 mi. 2415 ft.

Relative: Lower

Actual: 3 ft.

FLEET AND INDUSTRIAL SUPPLY CTR — **LUST** **U003154824**
BLDG 480 TANK Y-DOCK AND 480 — **UST** **N/A**
PEARL HARBOR, HI 96860

LUST:

Facility ID:	9-103098
Facility Status:	Site Cleanup Completed (NFA)
Facility Status Date:	09/10/1996
Release ID:	950119
Project Officer:	Roger Brewer

UST:

Facility ID:	9-103098
Owner:	U.S. DEPT OF THE NAVY
Owner Address:	Not reported
Owner City,St,Zip:	Pearl Harbor, 96860 96860
Latitude:	21.356808
Longitude:	-157.947778
Horizontal Reference Datum Name:	NAD83
Horizontal Collection Method Name:	Map

Tank ID:	R-480
Date Installed:	Not reported
Tank Status:	**Permanently Out of Use**
Date Closed:	05/01/1992
Tank Capacity:	150
Substance:	Not Listed

Tank ID:	R-Y-DOCK
Date Installed:	Not reported
Tank Status:	**Permanently Out of Use**
Date Closed:	10/02/1992
Tank Capacity:	850
Substance:	Diesel

---

13 SE 1/4-1/2 0.494 mi. 2606 ft.

Relative: Lower

Actual: 27 ft.

GOODYEAR AUTO SERVICE CENTER 8025 — **LUST** **U001235104**
4510 SALT LAKE BLVD — **UST** **N/A**
HONOLULU, HI 96818 — **Financial Assurance**

LUST:

Facility ID:	9-101200
Facility Status:	Site Cleanup Completed (NFA)
Facility Status Date:	11/26/2001
Release ID:	970115
Project Officer:	Deena Kam

Facility ID:	9-101200
Facility Status:	Site Cleanup Completed (NFA)
Facility Status Date:	06/07/2011
Release ID:	110015
Project Officer:	Deena Kam

UST:

Facility ID:	9-100226

GOODYEAR AUTO SERVICE CENTER 8025 (Continued) — **U001235104**

Owner:	STADIUM MALL PARTNERSHIPS
Owner Address:	4510 SALT LAKE BLVD
Owner City,St,Zip:	Honolulu, 96818 96818
Latitude:	Not reported
Longitude:	Not reported
Horizontal Reference Datum Name:	Not reported
Horizontal Collection Method Name:	Not reported

Tank ID:	R-1
Date Installed:	04/15/1985
Tank Status:	**Permanently Out of Use**
Date Closed:	09/28/1993
Tank Capacity:	650
Substance:	Used Oil

Tank ID:	R-1
Date Installed:	04/04/1982
Tank Status:	**Permanently Out of Use**
Date Closed:	07/22/1997
Tank Capacity:	10000
Substance:	Gasoline

Tank ID:	R-2
Date Installed:	04/04/1982
Tank Status:	**Permanently Out of Use**
Date Closed:	07/22/1997
Tank Capacity:	10000
Substance:	Gasoline

Tank ID:	R-3
Date Installed:	04/04/1982
Tank Status:	**Permanently Out of Use**
Date Closed:	07/22/1997
Tank Capacity:	10000
Substance:	Gasoline

Tank ID:	r-87
Date Installed:	07/01/1997
Tank Status:	**Permanently out of Use**
Date Closed:	06/01/2010
Tank Capacity:	10000
Substance:	Gasoline

Tank ID:	r-92
Date Installed:	07/01/1997
Tank Status:	**Permanently out of Use**
Date Closed:	06/01/2010
Tank Capacity:	10000
Substance:	Gasoline

HI Financial Assurance:

Alt Facility ID:	9-101200

GOODYEAR AUTO SERVICE CENTER 8025 (Continued) **U001235104**

Tank Id: r-87
Tank Status: Permanently out of Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-101200
Tank Id: r-92
Tank Status: Permanently out of Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-101200
Tank Id: R-3
Tank Status: Permanently Out of Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-101200
Tank Id: R-1
Tank Status: Permanently Out of Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-101200
Tank Id: R-2
Tank Status: Permanently Out of Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-101200
Tank Id: R-3
Tank Status: Permanently Out of Use
FRTYPE: Insurance
Expiration Date: 04/01/2009

Alt Facility ID: 9-101200
Tank Id: R-2
Tank Status: Permanently Out of Use
FRTYPE: Insurance
Expiration Date: 04/01/2009

Alt Facility ID: 9-101200
Tank Id: r-87
Tank Status: Permanently out of Use
FRTYPE: Insurance
Expiration Date: 04/01/2009

Alt Facility ID: 9-101200
Tank Id: R-1
Tank Status: Permanently Out of Use
FRTYPE: Insurance
Expiration Date: 04/01/2009

Alt Facility ID: 9-101200
Tank Id: r-92
Tank Status: Permanently out of Use
FRTYPE: Insurance

GOODYEAR AUTO SERVICE CENTER 8025 (Continued) **U001235104**

Expiration Date: 04/01/2009

14
North
1/2-1
0.616 mi.
3250 ft.

Relative:
Lower

Actual:
1 ft.

AIEA MILITARY RESERVATION **FUDS** **1007372710**
N/A
AIEA, HI

FUDS:
Federal Facility ID: HI9799F3759
FUDS #: H09HI0011
INST ID: 62506
Facility Name: AIEA MILITARY RESERVATION
City: AIEA
State: HI
EPA Region: 09
County: HONOLULU
Congressional District: Not reported
US Army District: Honolulu District (POH)
Fiscal Year: 2012
Telephone: 808-438-8317
NPL Status: Not Listed
RAB: Not reported
CTC: 3042.900
Current Owner: Private Sector; State Government
Current Prog: Not reported
Future Prog: Not reported
Acreage: Not reported
Description: The Aiea Military Reservation comprises 274.07 acres and is located across from the Admiral's boathouse in Pearl Harbor, near Aiea State Park. The buildings were unoccupied and much vandalism has occurred including the unauthorized removal of mercury from the pump house which contaminated the Puu Momi subdivision. The State of Hawaii has secured the site to prohibit further access. The property is currently owned by the State of Hawaii.
History: The land was withdrawn by the U.S. from the Territory of Hawaii and set aside for military purposes. By Executive Order 8320, dated 15 January 1940, the description of the Aiea Military Reservation was amended to an area of 8.471 acres. The property having the Aiea Pumphouse was a former Navy facility and was turned over to the State of Hawaii in 1962. Since then, the buildings have been unoccupied and subject to vandalism.
Latitude: 21.37722222
Longitude: -157.9361111100

15
NNW
1/2-1
0.768 mi.
4054 ft.

Relative:
Lower

Actual:
27 ft.

HICKAM POL ST20, SPILL SITE ST20 **SHWS** **S110061554**
KAMEHAMEHA HWY & MCGREW LP **N/A**
AIEA, HI 96701

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: Hickam POL ST20, Spill Site ST20
HID Number: Not reported

HICKAM POL ST20, SPILL SITE ST20 (Continued) **S110061554**

Facility Registry Identifier:	Not reported
Lead Agency:	HEER
Program:	Installation Restoration Program
Project Manager:	Lynn Bailey
Hazard Priority:	NFA
Potential Hazards And Controls:	No Hazard
Organization:	Not reported
Island:	Oahu
Supplemental Location Text:	Not reported
SDAR Environmental Interest Name:	Hickam POL ST20, Spill Site ST20
HID Number:	Not reported
Facility Registry Identifier:	Not reported
Lead Agency:	HEER
Progran Name:	Installation Restoration Program
Potential Hazard And Controls:	No Hazard
Priority:	NFA
Assessment:	Response Not Necessary
Response:	Not reported
Nature of Contamination:	Not reported
Nature of Residual Contamination:	petroleum in GW
Use Restrictions:	No Hazard Present For Unrestricted Residential Use
Engineering Control:	No Engineering Control Required
Description of Restrictions:	Not reported
Institutional Control:	Not reported
Within Designated Areawide Contamination:	Not reported
Site Closure Type:	No Further Action Letter - Unrestricted Residential Use
Document Date:	12/01/2009
Document Number:	2009-779-LMB
Document Subject:	Request for Signature - Final Decision Document to support No Further Response Action Planned (NFRAP
Project Manager:	Lynn Bailey
Contact Information:	(808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Count: 9 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
AIEA	S106815973	AIEA HEIGHTS TANKS	1294 AIEA HEIGHTS DR	96701	SHWS, SPILLS
AIEA	1015733371	CAMP H.M. SMITH	HALAWA HEIGHTS HEADQUARTERS -	96701	CERC-NFRAP, RCRA-SQG, HAZNET
AIEA	S110061547	HICKAM POL ST13, SPILL SITE ST13	INTERSECTION OF ARIZONA ST & H	96701	SHWS, SPILLS, INST CONTROL
AIEA	S110061740	PHNC, AIEA LAUNDRY BUILDING 436	KAIMAKANI ST AND MOANALUA RD	96701	SHWS, SPILLS
AIEA	S110061542	HICKAM POL ST08, SPILL SITE ST08	KAMEHAMEHA HWY & RADFORD DR	96701	SHWS
AIEA	S110061545	HICKAM POL ST11, SPILL SITE ST11	EAST OF KAONOHI ST & KAMEHAMEH	96701	SHWS
AIEA	S110061549	HICKAM POL ST15, SPILL SITE ST15	EAST OF KAMEHAMEHA HWY & HEKAH	96701	SHWS
JOINT BASE PEARL HAR	1015730959	NAVY REGION HAWAII - MAKALAPA COMP	0000 MAKALAPA COMPOUND	96860	RCRA-TSDF, CERCLIS, RCRA-CESQ
PEARL HARBOR	S110061734	PHFISC, BUILDING 4 & OPEN STORAGE	KAMEHAMEHA HWY		SHWS, ENG CONTROLS, INST CON

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List
National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 12/16/2014
Date Data Arrived at EDR: 01/08/2015
Date Made Active in Reports: 02/09/2015
Number of Days to Update: 32

Source: EPA
Telephone: N/A
Last EDR Contact: 01/08/2015
Next Scheduled EDR Contact: 04/20/2015
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites
A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 12/16/2014
Date Data Arrived at EDR: 01/08/2015
Date Made Active in Reports: 02/09/2015
Number of Days to Update: 32

Source: EPA
Telephone: N/A
Last EDR Contact: 01/08/2015
Next Scheduled EDR Contact: 04/20/2015
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens
Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

DELISTED NPL: National Priority List Deletions
The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 12/16/2014
Date Data Arrived at EDR: 01/08/2015
Date Made Active in Reports: 02/09/2015
Number of Days to Update: 32

Source: EPA
Telephone: N/A
Last EDR Contact: 01/08/2015
Next Scheduled EDR Contact: 04/20/2015
Data Release Frequency: Quarterly

Federal CERCLIS list

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System
CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 11/11/2013
Date Made Active in Reports: 02/13/2014
Number of Days to Update: 94

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 02/27/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Quarterly

FEDERAL FACILITY: Federal Facility Site Information listing
A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 07/21/2014
Date Data Arrived at EDR: 10/07/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 01/09/2015
Next Scheduled EDR Contact: 04/20/2015
Data Release Frequency: Varies

Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned
Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 11/11/2013
Date Made Active in Reports: 02/13/2014
Number of Days to Update: 94

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 02/27/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report
CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/09/2014
Date Data Arrived at EDR: 12/29/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 31

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 12/29/2014
Next Scheduled EDR Contact: 04/13/2015
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 12/09/2014
Date Data Arrived at EDR: 12/29/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 12/29/2014
Next Scheduled EDR Contact: 04/13/2015
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/09/2014
Date Data Arrived at EDR: 12/29/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 12/29/2014
Next Scheduled EDR Contact: 04/13/2015
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 12/09/2014
Date Data Arrived at EDR: 12/29/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 12/29/2014
Next Scheduled EDR Contact: 04/13/2015
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/09/2014
Date Data Arrived at EDR: 12/29/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 12/29/2014
Next Scheduled EDR Contact: 04/13/2015
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

US ENG CONTROLS: Engineering Controls Sites List
A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 09/18/2014
Date Data Arrived at EDR: 09/19/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/26/2015
Next Scheduled EDR Contact: 06/15/2015
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls
A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 09/18/2014
Date Data Arrived at EDR: 09/19/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/26/2015
Next Scheduled EDR Contact: 06/15/2015
Data Release Frequency: Varies

LUCIS: Land Use Control Information System
LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/03/2014
Date Data Arrived at EDR: 12/12/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 48

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 02/16/2015
Next Scheduled EDR Contact: 06/01/2015
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System
Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/29/2014
Date Data Arrived at EDR: 09/30/2014
Date Made Active in Reports: 11/06/2014
Number of Days to Update: 37

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 12/29/2014
Next Scheduled EDR Contact: 04/13/2015
Data Release Frequency: Annually

State- and tribal - equivalent CERCLIS

SHWS: Sites List
Facilities, sites or areas in which the Office of Hazard Evaluation and Emergency Response has an interest, has investigated or may investigate under HRS 128D (includes CERCLIS sites).

Date of Government Version: 12/02/2014
Date Data Arrived at EDR: 12/22/2014
Date Made Active in Reports: 01/27/2015
Number of Days to Update: 36

Source: Department of Health
Telephone: 808-586-4249
Last EDR Contact: 02/27/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Semi-Annually

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: Permitted Landfills in the State of Hawaii
Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 09/17/2012
Date Data Arrived at EDR: 04/03/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 37

Source: Department of Health
Telephone: 808-586-4245
Last EDR Contact: 12/31/2014
Next Scheduled EDR Contact: 04/13/2015
Data Release Frequency: Varies

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 03/02/2015
Date Data Arrived at EDR: 03/04/2015
Date Made Active in Reports: 03/17/2015
Number of Days to Update: 13

Source: Department of Health
Telephone: 808-586-4228
Last EDR Contact: 02/26/2015
Next Scheduled EDR Contact: 06/15/2015
Data Release Frequency: Semi-Annually

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 09/30/2014
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 10

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 01/26/2015
Next Scheduled EDR Contact: 05/11/2015
Data Release Frequency: Semi-Annually

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 01/30/2015
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 32

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 01/26/2015
Next Scheduled EDR Contact: 05/11/2015
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 09/23/2014
Date Data Arrived at EDR: 11/25/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 65

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/26/2015
Next Scheduled EDR Contact: 05/11/2015
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 01/08/2015
Date Data Arrived at EDR: 01/08/2015
Date Made Active in Reports: 02/09/2015
Number of Days to Update: 32

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 01/08/2015
Next Scheduled EDR Contact: 05/11/2015
Data Release Frequency: Quarterly

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 02/03/2015
Date Data Arrived at EDR: 02/12/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 29

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/26/2015
Next Scheduled EDR Contact: 05/11/2015
Data Release Frequency: Quarterly

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 02/01/2013
Date Data Arrived at EDR: 05/01/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 184

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 01/30/2015
Next Scheduled EDR Contact: 05/11/2015
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 01/28/2015
Date Data Arrived at EDR: 01/30/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 42

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 01/26/2015
Next Scheduled EDR Contact: 05/11/2015
Data Release Frequency: Quarterly

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 01/23/2015
Date Data Arrived at EDR: 02/10/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 31

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 01/26/2015
Next Scheduled EDR Contact: 05/11/2015
Data Release Frequency: Varies

State and tribal registered storage tank lists

UST: Underground Storage Tank Database
Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 03/02/2015
Date Data Arrived at EDR: 03/04/2015
Date Made Active in Reports: 03/17/2015
Number of Days to Update: 13

Source: Department of Health
Telephone: 808-586-4228
Last EDR Contact: 02/26/2015
Next Scheduled EDR Contact: 06/15/2015
Data Release Frequency: Semi-Annually

INDIAN UST R10: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 02/03/2015
Date Data Arrived at EDR: 02/12/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 29

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/26/2015
Next Scheduled EDR Contact: 05/11/2015
Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 12/14/2014
Date Data Arrived at EDR: 02/13/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 28

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 01/26/2015
Next Scheduled EDR Contact: 05/11/2015
Data Release Frequency: Quarterly

INDIAN UST R1: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 02/01/2013
Date Data Arrived at EDR: 05/01/2013
Date Made Active in Reports: 01/27/2014
Number of Days to Update: 271

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 01/30/2015
Next Scheduled EDR Contact: 05/11/2015
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/23/2014
Date Data Arrived at EDR: 11/25/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 65

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/26/2015
Next Scheduled EDR Contact: 05/11/2015
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 01/23/2015
Date Data Arrived at EDR: 02/13/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 28

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 01/26/2015
Next Scheduled EDR Contact: 05/11/2015
Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 01/30/2015
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 36

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 01/26/2015
Next Scheduled EDR Contact: 05/11/2015
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 09/30/2014
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 10

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 01/26/2015
Next Scheduled EDR Contact: 05/11/2015
Data Release Frequency: Semi-Annually

INDIAN UST R8: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 01/29/2015
Date Data Arrived at EDR: 01/30/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 42

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 01/26/2015
Next Scheduled EDR Contact: 05/11/2015
Data Release Frequency: Quarterly

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 01/12/2015
Next Scheduled EDR Contact: 04/27/2015
Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

ENG CONTROLS: Engineering Control Sites
A listing of sites with engineering controls in place.

Date of Government Version: 12/02/2014
Date Data Arrived at EDR: 12/22/2014
Date Made Active in Reports: 01/27/2015
Number of Days to Update: 36

Source: Department of Health
Telephone: 404-586-4249
Last EDR Contact: 02/27/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Varies

INST CONTROL: Sites with Institutional Controls
Voluntary Remediation Program and Brownfields sites with institutional controls in place.

Date of Government Version: 12/02/2014
Date Data Arrived at EDR: 12/22/2014
Date Made Active in Reports: 01/27/2015
Number of Days to Update: 36

Source: Department of Health
Telephone: 808-586-4249
Last EDR Contact: 02/27/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

VCP: Voluntary Response Program Sites
Sites participating in the Voluntary Response Program. The purpose of the VRP is to streamline the cleanup process in a way that will encourage prospective developers, lenders, and purchasers to voluntarily cleanup properties.

Date of Government Version: 12/02/2014
Date Data Arrived at EDR: 12/22/2014
Date Made Active in Reports: 01/27/2015
Number of Days to Update: 36

Source: Department of Health
Telephone: 808-586-4249
Last EDR Contact: 02/27/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 09/29/2014
Date Data Arrived at EDR: 10/01/2014
Date Made Active in Reports: 11/06/2014
Number of Days to Update: 36
Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 12/31/2014
Next Scheduled EDR Contact: 04/13/2015
Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Brownfields Sites
With certain legal exclusions and additions, the term 'brownfield site' means real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.

Date of Government Version: 12/02/2014
Date Data Arrived at EDR: 12/22/2014
Date Made Active in Reports: 01/27/2015
Number of Days to Update: 36
Source: Department of Health
Telephone: 808-586-4249
Last EDR Contact: 02/27/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 12/22/2014
Date Data Arrived at EDR: 12/22/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 38
Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 12/22/2014
Next Scheduled EDR Contact: 04/06/2015
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39
Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137
Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 01/26/2015
Next Scheduled EDR Contact: 05/11/2015
Data Release Frequency: No Update Planned

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52
Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 02/02/2015
Next Scheduled EDR Contact: 05/18/2015
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US CDL: Clandestine Drug Labs
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 11/10/2014
Date Data Arrived at EDR: 12/01/2014
Date Made Active in Reports: 02/09/2015
Number of Days to Update: 70
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/03/2015
Next Scheduled EDR Contact: 06/15/2015
Data Release Frequency: Quarterly

CDL: Clandestine Drug Lab Listing
A listing of clandestine drug lab site locations.

Date of Government Version: 08/04/2010
Date Data Arrived at EDR: 09/10/2010
Date Made Active in Reports: 10/22/2010
Number of Days to Update: 42
Source: Department of Health
Telephone: 808-586-4249
Last EDR Contact: 02/26/2015
Next Scheduled EDR Contact: 06/15/2015
Data Release Frequency: Varies

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 11/10/2014
Date Data Arrived at EDR: 12/01/2014
Date Made Active in Reports: 02/09/2015
Number of Days to Update: 70
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/03/2015
Next Scheduled EDR Contact: 06/15/2015
Data Release Frequency: No Update Planned

Local Land Records

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014
Date Data Arrived at EDR: 03/18/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 37
Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 01/30/2015
Next Scheduled EDR Contact: 05/11/2015
Data Release Frequency: Varies

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/29/2014
Date Data Arrived at EDR: 12/30/2014
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 69

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 12/30/2014
Next Scheduled EDR Contact: 04/13/2015
Data Release Frequency: Annually

SPILLS: Release Notifications
Releases of hazardous substances to the environment reported to the Office of Hazard Evaluation and Emergency Response since 1988.

Date of Government Version: 12/02/2014
Date Data Arrived at EDR: 12/22/2014
Date Made Active in Reports: 01/28/2015
Number of Days to Update: 37

Source: Department of Health
Telephone: 808-586-4249
Last EDR Contact: 02/27/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Varies

SPILLS 90: SPILLS90 data from FirstSearch
Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 03/10/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/11/2013
Number of Days to Update: 39

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 12/09/2014
Date Data Arrived at EDR: 12/29/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 12/29/2014
Next Scheduled EDR Contact: 04/13/2015
Data Release Frequency: Varies

DOT OPS: Incident and Accident Data
Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 02/03/2015
Next Scheduled EDR Contact: 05/18/2015
Data Release Frequency: Varies

DOD: Department of Defense Sites
This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 01/15/2015
Next Scheduled EDR Contact: 04/27/2015
Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites
The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 06/06/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 09/18/2014
Number of Days to Update: 8

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 03/13/2015
Next Scheduled EDR Contact: 06/22/2015
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees
Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 01/23/2015
Date Data Arrived at EDR: 02/13/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 24

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 12/24/2014
Next Scheduled EDR Contact: 04/13/2015
Data Release Frequency: Varies

ROD: Records Of Decision
Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 74

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 03/10/2015
Next Scheduled EDR Contact: 06/22/2015
Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites
Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 02/27/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Varies

US MINES: Mines Master Index File
Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 12/30/2014
Date Data Arrived at EDR: 12/31/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 29

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 03/06/2015
Next Scheduled EDR Contact: 06/15/2015
Data Release Frequency: Semi-Annually

TRIS: Toxic Chemical Release Inventory System
Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/31/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 44

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 01/29/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Annually

TSCA: Toxic Substances Control Act
Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/15/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 14

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 12/22/2014
Next Scheduled EDR Contact: 04/06/2015
Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 02/23/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 02/23/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

SSTS: Section 7 Tracking Systems
Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 01/26/2015
Next Scheduled EDR Contact: 05/11/2015
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 01/23/2015
Date Data Arrived at EDR: 02/06/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 01/09/2015
Next Scheduled EDR Contact: 04/27/2015
Data Release Frequency: Quarterly

PADS: PCB Activity Database System
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 10/15/2014
Date Made Active in Reports: 11/17/2014
Number of Days to Update: 33

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 01/16/2015
Next Scheduled EDR Contact: 04/27/2015
Data Release Frequency: Annually

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 12/29/2014
Date Data Arrived at EDR: 01/08/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 21

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 03/09/2015
Next Scheduled EDR Contact: 06/22/2015
Data Release Frequency: Quarterly

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 10/07/2014
Date Data Arrived at EDR: 10/08/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 12

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 02/27/2015
Next Scheduled EDR Contact: 04/20/2015
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System
Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 08/16/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 03/09/2015
Next Scheduled EDR Contact: 06/22/2015
Data Release Frequency: Quarterly

RAATS: RCRA Administrative Action Tracking System
RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

RMP: Risk Management Plans
When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 08/01/2014
Date Data Arrived at EDR: 08/12/2014
Date Made Active in Reports: 11/06/2014
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 01/26/2015
Next Scheduled EDR Contact: 05/11/2015
Data Release Frequency: Varies

BRS: Biennial Reporting System
The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 04/19/2013
Number of Days to Update: 52

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 02/24/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Biennially

UIC: Underground Injection Wells Listing
A listing of underground injection well locations.

Date of Government Version: 02/07/2013
Date Data Arrived at EDR: 02/12/2013
Date Made Active in Reports: 04/09/2013
Number of Days to Update: 56

Source: Department of Health
Telephone: 808-586-4258
Last EDR Contact: 02/26/2015
Next Scheduled EDR Contact: 06/15/2015
Data Release Frequency: Varies

DRYCLEANERS: Permitted Drycleaner Facility Listing
A listing of permitted drycleaner facilities in the state.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 01/09/2015
Date Made Active in Reports: 02/11/2015
Number of Days to Update: 33

Source: Department of Health
Telephone: 808-586-4200
Last EDR Contact: 01/05/2015
Next Scheduled EDR Contact: 04/20/2015
Data Release Frequency: Varies

AIRS: List of Permitted Facilities
A listing of permitted facilities in the state.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 01/09/2015
Date Made Active in Reports: 02/11/2015
Number of Days to Update: 33

Source: Department of Health
Telephone: 808-586-4200
Last EDR Contact: 01/05/2015
Next Scheduled EDR Contact: 04/20/2015
Data Release Frequency: Varies

INDIAN RESERV: Indian Reservations
This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 01/15/2015
Next Scheduled EDR Contact: 04/27/2015
Data Release Frequency: Semi-Annually

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing
The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011
Date Data Arrived at EDR: 03/09/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 02/18/2015
Next Scheduled EDR Contact: 06/01/2015
Data Release Frequency: Varies

EPA WATCH LIST: EPA WATCH LIST
EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 02/09/2015
Next Scheduled EDR Contact: 05/25/2015
Data Release Frequency: Quarterly

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 10/17/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 3

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 02/13/2015
Next Scheduled EDR Contact: 05/25/2015
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List
The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 6
Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 02/13/2015
Next Scheduled EDR Contact: 05/25/2015
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites
A listing of former lead smelter site locations.

Date of Government Version: 11/25/2014
Date Data Arrived at EDR: 11/26/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 64
Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 01/05/2015
Next Scheduled EDR Contact: 04/20/2015
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands
Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339
Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 01/15/2015
Next Scheduled EDR Contact: 04/27/2015
Data Release Frequency: N/A

LEAD SMELTER 2: Lead Smelter Sites
A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36
Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)
The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/16/2014
Date Data Arrived at EDR: 10/31/2014
Date Made Active in Reports: 11/17/2014
Number of Days to Update: 17
Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 02/06/2015
Next Scheduled EDR Contact: 04/13/2015
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data
A listing of minor source facilities.

Date of Government Version: 10/16/2014
Date Data Arrived at EDR: 10/31/2014
Date Made Active in Reports: 11/17/2014
Number of Days to Update: 17
Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 02/06/2015
Next Scheduled EDR Contact: 04/13/2015
Data Release Frequency: Annually

US FIN ASSUR: Financial Assurance Information
All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 11/19/2014
Date Data Arrived at EDR: 11/21/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 69
Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 02/16/2015
Next Scheduled EDR Contact: 06/01/2015
Data Release Frequency: Quarterly

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 03/13/2015
Next Scheduled EDR Contact: 06/22/2015
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 01/30/2015
Next Scheduled EDR Contact: 05/11/2015
Data Release Frequency: Varies

Financial Assurance: Financial Assurance Information Listing
A listing of financial assurance information for underground storage tank facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 12/01/2014
Date Data Arrived at EDR: 12/19/2014
Date Made Active in Reports: 01/28/2015
Number of Days to Update: 40
Source: Department of Health
Telephone: 808-586-4226
Last EDR Contact: 03/13/2015
Next Scheduled EDR Contact: 06/29/2015
Data Release Frequency: Varies

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 01/15/2015
Next Scheduled EDR Contact: 04/27/2015
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR US Hist Auto Stat: EDR Exclusive Historic Gas Stations
EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Exclusive Historic Dry Cleaners
EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List
The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Health in Hawaii.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/08/2014
Number of Days to Update: 191

Source: Department of Health
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LF: Recovered Government Archive Solid Waste Facilities List
The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Health in Hawaii.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/17/2014
Number of Days to Update: 200

Source: Department of Health
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank
The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Health in Hawaii.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/03/2014
Number of Days to Update: 186

Source: Department of Health
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

PUUWAI MOMI
99-132 KOHOMUA ST.
AIEA, HI 96701

TARGET PROPERTY COORDINATES

Latitude (North):	21.3684 - 21˚ 22' 6.24''
Longitude (West):	157.9345 - 157˚ 56' 4.20''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	610468.6
UTM Y (Meters):	2363155.5
Elevation:	36 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	21157-C8 PEARL HARBOR, HI
Most Recent Revision:	Not reported
North Map:	21157-D8 WAIPAHU, HI
Most Recent Revision:	Not reported

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

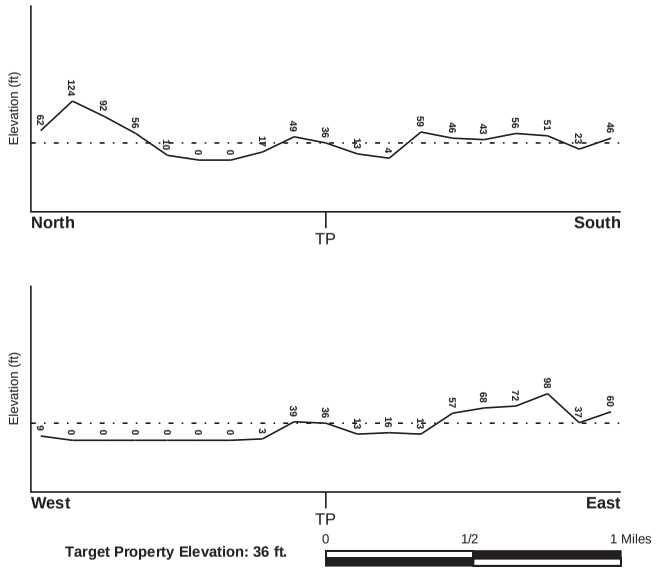
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General South

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
HONOLULU, HI	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 15003C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
PUULOA	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

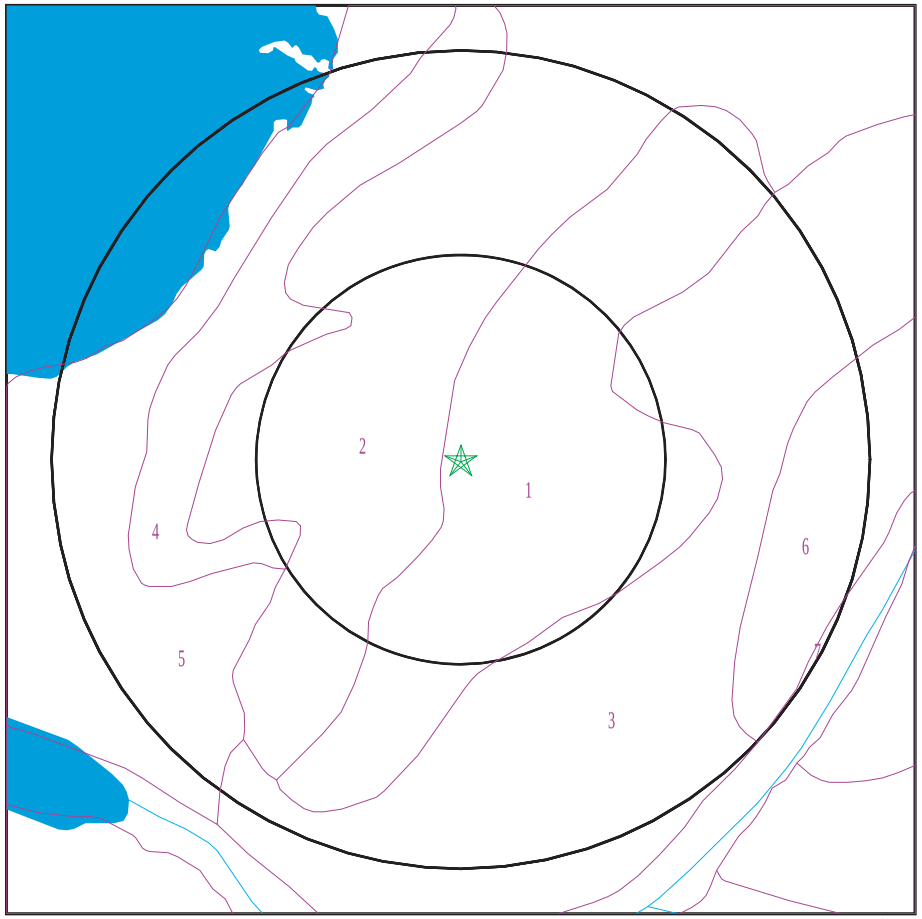
GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT		GEOLOGIC AGE IDENTIFICATION	
Era:	-	Category:	-
System:	-		
Series:	-		
Code:	N/A *(decoded above as Era, System & Series)*		

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4237094.6s



★ Target Property
SSURGO Soil
Water

SITE NAME: Puuwai Momi ADDRESS: 99-132 Kohomua St. Alea HI 96701 LAT/LONG: 21.3684 / 157.9345	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.6s DATE: March 18, 2015 7:43 am

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DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Waipahu

Soil Surface Texture: silty clay

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14.11 Min: 4.23	Max: 6.5 Min: 6.1
2	11 inches	70 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4.23 Min: 0.42	Max: 6.5 Min: 6.1

Soil Map ID: 2

Soil Component Name: Makalapa

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4.23 Min: 0.42	Max: 7.8 Min: 7.4
2	7 inches	37 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 8.4 Min: 7.4
3	37 inches	48 inches	bedrock	Not reported	Not reported	Max: 0.42 Min: 0.02	Max: Min:

Soil Map ID: 3

Soil Component Name: Hanalei

Soil Surface Texture: silty clay

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 30 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	12 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 14 Min: 1.41	Max: 6.5 Min: 4.5
2	12 inches	25 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.1
3	25 inches	35 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.1

Soil Map ID: 4

Soil Component Name: Rock land

Soil Surface Texture: silty clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	3 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6
2	3 inches	7 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6
3	7 inches	20 inches	bedrock	Not reported	Not reported	Max: 0.42 Min: 0.02	Max: Min:

Soil Map ID: 5

Soil Component Name: Fill land, mixed

Soil Surface Texture: gravelly sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 152 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	gravelly sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 1.41	Max: 7.3 Min: 6.1

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	5 inches	59 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 1.41	Max: 7.3 Min: 6.1
3	59 inches	70 inches	bedrock	Not reported	Not reported	Max: 0.42 Min: 0.02	Max: Min:

Soil Map ID: 6

Soil Component Name: Kawaihapai

Soil Surface Texture: clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	22 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 42.34 Min: 4.23	Max: 7.3 Min: 6.6
2	22 inches	31 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.14 Min: 14.11	Max: 7.3 Min: 6.6

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
3	31 inches	53 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.14 Min: 14.11	Max: 7.3 Min: 6.6

Soil Map ID: 7

Soil Component Name: Water > 40 acres

Soil Surface Texture: clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class:
Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	USGS40000270171	1/8 - 1/4 Mile ENE
A3	USGS40000270138	1/4 - 1/2 Mile East
B5	USGS40000270136	1/4 - 1/2 Mile East
C7	USGS40000270213	1/4 - 1/2 Mile North
8	USGS40000270206	1/4 - 1/2 Mile NNW
C10	USGS40000270212	1/4 - 1/2 Mile North
C11	USGS40000270214	1/4 - 1/2 Mile North
C12	USGS40000270215	1/4 - 1/2 Mile North
D13	USGS40000270111	1/4 - 1/2 Mile SSW
E18	USGS40000270170	1/4 - 1/2 Mile ENE
F20	USGS40000270188	1/4 - 1/2 Mile ENE
G23	USGS40000270114	1/4 - 1/2 Mile SE
H24	USGS40000270158	1/2 - 1 Mile East
H25	USGS40000270157	1/2 - 1 Mile East
H26	USGS40000270160	1/2 - 1 Mile East
H27	USGS40000270159	1/2 - 1 Mile East
H28	USGS40000270156	1/2 - 1 Mile East
H29	USGS40000270153	1/2 - 1 Mile East
H30	USGS40000270152	1/2 - 1 Mile East
H31	USGS40000270155	1/2 - 1 Mile East
H32	USGS40000270154	1/2 - 1 Mile East
H33	USGS40000270167	1/2 - 1 Mile East
H34	USGS40000270166	1/2 - 1 Mile East
H35	USGS40000270169	1/2 - 1 Mile East
H36	USGS40000270168	1/2 - 1 Mile East
H37	USGS40000270165	1/2 - 1 Mile East
H38	USGS40000270162	1/2 - 1 Mile East
H39	USGS40000270161	1/2 - 1 Mile East
H40	USGS40000270164	1/2 - 1 Mile East
H41	USGS40000270163	1/2 - 1 Mile East
I59	USGS40000270183	1/2 - 1 Mile ENE
I60	USGS40000270182	1/2 - 1 Mile ENE
I61	USGS40000270185	1/2 - 1 Mile ENE
I62	USGS40000270184	1/2 - 1 Mile ENE
I63	USGS40000270178	1/2 - 1 Mile ENE
I64	USGS40000270177	1/2 - 1 Mile ENE
I65	USGS40000270179	1/2 - 1 Mile ENE
I66	USGS40000270181	1/2 - 1 Mile ENE
I67	USGS40000270180	1/2 - 1 Mile ENE
J76	USGS40000270126	1/2 - 1 Mile ESE
78	USGS40000270131	1/2 - 1 Mile East

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
K81	USGS40000270080	1/2 - 1 Mile South
L82	USGS40000270230	1/2 - 1 Mile NNE
M83	USGS40000270238	1/2 - 1 Mile NNE
L86	USGS40000270233	1/2 - 1 Mile NNE
N87	USGS40000270225	1/2 - 1 Mile NW
L90	USGS40000270236	1/2 - 1 Mile NNE
L91	USGS40000270237	1/2 - 1 Mile NNE
L93	USGS40000270241	1/2 - 1 Mile NNE
L95	USGS40000270242	1/2 - 1 Mile NNE
O98	USGS40000270079	1/2 - 1 Mile SSE
O101	USGS40000270073	1/2 - 1 Mile SSE
Q102	USGS40000270264	1/2 - 1 Mile North
Q103	USGS40000270265	1/2 - 1 Mile North
Q104	USGS40000270266	1/2 - 1 Mile North
S109	USGS40000270258	1/2 - 1 Mile NNW
R110	USGS40000270069	1/2 - 1 Mile SSE
R114	USGS40000270068	1/2 - 1 Mile SSE
V116	USGS40000270246	1/2 - 1 Mile NE
U117	USGS40000270053	1/2 - 1 Mile SSE
T118	USGS40000270193	1/2 - 1 Mile ENE
T119	USGS40000270194	1/2 - 1 Mile ENE
V120	USGS40000270251	1/2 - 1 Mile NE
W122	USGS40000270267	1/2 - 1 Mile NNW
V125	USGS40000270256	1/2 - 1 Mile NE
V126	USGS40000270257	1/2 - 1 Mile NE
U127	USGS40000270052	1/2 - 1 Mile South

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
P107	HI0000350	1/2 - 1 Mile NE

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

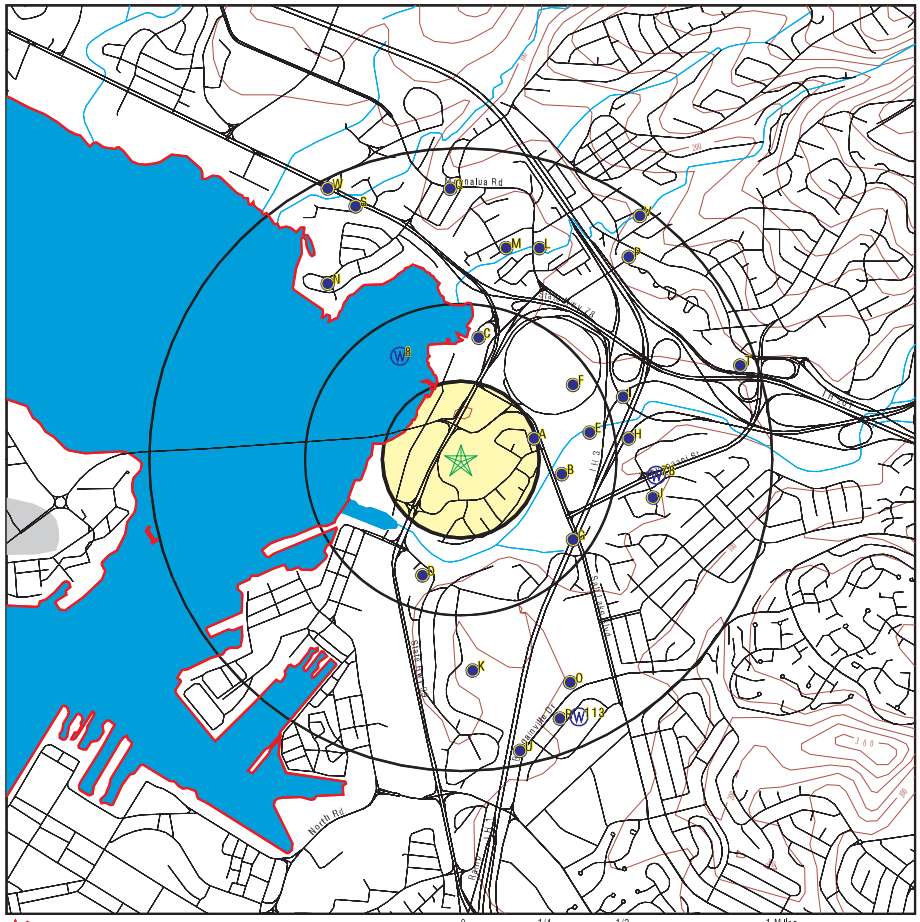
MAP ID	WELL ID	LOCATION FROM TP
A2	HI8000000002789	1/8 - 1/4 Mile ENE
A4	HI8000000002758	1/4 - 1/2 Mile East
B6	HI8000000002753	1/4 - 1/2 Mile East
D9	HI8000000002732	1/4 - 1/2 Mile SSW
C14	HI8000000002827	1/4 - 1/2 Mile North
C15	HI8000000002826	1/4 - 1/2 Mile North
C16	HI8000000002829	1/4 - 1/2 Mile North
C17	HI8000000002828	1/4 - 1/2 Mile North
E19	HI8000000002788	1/4 - 1/2 Mile ENE
F21	HI8000000002806	1/4 - 1/2 Mile NE
G22	HI8000000002741	1/4 - 1/2 Mile SE

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
H42	HI8000000002776	1/2 - 1 Mile East
H43	HI8000000002775	1/2 - 1 Mile East
H44	HI8000000002778	1/2 - 1 Mile East
H45	HI8000000002777	1/2 - 1 Mile East
H46	HI8000000002772	1/2 - 1 Mile East
H47	HI8000000002771	1/2 - 1 Mile East
H48	HI8000000002774	1/2 - 1 Mile East
H49	HI8000000002773	1/2 - 1 Mile East
H50	HI8000000002779	1/2 - 1 Mile East
H51	HI8000000002785	1/2 - 1 Mile East
H52	HI8000000002784	1/2 - 1 Mile East
H53	HI8000000002787	1/2 - 1 Mile East
H54	HI8000000002786	1/2 - 1 Mile East
H55	HI8000000002781	1/2 - 1 Mile East
H56	HI8000000002780	1/2 - 1 Mile East
H57	HI8000000002783	1/2 - 1 Mile East
H58	HI8000000002782	1/2 - 1 Mile East
I68	HI8000000002802	1/2 - 1 Mile ENE
I69	HI8000000002801	1/2 - 1 Mile ENE
I70	HI8000000002804	1/2 - 1 Mile ENE
I71	HI8000000002803	1/2 - 1 Mile ENE
I72	HI8000000002798	1/2 - 1 Mile ENE
I73	HI8000000002797	1/2 - 1 Mile ENE
I74	HI8000000002800	1/2 - 1 Mile ENE
I75	HI8000000002799	1/2 - 1 Mile ENE
J77	HI8000000002747	1/2 - 1 Mile ESE
J79	HI8000000002751	1/2 - 1 Mile East
K80	HI8000000002697	1/2 - 1 Mile South
L84	HI8000000002847	1/2 - 1 Mile NNE
M85	HI8000000002855	1/2 - 1 Mile NNE
N88	HI8000000002842	1/2 - 1 Mile NW
L89	HI8000000002850	1/2 - 1 Mile NNE
L92	HI8000000002856	1/2 - 1 Mile NNE
L94	HI8000000002857	1/2 - 1 Mile NNE
O96	HI8000000002698	1/2 - 1 Mile SSE
L97	HI8000000002860	1/2 - 1 Mile NNE
P99	HI8000000002845	1/2 - 1 Mile NE
O100	HI8000000002693	1/2 - 1 Mile SSE
Q105	HI8000000002878	1/2 - 1 Mile North
Q106	HI8000000002879	1/2 - 1 Mile North
R108	HI8000000002688	1/2 - 1 Mile SSE
S111	HI8000000002874	1/2 - 1 Mile NNW
T112	HI8000000002820	1/2 - 1 Mile ENE
113	HI8000000002689	1/2 - 1 Mile SSE
U115	HI8000000002674	1/2 - 1 Mile SSE
T121	HI8000000002809	1/2 - 1 Mile ENE
W123	HI8000000002877	1/2 - 1 Mile NNW
U124	HI8000000002672	1/2 - 1 Mile South
V128	HI8000000002869	1/2 - 1 Mile NE
V129	HI8000000002870	1/2 - 1 Mile NE
V130	HI8000000002871	1/2 - 1 Mile NE

PHYSICAL SETTING SOURCE MAP - 4237094.6s



- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location

SITE NAME: Puuwai Momi ADDRESS: 99-132 Kohomua St. Alea HI 96701 LAT/LONG: 21.3684 / 157.9345	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.6s DATE: March 18, 2015 7:43 am

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Map ID Direction Distance Elevation	Database	EDR ID Number
A1 **ENE** **1/8 - 1/4 Mile** **Lower**	**FED USGS**	**USGS40000270171**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212223157560201		
Monloc name:	3-2256-02 W183		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3698904
Longitude:	-157.9311438	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	19.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

A2 **ENE** **1/8 - 1/4 Mile** **Lower**	**HI WELLS**	**HI8000000002789**

Objectid:	1342	Wid:	3-2256-002
Island:	Oahu	Well name:	Salt Lake Blvd
Old name:	Not Reported		
Yr drilled:	0		
Driller:	Not Reported		
Quad map:	10		
Long83dd:	-157.931111111		
Lat83dd:	21.37		
Gps:	0	Utm:	-1
Owner user:	Oahu Sugar	Old number:	183-
Well type:	Not Reported	Casing dia:	10
Ground el:	19		
Well depth:	0		
Solid case:	Not Reported	Perf case:	Not Reported
Use:	Other	Use year:	Not Reported
Init head:	22.8	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	146		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported

Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	Not Reported
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002789

A3 **East** **1/4 - 1/2 Mile** **Lower**	**FED USGS**	**USGS40000270138**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212219157560001		
Monloc name:	3-2256-01 W182		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3687793
Longitude:	-157.9305883	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	17.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	272
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

A4 **East** **1/4 - 1/2 Mile** **Lower**	**HI WELLS**	**HI8000000002758**

Objectid:	1341	Wid:	3-2256-001
Island:	Oahu	Well name:	Salt Lake Blvd
Old name:	Not Reported		
Yr drilled:	0		
Driller:	Not Reported		
Quad map:	10		
Long83dd:	-157.930555556		
Lat83dd:	21.3688888889		
Gps:	0	Utm:	-1
Owner user:	Oahu Sugar	Old number:	182-
Well type:	Not Reported	Casing dia:	6
Ground el:	17		
Well depth:	272		
Solid case:	180	Perf case:	Not Reported
Use:	ABN - Sealed	Use year:	Not Reported
Init head:	19.1	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	156		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-255
Bot solid:	-163	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002758

B5
East **FED USGS** **USGS40000270136**
1/4 - 1/2 Mile
Lower

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212215157555601		
Monloc name:	3-2255-02 W180		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3676682
Longitude:	-157.9294772	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	18.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	326
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

B6
East **HI WELLS** **HI8000000002753**
1/4 - 1/2 Mile
Lower

Objectid:	1302	Wid:	3-2255-002
Island:	Oahu	Well name:	Halawa
Old name:	Not Reported		
Yr drilled:	0		
Driller:	Not Reported		
Quad map:	10		
Long83dd:	-157.929444444		
Lat83dd:	21.3677777778		
Gps:	0	Utm:	-1
Owner user:	Oahu Sugar	Old number:	180-
Well type:	Not Reported	Casing dia:	12
Ground el:	18		
Well depth:	326		
Solid case:	Not Reported	Perf case:	Not Reported
Use:	ABN - Sealed	Use year:	Not Reported
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	104		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-308
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002753

C7
North **FED USGS** **USGS40000270213**
1/4 - 1/2 Mile
Lower

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212238157561101		
Monloc name:	3-2256-10 Aiea US Navy, (187-B), Oahu, HI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3738889
Longitude:	-157.9334722	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Global positioning system (GPS), uncorrected		
Horiz coord refsys:	NAD83	Vert measure val:	9.9
Vert measure units:	feet	Vertacc measure val:	.1
Vert accmeasure units:	feet		
Vertcollection method:	Level or other surveying method		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Hawaii volcanic-rock aquifers		
Formation type:	Koolau Volcanic Series, Lava Flows		
Aquifer type:	Confined single aquifer		
Construction date:	19230301	Welldepth:	173
Welldepth units:	ft	Wellholedepth:	173
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 25

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
2002-09-17		14.83			
Note: The site was flowing, but the head could not be measured without additional equipment.					
2002-07-18		14.95			
Note: The site was flowing, but the head could not be measured without additional equipment.					
2002-05-16		15.30			
Note: The site was flowing, but the head could not be measured without additional equipment.					
2002-03-25		15.04			
Note: The site was flowing, but the head could not be measured without additional equipment.					
2001-12-27		14.89			
Note: The site was flowing, but the head could not be measured without additional equipment.					
2001-10-12		14.19			
Note: The site was flowing, but the head could not be measured without additional equipment.					
2001-09-25					
Note: The site was flowing, but the head could not be measured without additional equipment.					
2001-08-08					
Note: The site was flowing, but the head could not be measured without additional equipment.					
2001-06-14					
Note: The site was flowing, but the head could not be measured without additional equipment.					
2001-03-15		14.78			
Note: The site was flowing, but the head could not be measured without additional equipment.					
2001-03-13					
Note: The site was flowing, but the head could not be measured without additional equipment.					
2000-11-07		14.93			
Note: The site was flowing, but the head could not be measured without additional equipment.					
2000-09-20		14.91			
Note: A nearby site that taps the same aquifer was flowing.					
2000-07-21		14.98			
Note: A nearby site that taps the same aquifer was flowing.					
2000-05-23		15.21			
Note: A nearby site that taps the same aquifer was flowing.					
2000-04-04		15.57			
Note: A nearby site that taps the same aquifer was flowing.					

Ground-water levels, continued.

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
2000-01-06		15.85			
Note: A nearby site that taps the same aquifer was flowing.					
1999-11-08		15.58			
Note: A nearby site that taps the same aquifer was flowing.					
1999-09-13		15.35	1999-07-29		15.60
1999-07-13		15.54	1999-06-09		15.53
1999-02-05		15.6	1998-10-19		14.89
1928-01-16	-16.00				

8
NNW
1/4 - 1/2 Mile
Lower

FED USGS **USGS40000270206**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212235157562500		
Monloc name:	3-2356-34 TO 42		
Monloc type:	Well: Multiple wells		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3732242
Longitude:	-157.9375327	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	56
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Unknown		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

D9
SSW
1/4 - 1/2 Mile
Lower

HI WELLS **HI8000000002732**

Objectid:	1225	Wid:	3-2156-004
Island:	Oahu	Well name:	Makalapa
Old name:	Not Reported		
Yr drilled:	1941		
Driller:	U S NAVY		
Quad map:	10		
Long83dd:	-157.936388889		
Lat83dd:	21.3630555556		
Gps:	0	Utm:	-1
Owner user:	U S Navy	Old number:	176-1

Well type:	Not Reported	Casing dia:	6
Ground el:	8		
Well depth:	186		
Solid case:	Not Reported	Perf case:	Not Reported
Use:	ABN - Lost	Use year:	Not Reported
Init head:	1	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-178
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	01-JAN-41
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002732

C10
North **FED USGS** **USGS40000270212**
1/4 - 1/2 Mile
Lower

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212238157561001		
Monloc name:	3-2256-11 W187-A		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.374057
Longitude:	-157.9336438	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	13.20
Vert measure units:	feet	Vertacc measure val:	.1
Vert accmeasure units:	feet		
Vertcollection method:	Level or other surveying method		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19230101	Welldepth:	210
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1928-01-16	-12.80	

C11
North **FED USGS** **USGS40000270214**
1/4 - 1/2 Mile
Lower

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212238157561102		
Monloc name:	3-2256-12 Aiea US Navy (187-C), Oahu, HI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.374057
Longitude:	-157.9336438	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	9.20
Vert measure units:	feet	Vertacc measure val:	.1
Vert accmeasure units:	feet		
Vertcollection method:	Level or other surveying method		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Hawaii volcanic-rock aquifers		
Formation type:	Koolau Volcanic Series, Lava Flows		
Aquifer type:	Unconfined single aquifer		
Construction date:	19230401	Welldepth:	182
Welldepth units:	ft	Wellholedepth:	182
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 24

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
2002-09-17		14.84			
Note: The site was flowing, but the head could not be measured without additional equipment.					
2002-07-18		14.92			
Note: The site was flowing, but the head could not be measured without additional equipment.					
2002-05-16		15.28			
Note: The site was flowing, but the head could not be measured without additional equipment.					
2002-03-25		15.06			
Note: The site was flowing, but the head could not be measured without additional equipment.					
2001-12-27		14.86			
Note: The site was flowing, but the head could not be measured without additional equipment.					
2001-10-12		14.20			
Note: The site was flowing, but the head could not be measured without additional equipment.					
2001-09-25					
Note: The site was flowing, but the head could not be measured without additional equipment.					
2001-08-08					
Note: The site was flowing, but the head could not be measured without additional equipment.					
2001-06-14		14.62			
Note: The site was flowing, but the head could not be measured without additional equipment.					
2001-03-15		14.77			
Note: The site was flowing, but the head could not be measured without additional equipment.					

Ground-water levels, continued.

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
2000-11-07		14.95			
Note: The site was flowing, but the head could not be measured without additional equipment.					
2000-09-20		14.87	2000-07-21		14.94
2000-05-23		15.18	2000-04-04		15.58
2000-01-06		15.83	1999-11-08		15.43
1999-09-13		15.33	1999-07-29		15.63
1999-06-04		15.39	1999-02-05		15.58
1998-12-02		15.31	1998-10-19		14.84
1928-01-16	-16.87				

C12
North
1/4 - 1/2 Mile
Lower

FED USGS **USGS40000270215**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212238157561103		
Monloc name:	3-2256-13 W187-D		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.374057
Longitude:	-157.9336438	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	16.46
Vert measure units:	feet	Vertacc measure val:	.1
Vert accmeasure units:	feet		
Vertcollection method:	Level or other surveying method		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19430101	Welldepth:	275
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1943-03-12	-6.09	

D13
SSW
1/4 - 1/2 Mile
Lower

FED USGS **USGS40000270111**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212158157562101		
Monloc name:	3-2156-04 W176-1 HAL		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3629474
Longitude:	-157.9364219	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	8.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19410610	Welldepth:	186
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

C14
North
1/4 - 1/2 Mile
Lower

HI WELLS **HI8000000002827**

Objectid:	1351	Wid:	3-2256-011
Island:	Oahu	Well name:	Aiea
Old name:	Not Reported		
Yr drilled:	1923		
Driller:	MCCANDLESS		
Quad map:	9		
Long83dd:	-157.933611111		
Lat83dd:	21.3741666667		
Gps:	0	Utm:	-1
Owner user:	State Of Hawaii	Old number:	187-A
Well type:	Not Reported	Casing dia:	12
Ground el:	14		
Well depth:	210		
Solid case:	144	Perf case:	Not Reported
Use:	OBS - Observation	Use year:	Not Reported
Init head:	23	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	98		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	36	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-196
Bot solid:	-130	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		

Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 9-9-003:029
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	01-JAN-23
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002827

C15
North
1/4 - 1/2 Mile
Lower

HI WELLS **HI8000000002826**

Objectid:	1350	Wid:	3-2256-010
Island:	Oahu	Well name:	Aiea
Old name:	Not Reported		
Yr drilled:	1922		
Driller:	MCCANDLESS		
Quad map:	9		
Long83dd:	-157.933611111		
Lat83dd:	21.3741666667		
Gps:	0	Utm:	-1
Owner user:	U S Navy	Old number:	187-B
Well type:	Not Reported	Casing dia:	12
Ground el:	11		
Well depth:	173		
Solid case:	143	Perf case:	Not Reported
Use:	OBS - Observation	Use year:	Not Reported
Init head:	23	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	130		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	23.5	Test unit:	C
Pump gpm:	0		
Draft mgy:	36	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-162
Bot solid:	-132	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	01-JAN-22
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002826

C16
North
1/4 - 1/2 Mile
Lower

HI WELLS **HI8000000002829**

Objectid:	1353	Wid:	3-2256-013
Island:	Oahu	Well name:	Aiea
Old name:	Not Reported		
Yr drilled:	1943		
Driller:	MULLIN		
Quad map:	9		
Long83dd:	-157.933611111		
Lat83dd:	21.3741666667		
Gps:	0	Utm:	-1
Owner user:	U S Navy	Old number:	187-D
Well type:	Not Reported	Casing dia:	16
Ground el:	16		
Well depth:	275		
Solid case:	154	Perf case:	Not Reported
Use:	ABN - Sealed	Use year:	Not Reported
Init head:	22.6	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	165		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-259
Bot solid:	-138	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	01-JAN-43
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002829

C17
North
1/4 - 1/2 Mile
Lower

HI WELLS **HI8000000002828**

Objectid:	1352	Wid:	3-2256-012
Island:	Oahu	Well name:	Aiea
Old name:	Not Reported		
Yr drilled:	1923		
Driller:	MCCANDLESS		
Quad map:	9		
Long83dd:	-157.933611111		
Lat83dd:	21.3741666667		
Gps:	0	Utm:	-1
Owner user:	U S Navy	Old number:	187-C
Well type:	Not Reported	Casing dia:	12
Ground el:	11		
Well depth:	182		
Solid case:	139	Perf case:	Not Reported
Use:	OBS - Observation	Use year:	Not Reported
Init head:	23	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	99		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported

Test temp:	23	Test unit:	C
Pump gpm:	0		
Draft mgy:	36	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-171
Bot solid:	-128	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	01-JAN-23
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002828

E18
ENE
1/4 - 1/2 Mile
Lower

FED USGS **USGS40000270170**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212222157555101		
Monloc name:	3-2255-03 W181		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3696122
Longitude:	-157.9280883	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	20.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19020101	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

E19
ENE
1/4 - 1/2 Mile
Lower

HI WELLS **HI8000000002788**

Objectid:	1303	Wid:	3-2255-003
Island:	Oahu	Well name:	Halawa
Old name:	Not Reported		
Yr drilled:	0		
Driller:	Not Reported		
Quad map:	10		
Long83dd:	-157.928055556		
Lat83dd:	21.3697222222		
Gps:	0	Utm:	-1
Owner user:	Oahu Sugar	Old number:	181-
Well type:	Not Reported	Casing dia:	6
Ground el:	20		
Well depth:	0		
Solid case:	Not Reported	Perf case:	Not Reported
Use:	ABN - Sealed	Use year:	Not Reported
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	208		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	Not Reported
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002788

F20
ENE
1/4 - 1/2 Mile
Lower

FED USGS **USGS40000270188**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212230157555401		
Monloc name:	3-2255-04 W184		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3718344
Longitude:	-157.9289215	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	23.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	234
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

F21
NE
1/4 - 1/2 Mile
Lower

HI WELLS **HI8000000002806**

Objectid:	1304	Wid:	3-2255-004
Island:	Oahu	Well name:	Halawa
Old name:	Not Reported		
Yr drilled:	0		
Driller:	Not Reported		
Quad map:	10		
Long83dd:	-157.928888889		
Lat83dd:	21.3719444444		
Gps:	0	Utm:	-1
Owner user:	Oahu Sugar	Old number:	184-
Well type:	Not Reported	Casing dia:	8
Ground el:	23		
Well depth:	234		
Solid case:	86	Perf case:	Not Reported
Use:	ABN - Sealed	Use year:	Not Reported
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	146		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-211
Bot solid:	-63	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002806

G22
SE
1/4 - 1/2 Mile
Lower

HI WELLS **HI8000000002741**

Objectid:	1301	Wid:	3-2255-001
Island:	Oahu	Well name:	Halawa
Old name:	Not Reported		
Yr drilled:	0		
Driller:	Not Reported		
Quad map:	10		
Long83dd:	-157.928888889		
Lat83dd:	21.3647222222		
Gps:	0	Utm:	-1
Owner user:	U S Army	Old number:	177-
Well type:	Not Reported	Casing dia:	6
Ground el:	15		
Well depth:	474		
Solid case:	333	Perf case:	Not Reported
Use:	ABN - Sealed	Use year:	Not Reported
Init head:	23.1	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	146		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-459
Bot solid:	-318	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002741

G23
SE
1/4 - 1/2 Mile
Lower

FED USGS **USGS40000270114**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212204157555401		
Monloc name:	3-2255-01 W177		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3646128
Longitude:	-157.9289217	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	15.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	474
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

H24
East **FED USGS** **USGS40000270158**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212221157554406		
Monloc name:	3-2255-12 W185-F		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3693342
Longitude:	-157.9261438	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	19.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19000101	Welldepth:	205
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

H25
East **FED USGS** **USGS40000270157**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212221157554405		
Monloc name:	3-2255-11 W185-E		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3693342
Longitude:	-157.9261438	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	25.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	19000101	Welldepth:	500
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

H26
East **FED USGS** **USGS40000270160**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212221157554408		
Monloc name:	3-2255-14 W185-H		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3693342
Longitude:	-157.9261438	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	20.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19000101	Welldepth:	236
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

H27
East **FED USGS** **USGS40000270159**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212221157554407		
Monloc name:	3-2255-13 W185-G		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3693342
Longitude:	-157.9261438	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	22.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	19000101	Welldepth:	288
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

H28
East **FED USGS** **USGS40000270156**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212221157554404		
Monloc name:	3-2255-10 W185-D		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3693342
Longitude:	-157.9261438	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	25.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19000101	Welldepth:	500
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

H29
East **FED USGS** **USGS40000270153**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212221157554401		
Monloc name:	3-2255-07 W185-A		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3693342
Longitude:	-157.9261438	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	21.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	19000101	Welldepth:	391
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

H30
East **FED USGS** **USGS40000270152**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212221157554400		
Monloc name:	3-2255-07 TO 20, ETC		
Monloc type:	Well: Multiple wells		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3693342
Longitude:	-157.9261438	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	21
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Unknown		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

H31
East **FED USGS** **USGS40000270155**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212221157554403		
Monloc name:	3-2255-09 W185-C		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3693342
Longitude:	-157.9261438	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	23.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	19000101	Welldepth:	399
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

H32
East **FED USGS** **USGS40000270154**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212221157554402		
Monloc name:	3-2255-08 W185-B		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3693342
Longitude:	-157.9261438	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	19.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19000101	Welldepth:	173
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

H33
East **FED USGS** **USGS40000270167**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212221157554415		
Monloc name:	3-2255-29 W185-O		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3693342
Longitude:	-157.9261438	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	26.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	19300101	Welldepth:	440
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

H34
East **FED USGS** **USGS40000270166**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212221157554414		
Monloc name:	3-2255-20 W185-N		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3693342
Longitude:	-157.9261438	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	21.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19000101	Welldepth:	421
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

H35
East **FED USGS** **USGS40000270169**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212221157554417		
Monloc name:	3-2255-31 W185-Q		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3693342
Longitude:	-157.9261438	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	20.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	19300101	Welldepth:	423
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

H36
East **FED USGS** **USGS40000270168**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212221157554416		
Monloc name:	3-2255-30 W185-P		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3693342
Longitude:	-157.9261438	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	20.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19300101	Welldepth:	427
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

H37
East **FED USGS** **USGS40000270165**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212221157554413		
Monloc name:	3-2255-19 W185-M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3693342
Longitude:	-157.9261438	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	22.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	19000101	Welldepth:	426
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

H38
East **FED USGS** **USGS40000270162**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212221157554410		
Monloc name:	3-2255-16 W185-J		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3693342
Longitude:	-157.9261438	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	22.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19000101	Welldepth:	422
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

H39
East **FED USGS** **USGS40000270161**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212221157554409		
Monloc name:	3-2255-15 W185-I		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3693342
Longitude:	-157.9261438	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	23.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	19000101	Welldepth:	431
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

H40
East **FED USGS** **USGS40000270164**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-21222115755441 2		
Monloc name:	3-2255-18 W185-L		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3693342
Longitude:	-157.9261438	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	26.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19000101	Welldepth:	457
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

H41
East **FED USGS** **USGS40000270163**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-21222115755441 1		
Monloc name:	3-2255-17 W185-K		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3693342
Longitude:	-157.9261438	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	25.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	19000101	Welldepth:	450
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

H42
East **HI WELLS** **HI8000000002776**
1/2 - 1 Mile
Lower

Objectid:	1312	Wid:	3-2255-012
Island:	Oahu	Well name:	Halawa
Old name:	Not Reported		
Yr drilled:	1900		
Driller:	Not Reported		
Quad map:	10		
Long83dd:	-157.926111111		
Lat83dd:	21.3694444444		
Gps:	0	Utm:	-1
Owner user:	Oahu Sugar	Old number:	185-F
Well type:	Not Reported	Casing dia:	12
Ground el:	19		
Well depth:	205		
Solid case:	155	Perf case:	Not Reported
Use:	ABN - Sealed	Use year:	Not Reported
Init head:	24.9	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	380		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-186
Bot solid:	-136	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	02-JAN-00
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002776

H43
East **HI WELLS** **HI8000000002775**
1/2 - 1 Mile
Lower

Objectid:	1311	Wid:	3-2255-011
Island:	Oahu	Well name:	Halawa
Old name:	Not Reported		
Yr drilled:	1900		
Driller:	Not Reported		
Quad map:	10		
Long83dd:	-157.926111111		
Lat83dd:	21.3694444444		
Gps:	0	Utm:	-1
Owner user:	Oahu Sugar	Old number:	185-E
Well type:	Not Reported	Casing dia:	12
Ground el:	25		
Well depth:	500		
Solid case:	Not Reported	Perf case:	Not Reported
Use:	Other	Use year:	Not Reported
Init head:	24.9	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	380		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-475
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	02-JAN-00
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002775

H44
East
1/2 - 1 Mile
Lower

HI WELLS **HI8000000002778**

Objectid:	1314	Wid:	3-2255-014
Island:	Oahu	Well name:	Halawa
Old name:	Not Reported		
Yr drilled:	1900		
Driller:	Not Reported		
Quad map:	10		
Long83dd:	-157.926111111		
Lat83dd:	21.3694444444		
Gps:	0	Utm:	-1
Owner user:	Oahu Sugar	Old number:	185-H
Well type:	Not Reported	Casing dia:	12
Ground el:	20		
Well depth:	236		
Solid case:	134	Perf case:	Not Reported
Use:	ABN - Sealed	Use year:	Not Reported
Init head:	24.9	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	380		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported

Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-216
Bot solid:	-114	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	02-JAN-00
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002778

H45
East
1/2 - 1 Mile
Lower

HI WELLS **HI8000000002777**

Objectid:	1313	Wid:	3-2255-013
Island:	Oahu	Well name:	Halawa
Old name:	Not Reported		
Yr drilled:	1900		
Driller:	Not Reported		
Quad map:	10		
Long83dd:	-157.926111111		
Lat83dd:	21.3694444444		
Gps:	0	Utm:	-1
Owner user:	Oahu Sugar	Old number:	185-G
Well type:	Not Reported	Casing dia:	12
Ground el:	22		
Well depth:	288		
Solid case:	150	Perf case:	Not Reported
Use:	ABN - Sealed	Use year:	Not Reported
Init head:	24.9	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	380		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-266
Bot solid:	-128	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	02-JAN-00
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002777

Map ID Direction Distance Elevation			Database	EDR ID Number
H46 **East** **1/2 - 1 Mile** **Lower**			**HI WELLS**	**HI8000000002772**
Objectid:	1308	Wid:	3-2255-008	
Island:	Oahu	Well name:	Halawa	
Old name:	Not Reported			
Yr drilled:	1900			
Driller:	Not Reported			
Quad map:	10			
Long83dd:	-157.926111111			
Lat83dd:	21.3694444444			
Gps:	0	Utm:	-1	
Owner user:	Oahu Sugar	Old number:	185-B	
Well type:	Not Reported	Casing dia:	12	
Ground el:	19			
Well depth:	173			
Solid case:	127	Perf case:	Not Reported	
Use:	ABN - Sealed	Use year:	Not Reported	
Init head:	24.9	Init head2:	Not Reported	
Init head3:	Not Reported			
Init cl:	380			
Test date:	Not Reported	Test gpm:	Not Reported	
Test ddown:	Not Reported	Test chlor:	Not Reported	
Test temp:	Not Reported	Test unit:	Not Reported	
Pump gpm:	0			
Draft mgy:	Not Reported	Head feet:	Not Reported	
Max chlor:	Not Reported	Min chlor:	Not Reported	
Geology:	TKB			
Pump yr:	0			
Draft yr:	Not Reported	Bot hole:	-154	
Bot solid:	-108	Bot perf:	Not Reported	
Spec capac:	Not Reported			
Pump mgd:	0			
Draft mgd:	Not Reported	Pump elev:	Not Reported	
Pump depth:	Not Reported	Tmk:	Not Reported	
Aqui code:	30201			
Latest hd:	Not Reported	Wcr:	02-JAN-00	
Pir:	Not Reported	Surveyor:	Not Reported	
T:	Not Reported	Site id:	HI8000000002772	

H47 **East** **1/2 - 1 Mile** **Lower**			**HI WELLS**	**HI8000000002771**
Objectid:	1307	Wid:	3-2255-007	
Island:	Oahu	Well name:	Halawa	
Old name:	Not Reported			
Yr drilled:	1900			
Driller:	Not Reported			
Quad map:	10			
Long83dd:	-157.926111111			
Lat83dd:	21.3694444444			
Gps:	0	Utm:	-1	
Owner user:	Oahu Sugar	Old number:	185-A	

Well type:	Not Reported	Casing dia:	12
Ground el:	21		
Well depth:	391		
Solid case:	150	Perf case:	Not Reported
Use:	ABN - Sealed	Use year:	Not Reported
Init head:	24.9	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	380		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-370
Bot solid:	-129	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	02-JAN-00
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002771

H48 **East** **1/2 - 1 Mile** **Lower**			**HI WELLS**	**HI8000000002774**
Objectid:	1310	Wid:	3-2255-010	
Island:	Oahu	Well name:	Halawa	
Old name:	Not Reported			
Yr drilled:	1900			
Driller:	Not Reported			
Quad map:	10			
Long83dd:	-157.926111111			
Lat83dd:	21.3694444444			
Gps:	0	Utm:	-1	
Owner user:	Oahu Sugar	Old number:	185-D	
Well type:	Not Reported	Casing dia:	12	
Ground el:	25			
Well depth:	500			
Solid case:	Not Reported	Perf case:	Not Reported	
Use:	Other	Use year:	Not Reported	
Init head:	24.9	Init head2:	Not Reported	
Init head3:	Not Reported			
Init cl:	380			
Test date:	Not Reported	Test gpm:	Not Reported	
Test ddown:	Not Reported	Test chlor:	Not Reported	
Test temp:	Not Reported	Test unit:	Not Reported	
Pump gpm:	0			
Draft mgy:	Not Reported	Head feet:	Not Reported	
Max chlor:	Not Reported	Min chlor:	Not Reported	
Geology:	TKB			
Pump yr:	0			
Draft yr:	Not Reported	Bot hole:	-475	
Bot solid:	Not Reported	Bot perf:	Not Reported	
Spec capac:	Not Reported			
Pump mgd:	0			

Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	02-JAN-00
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002774

H49
East
1/2 - 1 Mile
Lower

HI WELLS **HI8000000002773**

Objectid:	1309	Wid:	3-2255-009
Island:	Oahu	Well name:	Halawa
Old name:	Not Reported		
Yr drilled:	1900		
Driller:	Not Reported		
Quad map:	10		
Long83dd:	-157.926111111		
Lat83dd:	21.3694444444		
Gps:	0	Utm:	-1
Owner user:	Oahu Sugar	Old number:	185-C
Well type:	Not Reported	Casing dia:	12
Ground el:	23		
Well depth:	399		
Solid case:	160	Perf case:	Not Reported
Use:	ABN - Sealed	Use year:	Not Reported
Init head:	24.9	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	380		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-376
Bot solid:	-137	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	02-JAN-00
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002773

H50
East
1/2 - 1 Mile
Lower

HI WELLS **HI8000000002779**

Objectid:	1315	Wid:	3-2255-015
Island:	Oahu	Well name:	Halawa
Old name:	Not Reported		
Yr drilled:	1900		
Driller:	Not Reported		
Quad map:	10		
Long83dd:	-157.926111111		
Lat83dd:	21.3694444444		
Gps:	0	Utm:	-1
Owner user:	Oahu Sugar	Old number:	185-I
Well type:	Not Reported	Casing dia:	12
Ground el:	23		
Well depth:	431		
Solid case:	135	Perf case:	Not Reported
Use:	ABN - Sealed	Use year:	Not Reported
Init head:	24.9	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	380		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-408
Bot solid:	-112	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	02-JAN-00
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002779

H51
East
1/2 - 1 Mile
Lower

HI WELLS **HI8000000002785**

Objectid:	1329	Wid:	3-2255-029
Island:	Oahu	Well name:	Halawa
Old name:	Not Reported		
Yr drilled:	1930		
Driller:	MCCANDLESS		
Quad map:	10		
Long83dd:	-157.926111111		
Lat83dd:	21.3694444444		
Gps:	0	Utm:	-1
Owner user:	Oahu Sugar	Old number:	185-O
Well type:	Not Reported	Casing dia:	12
Ground el:	26		
Well depth:	440		
Solid case:	149	Perf case:	Not Reported
Use:	ABN - Sealed	Use year:	Not Reported
Init head:	24.9	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	380		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported

Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-414
Bot solid:	-123	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	01-JAN-30
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002785

H52
East
1/2 - 1 Mile
Lower

HI WELLS **HI8000000002784**

Objectid:	1320	Wid:	3-2255-020
Island:	Oahu	Well name:	Halawa
Old name:	Not Reported		
Yr drilled:	1900		
Driller:	Not Reported		
Quad map:	10		
Long83dd:	-157.926111111		
Lat83dd:	21.3694444444		
Gps:	0	Utm:	-1
Owner user:	Oahu Sugar	Old number:	185-N
Well type:	Not Reported	Casing dia:	12
Ground el:	21		
Well depth:	421		
Solid case:	120	Perf case:	Not Reported
Use:	ABN - Sealed	Use year:	Not Reported
Init head:	24.9	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	380		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-400
Bot solid:	-99	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	02-JAN-00
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002784

Map ID Direction Distance Elevation	Database	EDR ID Number
H53 **East** **1/2 - 1 Mile** **Lower**	**HI WELLS**	**HI8000000002787**

Objectid:	1331	Wid:	3-2255-031
Island:	Oahu	Well name:	Halawa
Old name:	Not Reported		
Yr drilled:	1930		
Driller:	MCCANDLESS		
Quad map:	10		
Long83dd:	-157.926111111		
Lat83dd:	21.3694444444		
Gps:	0	Utm:	-1
Owner user:	Oahu Sugar	Old number:	185-Q
Well type:	Not Reported	Casing dia:	12
Ground el:	20		
Well depth:	423		
Solid case:	190	Perf case:	Not Reported
Use:	ABN - Sealed	Use year:	Not Reported
Init head:	24.9	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	380		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-403
Bot solid:	-170	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	01-JAN-30
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002787

H54
East
1/2 - 1 Mile
Lower

HI WELLS **HI8000000002786**

Objectid:	1330	Wid:	3-2255-030
Island:	Oahu	Well name:	Halawa
Old name:	Not Reported		
Yr drilled:	1930		
Driller:	MCCANDLESS		
Quad map:	10		
Long83dd:	-157.926111111		
Lat83dd:	21.3694444444		
Gps:	0	Utm:	-1
Owner user:	Oahu Sugar	Old number:	185-P

Well type:	Not Reported	Casing dia:	12
Ground el:	20		
Well depth:	427		
Solid case:	195	Perf case:	Not Reported
Use:	ABN - Sealed	Use year:	Not Reported
Init head:	24.9	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	380		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-407
Bot solid:	-175	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	01-JAN-30
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002786

H55
East **HI WELLS** **HI8000000002781**
1/2 - 1 Mile
Lower

Objectid:	1317	Wid:	3-2255-017
Island:	Oahu	Well name:	Halawa
Old name:	Not Reported		
Yr drilled:	1900		
Driller:	Not Reported		
Quad map:	10		
Long83dd:	-157.926111111		
Lat83dd:	21.3694444444		
Gps:	0	Utm:	-1
Owner user:	Oahu Sugar	Old number:	185-K
Well type:	Not Reported	Casing dia:	12
Ground el:	25		
Well depth:	450		
Solid case:	152	Perf case:	Not Reported
Use:	ABN - Sealed	Use year:	Not Reported
Init head:	24.9	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	380		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-425
Bot solid:	-127	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		

Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	02-JAN-00
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002781

H56
East **HI WELLS** **HI8000000002780**
1/2 - 1 Mile
Lower

Objectid:	1316	Wid:	3-2255-016
Island:	Oahu	Well name:	Halawa
Old name:	Not Reported		
Yr drilled:	1900		
Driller:	Not Reported		
Quad map:	10		
Long83dd:	-157.926111111		
Lat83dd:	21.3694444444		
Gps:	0	Utm:	-1
Owner user:	Oahu Sugar	Old number:	185-J
Well type:	Not Reported	Casing dia:	12
Ground el:	22		
Well depth:	422		
Solid case:	132	Perf case:	Not Reported
Use:	ABN - Sealed	Use year:	Not Reported
Init head:	24.9	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	380		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-400
Bot solid:	-110	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	02-JAN-00
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002780

H57
East **HI WELLS** **HI8000000002783**
1/2 - 1 Mile
Lower

Objectid:	1319	Wid:	3-2255-019
Island:	Oahu	Well name:	Halawa
Old name:	Not Reported		
Yr drilled:	1900		
Driller:	Not Reported		
Quad map:	10		
Long83dd:	-157.926111111		
Lat83dd:	21.3694444444		
Gps:	0	Utm:	-1
Owner user:	Oahu Sugar	Old number:	185-M
Well type:	Not Reported	Casing dia:	12
Ground el:	22		
Well depth:	426		
Solid case:	130	Perf case:	Not Reported
Use:	ABN - Sealed	Use year:	Not Reported
Init head:	24.9	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	380		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-404
Bot solid:	-108	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	02-JAN-00
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002783

H58
East
1/2 - 1 Mile
Lower

HI WELLS **HI8000000002782**

Objectid:	1318	Wid:	3-2255-018
Island:	Oahu	Well name:	Halawa
Old name:	Not Reported		
Yr drilled:	1900		
Driller:	Not Reported		
Quad map:	10		
Long83dd:	-157.926111111		
Lat83dd:	21.3694444444		
Gps:	0	Utm:	-1
Owner user:	Oahu Sugar	Old number:	185-L
Well type:	Not Reported	Casing dia:	12
Ground el:	26		
Well depth:	457		
Solid case:	157	Perf case:	Not Reported
Use:	ABN - Sealed	Use year:	Not Reported
Init head:	24.9	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	380		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported

Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-431
Bot solid:	-131	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	02-JAN-00
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002782

I59
ENE
1/2 - 1 Mile
Lower

FED USGS **USGS40000270183**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212228157554506		
Monloc name:	3-2255-26 W186-F		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3712785
Longitude:	-157.9264215	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	28.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19000101	Welldepth:	365
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

I60
ENE
1/2 - 1 Mile
Lower

FED USGS **USGS40000270182**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212228157554505		
Monloc name:	3-2255-25 W186-E		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3712785
Longitude:	-157.9264215	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	23.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19000101	Welldepth:	388
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

I61
ENE **FED USGS** **USGS40000270185**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212228157554508		
Monloc name:	3-2255-28 W186-H		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3712785
Longitude:	-157.9264215	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	22.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19000101	Welldepth:	128
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID Direction Distance Elevation	Database	EDR ID Number
I62 **ENE** **1/2 - 1 Mile** **Lower**	**FED USGS**	**USGS40000270184**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212228157554507		
Monloc name:	3-2255-27 W186-G		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3712785
Longitude:	-157.9264215	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	28.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19000101	Welldepth:	303
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

I63
ENE **FED USGS** **USGS40000270178**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212228157554501		
Monloc name:	3-2255-21 W186-A		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3712785
Longitude:	-157.9264215	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	28.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	19000101	Welldepth:	394
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

I64
ENE **FED USGS** **USGS40000270177**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212228157554500		
Monloc name:	3-2255-21 TO 28		
Monloc type:	Well: Multiple wells		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3712785
Longitude:	-157.9264215	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	28
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Unknown		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

I65
ENE **FED USGS** **USGS40000270179**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212228157554502		
Monloc name:	3-2255-22 W186-B		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3712785
Longitude:	-157.9264215	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	28.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	19000101	Welldepth:	403
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

I66
ENE **FED USGS** **USGS40000270181**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212228157554504		
Monloc name:	3-2255-24 W186-D		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3712785
Longitude:	-157.9264215	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	26.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19000101	Welldepth:	220
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

I67
ENE **FED USGS** **USGS40000270180**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212228157554503		
Monloc name:	3-2255-23 W186-C		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3712785
Longitude:	-157.9264215	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	23.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	19000101	Welldepth:	404
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

I68
ENE
1/2 - 1 Mile
Lower

HI WELLS **HI8000000002802**

Objectid:	1326	Wid:	3-2255-026
Island:	Oahu	Well name:	Halawa
Old name:	Not Reported		
Yr drilled:	1900		
Driller:	Not Reported		
Quad map:	10		
Long83dd:	-157.926388889		
Lat83dd:	21.3713888889		
Gps:	0	Utm:	-1
Owner user:	Not Reported	Old number:	186-F
Well type:	Not Reported	Casing dia:	2
Ground el:	33		
Well depth:	365		
Solid case:	350	Perf case:	Not Reported
Use:	OBS - Observation	Use year:	Not Reported
Init head:	22.9	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	114		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-332
Bot solid:	-317	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	02-JAN-00
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002802

I69
ENE
1/2 - 1 Mile
Lower

HI WELLS **HI8000000002801**

Objectid:	1325	Wid:	3-2255-025
Island:	Oahu	Well name:	Halawa
Old name:	Not Reported		
Yr drilled:	1900		
Driller:	Not Reported		
Quad map:	10		
Long83dd:	-157.926388889		
Lat83dd:	21.3713888889		
Gps:	0	Utm:	-1
Owner user:	Oahu Sugar	Old number:	186-E
Well type:	Not Reported	Casing dia:	12
Ground el:	23		
Well depth:	388		
Solid case:	96	Perf case:	Not Reported
Use:	ABN - Sealed	Use year:	Not Reported
Init head:	22.9	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	114		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-365
Bot solid:	-73	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	02-JAN-00
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002801

I70
ENE
1/2 - 1 Mile
Lower

HI WELLS **HI8000000002804**

Objectid:	1328	Wid:	3-2255-028
Island:	Oahu	Well name:	Halawa
Old name:	Not Reported		
Yr drilled:	1900		
Driller:	Not Reported		
Quad map:	10		
Long83dd:	-157.926388889		
Lat83dd:	21.3713888889		
Gps:	0	Utm:	-1
Owner user:	Oahu Sugar	Old number:	186-H
Well type:	Not Reported	Casing dia:	12
Ground el:	22		
Well depth:	128		
Solid case:	103	Perf case:	Not Reported
Use:	ABN - Sealed	Use year:	Not Reported
Init head:	22.9	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	114		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported

Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	2336	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-106
Bot solid:	-81	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	02-JAN-00
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002804

I71
ENE
1/2 - 1 Mile
Lower

HI WELLS **HI8000000002803**

Objectid:	1327	Wid:	3-2255-027
Island:	Oahu	Well name:	Halawa
Old name:	Not Reported		
Yr drilled:	1900		
Driller:	Not Reported		
Quad map:	10		
Long83dd:	-157.926388889		
Lat83dd:	21.3713888889		
Gps:	0	Utm:	-1
Owner user:	Not Reported	Old number:	186-G
Well type:	Not Reported	Casing dia:	2
Ground el:	20		
Well depth:	303		
Solid case:	300	Perf case:	Not Reported
Use:	OBS - Observation	Use year:	Not Reported
Init head:	22.9	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	114		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-283
Bot solid:	-280	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	02-JAN-00
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002803

Map ID Direction Distance Elevation	Database	EDR ID Number
I72 **ENE** **1/2 - 1 Mile** **Lower**	**HI WELLS**	**HI8000000002798**

Objectid:	1322	Wid:	3-2255-022
Island:	Oahu	Well name:	Halawa
Old name:	Not Reported		
Yr drilled:	1900		
Driller:	Not Reported		
Quad map:	10		
Long83dd:	-157.926388889		
Lat83dd:	21.3713888889		
Gps:	0	Utm:	-1
Owner user:	Not Reported	Old number:	186-B
Well type:	Not Reported	Casing dia:	2
Ground el:	32		
Well depth:	403		
Solid case:	400	Perf case:	Not Reported
Use:	OBS - Observation	Use year:	Not Reported
Init head:	22.9	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	114		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-371
Bot solid:	-368	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	02-JAN-00
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002798

I73
ENE
1/2 - 1 Mile
Lower

HI WELLS **HI8000000002797**

Objectid:	1321	Wid:	3-2255-021
Island:	Oahu	Well name:	Halawa
Old name:	Not Reported		
Yr drilled:	1900		
Driller:	Not Reported		
Quad map:	10		
Long83dd:	-157.926388889		
Lat83dd:	21.3713888889		
Gps:	0	Utm:	-1
Owner user:	Not Reported	Old number:	186-A

Well type:	Not Reported	Casing dia:	2
Ground el:	31		
Well depth:	394		
Solid case:	225	Perf case:	Not Reported
Use:	OBS - Observation	Use year:	Not Reported
Init head:	22.9	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	114		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-363
Bot solid:	-194	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	02-JAN-00
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002797

I74
ENE **HI WELLS** **HI8000000002800**
1/2 - 1 Mile
Lower

Objectid:	1324	Wid:	3-2255-024
Island:	Oahu	Well name:	Halawa
Old name:	Not Reported		
Yr drilled:	1900		
Driller:	Not Reported		
Quad map:	10		
Long83dd:	-157.926388889		
Lat83dd:	21.3713888889		
Gps:	0	Utm:	-1
Owner user:	Oahu Sugar	Old number:	186-D
Well type:	Not Reported	Casing dia:	12
Ground el:	26		
Well depth:	220		
Solid case:	150	Perf case:	Not Reported
Use:	ABN - Sealed	Use year:	Not Reported
Init head:	22.9	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	114		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-194
Bot solid:	-124	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		

Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	02-JAN-00
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002800

I75
ENE **HI WELLS** **HI8000000002799**
1/2 - 1 Mile
Lower

Objectid:	1323	Wid:	3-2255-023
Island:	Oahu	Well name:	Halawa
Old name:	Not Reported		
Yr drilled:	1900		
Driller:	Not Reported		
Quad map:	10		
Long83dd:	-157.926388889		
Lat83dd:	21.3713888889		
Gps:	0	Utm:	-1
Owner user:	Oahu Sugar	Old number:	186-C
Well type:	Not Reported	Casing dia:	12
Ground el:	23		
Well depth:	404		
Solid case:	118	Perf case:	Not Reported
Use:	ABN - Sealed	Use year:	Not Reported
Init head:	22.9	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	114		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-381
Bot solid:	-95	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	02-JAN-00
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002799

J76
ESE **FED USGS** **USGS40000270126**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212210157554001		
Monloc name:	3-2255-05 W178		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3662788
Longitude:	-157.9250327	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	31.00
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Altimeter		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19000101	Welldepth:	545
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

J77
ESE
1/2 - 1 Mile
Higher

HI WELLS **HI8000000002747**

Objectid:	1305	Wid:	3-2255-005
Island:	Oahu	Well name:	Halawa
Old name:	Not Reported		
Yr drilled:	1900		
Driller:	Not Reported		
Quad map:	10		
Long83dd:	-157.925		
Lat83dd:	21.3663888889		
Gps:	0	Utm:	-1
Owner user:	AMFAC Comm Haw	Old number:	178-
Well type:	Not Reported	Casing dia:	6
Ground el:	33		
Well depth:	555		
Solid case:	363	Perf case:	Not Reported
Use:	UNU - Unused	Use year:	Not Reported
Init head:	10.46	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	125		
Test date:	9/24/1979	Test gpm:	65
Test ddown:	11.6	Test chlor:	315
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-524
Bot solid:	-330	Bot perf:	Not Reported
Spec capac:	5.6		
Pump mgd:	0		

Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 9-9-002:016
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	02-JAN-00
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002747

78
East
1/2 - 1 Mile
Higher

FED USGS **USGS40000270131**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212213157553901		
Monloc name:	3-2255-06 W179		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3676675
Longitude:	-157.9247549	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	25.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19000101	Welldepth:	521
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

J79
East
1/2 - 1 Mile
Higher

HI WELLS **HI8000000002751**

Objectid:	1306	Wid:	3-2255-006
Island:	Oahu	Well name:	Halawa
Old name:	Not Reported		
Yr drilled:	1900		
Driller:	Not Reported		
Quad map:	10		
Long83dd:	-157.924722222		
Lat83dd:	21.3672222222		
Gps:	0	Utm:	-1
Owner user:	Oahu Sugar	Old number:	179-

Well type:	Not Reported	Casing dia:	12
Ground el:	25		
Well depth:	521		
Solid case:	247	Perf case:	Not Reported
Use:	ABN - Sealed	Use year:	Not Reported
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	187		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-496
Bot solid:	-222	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	02-JAN-00
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002751

K80
South **HI WELLS** **HI8000000002697**
1/2 - 1 Mile
Higher

Objectid:	1224	Wid:	3-2156-003
Island:	Oahu	Well name:	Makalapa
Old name:	Not Reported		
Yr drilled:	0		
Driller:	Not Reported		
Quad map:	10		
Long83dd:	-157.933888889		
Lat83dd:	21.3586111111		
Gps:	0	Utm:	-1
Owner user:	U S Navy	Old number:	176-
Well type:	Not Reported	Casing dia:	12
Ground el:	10		
Well depth:	623		
Solid case:	475	Perf case:	Not Reported
Use:	ABN - Sealed	Use year:	Not Reported
Init head:	19.9	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	405		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-613
Bot solid:	-465	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		

Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002697

K81
South **FED USGS** **USGS40000270080**
1/2 - 1 Mile
Higher

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212142157561201		
Monloc name:	3-2156-03 W176 HALAW		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3585031
Longitude:	-157.933922	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	10.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	623
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

L82
NNE **FED USGS** **USGS40000270230**
1/2 - 1 Mile
Higher

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212251157560001		
Monloc name:	3-2256-09 W189-E		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3776674
Longitude:	-157.930588	Sourcemap scale:	24000

Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	45.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19080101	Welldepth:	346
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

M83
NNE **FED USGS** **USGS40000270238**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212253157560601		
Monloc name:	3-2256-03 W188		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3782231
Longitude:	-157.9322547	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	10.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	275
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

L84
NNE **HI WELLS** **HI8000000002847**
1/2 - 1 Mile
Higher

Objectid:	1349	Wid:	3-2256-009
Island:	Oahu	Well name:	Aiea
Old name:	Not Reported		
Yr drilled:	1908		
Driller:	Not Reported		
Quad map:	9		
Long83dd:	-157.930555556		
Lat83dd:	21.3777777778		
Gps:	0	Utm:	-1
Owner user:	Oahu Sugar	Old number:	189-E

Well type:	Not Reported	Casing dia:	12
Ground el:	45		
Well depth:	0		
Solid case:	80	Perf case:	98
Use:	ABN - Sealed	Use year:	Not Reported
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	Not Reported
Bot solid:	-35	Bot perf:	-53
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	01-JAN-08
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002847

M85
NNE **HI WELLS** **HI8000000002855**
1/2 - 1 Mile
Lower

Objectid:	1343	Wid:	3-2256-003
Island:	Oahu	Well name:	Aiea
Old name:	Not Reported		
Yr drilled:	0		
Driller:	Not Reported		
Quad map:	9		
Long83dd:	-157.932222222		
Lat83dd:	21.3783333333		
Gps:	0	Utm:	-1
Owner user:	Oahu Sugar	Old number:	188-
Well type:	Not Reported	Casing dia:	Not Reported
Ground el:	10		
Well depth:	275		
Solid case:	Not Reported	Perf case:	Not Reported
Use:	Other	Use year:	Not Reported
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	73		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	23.9	Test unit:	C
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-265
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		

Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002855

L86
NNE **FED USGS** **USGS40000270233**
1/2 - 1 Mile
Higher

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212252157560001		
Monloc name:	3-2256-08 W189-D		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3779452
Longitude:	-157.930588	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	38.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19080101	Welldepth:	359
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

N87
NW **FED USGS** **USGS40000270225**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212247157563801		
Monloc name:	3-2256-04 W190		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3765575
Longitude:	-157.9411437	Sourcemap scale:	24000

Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	23.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	18890101	Welldepth:	290
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

N88
NW **HI WELLS** **HI8000000002842**
1/2 - 1 Mile
Lower

Objectid:	1344	Wid:	3-2256-004
Island:	Oahu	Well name:	Pearl Harbor
Old name:	Not Reported		
Yr drilled:	1889		
Driller:	Not Reported		
Quad map:	9		
Long83dd:	-157.941111111		
Lat83dd:	21.3766666667		
Gps:	0	Utm:	-1
Owner user:	U S Navy	Old number:	190-
Well type:	Not Reported	Casing dia:	6
Ground el:	23		
Well depth:	290		
Solid case:	200	Perf case:	Not Reported
Use:	ABN - Sealed	Use year:	Not Reported
Init head:	24	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	88		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-267
Bot solid:	-177	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002842

Map ID Direction Distance Elevation	Database	EDR ID Number
L89 **NNE** **1/2 - 1 Mile** **Lower**	**HI WELLS**	**HI8000000002850**

Objectid:	1348	Wid:	3-2256-008
Island:	Oahu	Well name:	Aiea
Old name:	Not Reported		
Yr drilled:	1908		
Driller:	Not Reported		
Quad map:	9		
Long83dd:	-157.930555556		
Lat83dd:	21.3780555556		
Gps:	0	Utm:	-1
Owner user:	Oahu Sugar	Old number:	189-D
Well type:	Not Reported	Casing dia:	12
Ground el:	38		
Well depth:	359		
Solid case:	98	Perf case:	Not Reported
Use:	ABN - Sealed	Use year:	Not Reported
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-321
Bot solid:	-60	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	01-JAN-08
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002850

L90 **NNE** **1/2 - 1 Mile** **Lower**	**FED USGS**	**USGS40000270236**	

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212253157560000		
Monloc name:	3-2256-05 TO 09		
Monloc type:	Well: Multiple wells		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3782229
Longitude:	-157.930588	Sourcemap scale:	24000

Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	38
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Unknown		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

L91 **NNE** **1/2 - 1 Mile** **Lower**	**FED USGS**	**USGS40000270237**	

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212253157560001		
Monloc name:	3-2256-07 W189-C		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3782229
Longitude:	-157.930588	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	38.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19080101	Welldepth:	345
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

L92 **NNE** **1/2 - 1 Mile** **Lower**	**HI WELLS**	**HI8000000002856**	

Objectid:	1347	Wid:	3-2256-007
Island:	Oahu	Well name:	Aiea
Old name:	Not Reported		
Yr drilled:	1908		
Driller:	Not Reported		
Quad map:	9		
Long83dd:	-157.930555556		
Lat83dd:	21.3783333333		
Gps:	0	Utm:	-1
Owner user:	Oahu Sugar	Old number:	189-C

Well type:	Not Reported	Casing dia:	12
Ground el:	38		
Well depth:	345		
Solid case:	71	Perf case:	Not Reported
Use:	ABN - Sealed	Use year:	Not Reported
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-307
Bot solid:	-33	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	01-JAN-08
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002856

L93
NNE **FED USGS** **USGS40000270241**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212254157560001		
Monloc name:	3-2256-06 W189-B		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3785007
Longitude:	-157.930588	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	38.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19080101	Welldepth:	338
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID Direction Distance Elevation	Database	EDR ID Number
L94 **NNE** **1/2 - 1 Mile** **Higher**	**HI WELLS**	**HI8000000002857**

Objectid:	1346	Wid:	3-2256-006
Island:	Oahu	Well name:	Aiea
Old name:	Not Reported		
Yr drilled:	1908		
Driller:	Not Reported		
Quad map:	9		
Long83dd:	-157.930555556		
Lat83dd:	21.3786111111		
Gps:	0	Utm:	-1
Owner user:	Oahu Sugar	Old number:	189-B
Well type:	Not Reported	Casing dia:	12
Ground el:	38		
Well depth:	338		
Solid case:	93	Perf case:	Not Reported
Use:	ABN - Sealed	Use year:	Not Reported
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-300
Bot solid:	-55	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	01-JAN-08
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002857

L95
NNE **FED USGS** **USGS40000270242**
1/2 - 1 Mile
Higher

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212255157560001		
Monloc name:	3-2256-05 W189-A		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3787784
Longitude:	-157.930588	Sourcemap scale:	24000

Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	38.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19080101	Welldepth:	344
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

O96
SSE
1/2 - 1 Mile
Higher

HI WELLS **HI8000000002698**

Objectid:	1219	Wid:	3-2155-003
Island:	Oahu	Well name:	Makalapa
Old name:	Not Reported		
Yr drilled:	0		
Driller:	Not Reported		
Quad map:	10		
Long83dd:	-157.928888889		
Lat83dd:	21.3586111111		
Gps:	0	Utm:	-1
Owner user:	U S Navy	Old number:	175-
Well type:	Not Reported	Casing dia:	12
Ground el:	23		
Well depth:	930		
Solid case:	486	Perf case:	Not Reported
Use:	ABN - Sealed	Use year:	Not Reported
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	1250		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-907
Bot solid:	-463	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002698

Map ID Direction Distance Elevation	Database	EDR ID Number
L97 **NNE** **1/2 - 1 Mile** **Higher**	**HI WELLS**	**HI8000000002860**

Objectid:	1345	Wid:	3-2256-005
Island:	Oahu	Well name:	Aiea
Old name:	Not Reported		
Yr drilled:	1908		
Driller:	Not Reported		
Quad map:	9		
Long83dd:	-157.930555556		
Lat83dd:	21.3788888889		
Gps:	0	Utm:	-1
Owner user:	Oahu Sugar	Old number:	189-A
Well type:	Not Reported	Casing dia:	12
Ground el:	38		
Well depth:	344		
Solid case:	87	Perf case:	Not Reported
Use:	ABN - Sealed	Use year:	Not Reported
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-306
Bot solid:	-49	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	01-JAN-08
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002860

O98
SSE
1/2 - 1 Mile
Higher

FED USGS **USGS40000270079**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212142157555401		
Monloc name:	3-2155-03 W175 HALAW		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3585022
Longitude:	-157.9289219	Sourcemap scale:	24000

Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	23.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	930
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

P99
NE
1/2 - 1 Mile
Higher

HI WELLS **HI8000000002845**

Objectid:	1332	Wid:	3-2255-032
Island:	Oahu	Well name:	Aiea Halawa Shft
Old name:	Not Reported		
Yr drilled:	1937		
Driller:	Not Reported		
Quad map:	9		
Long83dd:	-157.926388889		
Lat83dd:	21.3775		
Gps:	-1	Utm:	0
Owner user:	U S Navy Public Works Center	Old number:	SH5-
Well type:	SHF	Casing dia:	96
Ground el:	95		
Well depth:	99		
Solid case:	Not Reported	Perf case:	Not Reported
Use:	MIL - Military	Use year:	Not Reported
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	11.1	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	12014		
Draft mgy:	132	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-4
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	17.3		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 9-9-010:014
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	01-JAN-37
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002845

Map ID Direction Distance Elevation	Database	EDR ID Number
O100 **SSE** **1/2 - 1 Mile** **Higher**	**HI WELLS**	**HI8000000002693**

Objectid:	1218	Wid:	3-2155-002
Island:	Oahu	Well name:	Makalapa
Old name:	Not Reported		
Yr drilled:	0		
Driller:	Not Reported		
Quad map:	10		
Long83dd:	-157.929166667		
Lat83dd:	21.3575		
Gps:	0	Utm:	-1
Owner user:	U S Navy	Old number:	174-
Well type:	Not Reported	Casing dia:	12
Ground el:	22		
Well depth:	800		
Solid case:	431	Perf case:	Not Reported
Use:	ABN - Sealed	Use year:	Not Reported
Init head:	23.6	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	270		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-778
Bot solid:	-409	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002693

O101
SSE
1/2 - 1 Mile
Higher

FED USGS **USGS40000270073**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212138157555501		
Monloc name:	3-2155-02 W174 HALAW		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3573913
Longitude:	-157.9291997	Sourcemap scale:	24000

Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	22.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	800
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

Q102
North **FED USGS** **USGS40000270264**
1/2 - 1 Mile
Higher

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212303157561600		
Monloc name:	3-2356-43 ,44		
Monloc type:	Well: Multiple wells		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3810009
Longitude:	-157.9350324	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	81
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Unknown		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

Q103
North **FED USGS** **USGS40000270265**
1/2 - 1 Mile
Higher

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212303157561601		
Monloc name:	3-2356-43 W190-1A		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3810009
Longitude:	-157.9350324	Sourcemap scale:	24000

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	81.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19410101	Welldepth:	100
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

Q104
North **FED USGS** **USGS40000270266**
1/2 - 1 Mile
Higher

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212303157561602		
Monloc name:	3-2356-44 W190-1B		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3810009
Longitude:	-157.9350324	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	81.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19410101	Welldepth:	100
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

Q105
North **HI WELLS** **HI8000000002878**
1/2 - 1 Mile
Higher

Objectid:	1537	Wid:	3-2356-043
Island:	Oahu	Well name:	Aiea
Old name:	Not Reported		
Yr drilled:	1941		
Driller:	MULLIN		
Quad map:	9		
Long83dd:	-157.935		
Lat83dd:	21.3811111111		
Gps:	0	Utm:	-1
Owner user:	Ridley W	Old number:	190-1A

Well type:	Not Reported	Casing dia:	12
Ground el:	81		
Well depth:	100		
Solid case:	Not Reported	Perf case:	Not Reported
Use:	ABN - Sealed	Use year:	Not Reported
Init head:	22.3	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	139		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-19
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	01-JAN-41
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002878

Q106
North
1/2 - 1 Mile
Higher

HI WELLS **HI8000000002879**

Objectid:	1538	Wid:	3-2356-044
Island:	Oahu	Well name:	Aiea
Old name:	Not Reported		
Yr drilled:	1941		
Driller:	MULLIN		
Quad map:	9		
Long83dd:	-157.935		
Lat83dd:	21.3811111111		
Gps:	0	Utm:	-1
Owner user:	Ridley W	Old number:	190-1B
Well type:	Not Reported	Casing dia:	8
Ground el:	81		
Well depth:	100		
Solid case:	34	Perf case:	Not Reported
Use:	ABN - Sealed	Use year:	Not Reported
Init head:	21.4	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	160		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-19
Bot solid:	47	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		

Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	01-JAN-41
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002879

P107
NE
1/2 - 1 Mile
Higher

FRDS PWS **HI0000350**

Epa region:	09	State:	HI
Pwsid:	HI0000350		
Pwsname:	HICKAM		
City served:	HICKAM AIR BASE	State served:	HI
Zip served:	Not Reported	Fips county:	Not Reported
Status:	Closed	Pop srvd:	12853
Pwssvcconn:	1409	Source:	Purch_groundwater
Pws type:	CWS	Owner:	Fed_Govt
Contact:	LANIER, RONNIE D.		
Contactor gname:	LANIER, RONNIE D.		
Contact phone:	808-449-3173	Contact address1:	15 CES/CEV
Contact address2:	75 H Street	Contact city:	HICKAM AFB
Contact state:	HI	Contact zip:	96853
Activity code:	I		

Facid:	1T		
Facname:	USN HALAWA SHAFT		
Facility type:	Treatment_plant	Activity code:	A
Treatment obj:	disinfection	Treatment process:	gaseous chlorination, post
Treatment obj:	other	Treatment process:	fluoridation
Facid:	2T		
Facname:	USN WAIAWA SHAFT		
Facility type:	Treatment_plant	Activity code:	A
Treatment obj:	disinfection	Treatment process:	gaseous chlorination, post

Location Information:

Name:	HICKAM		
Pwstypcd:	CWS	Primsrccd:	GWP
Popserved:	12853		
Add1:	15 CES/CEV		
Add2:	75 H STREET		
City:	HICKAM AFB	State:	HI
Zip:	96853	Phone:	808-449-3173
Cityserv:	HICKAM AIR BASE	Cntyserv:	Not Reported
Stateserv:	HI	Zipserv:	Not Reported

Enforcement Information:

Violation id:	209	Orig cd:	S
Enf fy:	2011	Enf act date:	05/12/2011
Enf act detail:	St Compliance achieved	Enf act cat:	Resolving

Enforcement Information:
Violation id: 209 Orig cd: S
Enf fy: 2011 Enf act date: 07/01/2011
Enf act detail: St Public Notif received Enf act cat: Informal

Enforcement Information:
Violation id: 209 Orig cd: S
Enf fy: 2011 Enf act date: 10/28/2010
Enf act detail: St Violation/Reminder Notice Enf act cat: Informal

Enforcement Information:
Violation id: 208 Orig cd: S
Enf fy: 2009 Enf act date: 06/12/2009
Enf act detail: St Violation/Reminder Notice Enf act cat: Informal

Enforcement Information:
Violation id: 208 Orig cd: S
Enf fy: 2009 Enf act date: 07/10/2009
Enf act detail: St Public Notif received Enf act cat: Informal

Enforcement Information:
Violation id: 208 Orig cd: S
Enf fy: 2009 Enf act date: 06/30/2009
Enf act detail: St Compliance achieved Enf act cat: Resolving

Enforcement Information:
Violation id: 207 Orig cd: S
Enf fy: 2007 Enf act date: 04/20/2007
Enf act detail: St Public Notif requested Enf act cat: Informal

Enforcement Information:
Violation id: 207 Orig cd: S
Enf fy: 2007 Enf act date: 04/27/2007
Enf act detail: St Public Notif received Enf act cat: Informal

Enforcement Information:
Violation id: 207 Orig cd: S
Enf fy: 2007 Enf act date: 04/20/2007
Enf act detail: St Violation/Reminder Notice Enf act cat: Informal

Enforcement Information:
Violation id: 107 Orig cd: S
Enf fy: 2007 Enf act date: 04/20/2007
Enf act detail: St Violation/Reminder Notice Enf act cat: Informal

Enforcement Information:
Violation id: 107 Orig cd: S
Enf fy: 2007 Enf act date: 04/20/2007
Enf act detail: St Public Notif requested Enf act cat: Informal

Enforcement Information:
Violation id: 107 Orig cd: S
Enf fy: 2007 Enf act date: 04/27/2007
Enf act detail: St Public Notif received Enf act cat: Informal

Violations Information:
Violoation id: 209 Orig cd: S
State: HI Viol fy: 2008
Contamcd: 5000
Contamnm: Lead and Copper Rule
Viol code: 52
Viol name: Follow-up Or Routine LCR Tap M/R
Rule code: 350
Rule name: LCR
Violmeasur: Not Reported Unitmeasur: Not Reported
State mcl: Not Reported Cmpbdt: 01/01/2008
Cmpedt: Not Reported

Violations Information:
Violoation id: 208 Orig cd: S
State: HI Viol fy: 2009
Contamcd: 3100
Contamnm: Coliform (TCR)
Viol code: 22
Viol name: MCL, Monthly (TCR)
Rule code: 110
Rule name: TCR
Violmeasur: Not Reported Unitmeasur: Not Reported
State mcl: Not Reported Cmpbdt: 05/01/2009
Cmpedt: 05/31/2009

Violations Information:
Violoation id: 207 Orig cd: S
State: HI Viol fy: 2007
Contamcd: 3100
Contamnm: Coliform (TCR)
Viol code: 23
Viol name: Monitoring, Routine Major (TCR)
Rule code: 110
Rule name: TCR
Violmeasur: Not Reported Unitmeasur: Not Reported
State mcl: Not Reported Cmpbdt: 03/01/2007
Cmpedt: 03/31/2007

Violations Information:
Violoation id: 107 Orig cd: S
State: HI Viol fy: 2007
Contamcd: 3100
Contamnm: Coliform (TCR)
Viol code: 22
Viol name: MCL, Monthly (TCR)
Rule code: 110
Rule name: TCR
Violmeasur: Not Reported Unitmeasur: Not Reported
State mcl: Not Reported Cmpbdt: 03/01/2007
Cmpedt: 03/31/2007

PWS ID: HI0000350
Date Initiated: Not Reported Date Deactivated: Not Reported
PWS Name: HICKAM AFB
15 AIR BASE WING/CC, HICKAM
15 MED GGP/SGPB HICKAM AFB
HICKAM AFB, HI 96853

Addressee / Facility:	System Owner/Responsible Party MAJ STEPHEN PAYNE 15 MEDICAL GROUP\SGPB HICKAM AIR FORCE BASE HICKAM AFB, HI 96853		
Facility Latitude:	47 25 37	Facility Longitude:	119 25 14
Facility Latitude:	21 22 53	Facility Longitude:	157 55 43
Facility Latitude:	21 25 06	Facility Longitude:	157 58 23
City Served:	HICKAM AFB		
Treatment Class:	Treated	Population:	8850

Violations information not reported.

ENFORCEMENT INFORMATION:

Truedate:	03/31/2009	Pwsid:	HI0000350
Pwsname:	HICKAM		
Retpopsrvd:	12853	Pwstypecod:	C
Vioid:	107	Contaminant:	COLIFORM (TCR)
Viol. Type:	MCL, Monthly (TCR)		
Complperbe:	3/1/2007 0:00:00		
Complperen:	3/31/2007 0:00:00	Enfdate:	4/20/2007 0:00:00
Enf action:	State Violation/Reminder Notice		
Violmeasur:	Not Reported		

Truedate:	03/31/2009	Pwsid:	HI0000350
Pwsname:	HICKAM		
Retpopsrvd:	12853	Pwstypecod:	C
Vioid:	107	Contaminant:	COLIFORM (TCR)
Viol. Type:	MCL, Monthly (TCR)		
Complperbe:	3/1/2007 0:00:00		
Complperen:	3/31/2007 0:00:00	Enfdate:	4/20/2007 0:00:00
Enf action:	State Public Notif Requested		
Violmeasur:	Not Reported		

Truedate:	03/31/2009	Pwsid:	HI0000350
Pwsname:	HICKAM		
Retpopsrvd:	12853	Pwstypecod:	C
Vioid:	107	Contaminant:	COLIFORM (TCR)
Viol. Type:	MCL, Monthly (TCR)		
Complperbe:	3/1/2007 0:00:00		
Complperen:	3/31/2007 0:00:00	Enfdate:	4/27/2007 0:00:00
Enf action:	State Public Notif Received		
Violmeasur:	Not Reported		

Truedate:	03/31/2009	Pwsid:	HI0000350
Pwsname:	HICKAM		
Retpopsrvd:	12853	Pwstypecod:	C
Vioid:	207	Contaminant:	COLIFORM (TCR)
Viol. Type:	Monitoring, Routine Major (TCR)		
Complperbe:	3/1/2007 0:00:00		
Complperen:	3/31/2007 0:00:00	Enfdate:	4/20/2007 0:00:00
Enf action:	State Violation/Reminder Notice		
Violmeasur:	Not Reported		

Truedate:	03/31/2009	Pwsid:	HI0000350
Pwsname:	HICKAM		
Retpopsrvd:	12853	Pwstypecod:	C
Vioid:	207	Contaminant:	COLIFORM (TCR)
Viol. Type:	Monitoring, Routine Major (TCR)		
Complperbe:	3/1/2007 0:00:00		
Complperen:	3/31/2007 0:00:00	Enfdate:	4/20/2007 0:00:00
Enf action:	State Public Notif Requested		
Violmeasur:	Not Reported		

Truedate:	03/31/2009	Pwsid:	HI0000350
Pwsname:	HICKAM		
Retpopsrvd:	12853	Pwstypecod:	C
Vioid:	207	Contaminant:	COLIFORM (TCR)
Viol. Type:	Monitoring, Routine Major (TCR)		
Complperbe:	3/1/2007 0:00:00		
Complperen:	3/31/2007 0:00:00	Enfdate:	4/27/2007 0:00:00
Enf action:	State Public Notif Received		
Violmeasur:	Not Reported		

CONTACT INFORMATION:

Name:	HICKAM	Population:	12853
Contact:	LANIER, RONNIE D.	Phone:	808-449-3173
Address:	15 CES/CEV		
Address 2:	75 H Street HICKAM AFB, HI 96853		

R108
SSE
1/2 - 1 Mile
Higher

HI WELLS **HI8000000002688**

Objectid:	1217	Wid:	3-2155-001
Island:	Oahu	Well name:	Makalapa
Old name:	Not Reported		
Yr drilled:	0		
Driller:	Not Reported		
Quad map:	10		
Long83dd:	-157.93		
Lat83dd:	21.3563888889		
Gps:	0	Utm:	-1
Owner user:	Oahu Sugar	Old number:	173-
Well type:	Not Reported	Casing dia:	12
Ground el:	21		
Well depth:	740		
Solid case:	500	Perf case:	Not Reported
Use:	ABN - Sealed	Use year:	Not Reported
Init head:	23.3	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	499		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported

Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-719
Bot solid:	-479	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002688

S109
NNW
1/2 - 1 Mile
Lower

FED USGS **USGS40000270258**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212300157563301		
Monloc name:	3-2356-09 T127		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3801681
Longitude:	-157.9397547	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	6.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19421101	Welldepth:	75
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

R110
SSE
1/2 - 1 Mile
Higher

FED USGS **USGS40000270069**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212134157555801		
Monloc name:	3-2155-01 W173 HALAW		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3562804
Longitude:	-157.930033	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	21.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	740
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

S111
NNW
1/2 - 1 Mile
Lower

HI WELLS **HI8000000002874**

Objectid:	1503	Wid:	3-2356-009
Island:	Oahu	Well name:	Pearl Harbor
Old name:	Not Reported		
Yr drilled:	0		
Driller:	U S NAVY		
Quad map:	9		
Long83dd:	-157.939722222		
Lat83dd:	21.3802777778		
Gps:	0	Utm:	-1
Owner user:	U S Navy	Old number:	T127-
Well type:	Not Reported	Casing dia:	Not Reported
Ground el:	6		
Well depth:	75		
Solid case:	Not Reported	Perf case:	Not Reported
Use:	Not Reported	Use year:	Not Reported
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-69
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		

Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 9-8-014:006
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002874

T112
ENE
1/2 - 1 Mile
Higher

HI WELLS **HI8000000002820**

Objectid:	1340	Wid:	3-2255-040
Island:	Oahu	Well name:	Halawa-BWS Deep Monitor
Old name:	Not Reported		
Yr drilled:	1997		
Driller:	USGS		
Quad map:	10		
Long83dd:	-157.921389		
Lat83dd:	21.373056		
Gps:	-1	Utm:	0
Owner user:	Honolulu BWS	Old number:	Not Reported
Well type:	ROT	Casing dia:	8
Ground el:	59		
Well depth:	1014		
Solid case:	59	Perf case:	Not Reported
Use:	OBS - Deep (through transition zone)	Use year:	Not Reported
Init head:	17.39	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-955
Bot solid:	0	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 9-9-010:042
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	31-JAN-97
Pir:	Not Reported	Surveyor:	U S G S
T:	Not Reported	Site id:	HI8000000002820

113
SSE
1/2 - 1 Mile
Higher

HI WELLS **HI8000000002689**

Objectid:	1221	Wid:	3-2155-005
Island:	Oahu	Well name:	Makalapa
Old name:	Not Reported		
Yr drilled:	1948		
Driller:	MULLIN		
Quad map:	10		
Long83dd:	-157.928611111		
Lat83dd:	21.3563888889		
Gps:	0	Utm:	-1
Owner user:	Aiea Dairy	Old number:	172-1
Well type:	Not Reported	Casing dia:	8
Ground el:	62		
Well depth:	682		
Solid case:	499	Perf case:	Not Reported
Use:	ABN - Sealed	Use year:	Not Reported
Init head:	20.5	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	242		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-620
Bot solid:	-437	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	01-JAN-48
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002689

R114
SSE
1/2 - 1 Mile
Higher

FED USGS **USGS40000270068**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212134157555301		
Monloc name:	3-2155-05 W172-1 HAL		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3562802
Longitude:	-157.9286442	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	62.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	19480101	Welldepth:	682
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

U115
SSE
1/2 - 1 Mile
Higher

HI WELLS **HI8000000002674**

Objectid:	1223	Wid:	3-2156-002
Island:	Oahu	Well name:	Makalapa
Old name:	Not Reported		
Yr drilled:	0		
Driller:	Not Reported		
Quad map:	10		
Long83dd:	-157.931111111		
Lat83dd:	21.3552777778		
Gps:	0	Utm:	-1
Owner user:	Not Reported	Old number:	172-
Well type:	Not Reported	Casing dia:	12
Ground el:	33		
Well depth:	730		
Solid case:	521	Perf case:	Not Reported
Use:	ABN - Sealed	Use year:	Not Reported
Init head:	23	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	243		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-697
Bot solid:	-488	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002674

V116
NE
1/2 - 1 Mile
Higher

FED USGS **USGS40000270246**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212256157554201		
Monloc name:	3-2255-34 T56		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3790557
Longitude:	-157.925588	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	120.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19551202	Welldepth:	121
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

U117
SSE
1/2 - 1 Mile
Higher

FED USGS **USGS40000270053**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212130157560201		
Monloc name:	3-2156-02 W172 HALAW		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3551696
Longitude:	-157.9311442	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	33.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	730
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID Direction Distance Elevation	Database	EDR ID Number
T118 **ENE** **1/2 - 1 Mile** **Higher**	**FED USGS**	**USGS40000270193**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212233157552301		
Monloc name:	3-2255-33 T45		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3726668
Longitude:	-157.9203103	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	57.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19540101	Welldepth:	85
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

T119 **ENE** **1/2 - 1 Mile** **Higher**	**FED USGS**	**USGS40000270194**	

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212233157552302		
Monloc name:	3-2255-40 HALAWA TZ WELL, OAHU		
Monloc type:	Well		
Monloc desc:	Well is located 50 ft west of well 3-2255-33.		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3726668
Longitude:	-157.9203103	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	57
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	1014
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

V120 **NE** **1/2 - 1 Mile** **Higher**	**FED USGS**	**USGS40000270251**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212258157554201		
Monloc name:	3-2255-36 W189-3B		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3796112
Longitude:	-157.925588	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	119.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19560801	Welldepth:	240
Welldepth units:	ft	Wellholedepth:	240
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1956-09-17	98.54	

T121 **ENE** **1/2 - 1 Mile** **Higher**	**HI WELLS**	**HI8000000002809**

Objectid:	1333	Wid:	3-2255-033
Island:	Oahu	Well name:	Halawa Obs.
Old name:	Not Reported		
Yr drilled:	1954		
Driller:	SAMSON-SMOCK		
Quad map:	9		
Long83dd:	-157.920278		
Lat83dd:	21.372778		
Gps:	0	Utm:	-1
Owner user:	Honolulu BWS	Old number:	T45-

Well type:	Not Reported	Casing dia:	12
Ground el:	57		
Well depth:	85		
Solid case:	60	Perf case:	Not Reported
Use:	OBS - Water Level	Use year:	Not Reported
Init head:	18.3	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-28
Bot solid:	-3	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 9-9-010:003
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	01-JAN-54
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002809

W122
NNW
1/2 - 1 Mile
Lower

FED USGS **USGS40000270267**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212303157563801		
Monloc name:	3-2356-08 T126		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3810014
Longitude:	-157.9411436	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	6.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19421101	Welldepth:	79
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID Direction Distance Elevation	Database	EDR ID Number
W123 **NNW** **1/2 - 1 Mile** **Lower**	**HI WELLS**	**HI8000000002877**

Objectid:	1502	Wid:	3-2356-008
Island:	Oahu	Well name:	Pearl Harbor
Old name:	Not Reported		
Yr drilled:	0		
Driller:	U S NAVY		
Quad map:	9		
Long83dd:	-157.941111111		
Lat83dd:	21.3811111111		
Gps:	0	Utm:	-1
Owner user:	U S Navy	Old number:	T126-
Well type:	Not Reported	Casing dia:	Not Reported
Ground el:	6		
Well depth:	79		
Solid case:	Not Reported	Perf case:	Not Reported
Use:	Not Reported	Use year:	Not Reported
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-73
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 9-8-014:030
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002877

U124
South
1/2 - 1 Mile
Lower

HI WELLS **HI8000000002672**

Objectid:	1222	Wid:	3-2156-001
Island:	Oahu	Well name:	Makalapa
Old name:	Not Reported		
Yr drilled:	0		
Driller:	Not Reported		
Quad map:	10		
Long83dd:	-157.931944444		
Lat83dd:	21.3544444444		
Gps:	0	Utm:	-1
Owner user:	Oahu Sugar	Old number:	171-

Well type:	Not Reported	Casing dia:	12
Ground el:	25		
Well depth:	608		
Solid case:	520	Perf case:	Not Reported
Use:	ABN - Sealed	Use year:	Not Reported
Init head:	21.7	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	104		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-583
Bot solid:	-495	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002672

V125
NE **FED USGS** **USGS40000270256**
1/2 - 1 Mile
Higher

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212259157554200		
Monloc name:	3-2255-35 ,36		
Monloc type:	Well: Multiple wells		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.379889
Longitude:	-157.925588	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	119
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Unknown		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID Direction Distance Elevation	Database	EDR ID Number
V126 **NE** **1/2 - 1 Mile** **Higher**	**FED USGS**	**USGS40000270257**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212259157554201		
Monloc name:	3-2255-35 Aiea Refinery, Oahu, HI		
Monloc type:	Well		
Monloc desc:	former local no. W189-3A		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.379889
Longitude:	-157.925588	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	119.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Hawaii volcanic-rock aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19560719	Welldepth:	244
Welldepth units:	ft	Wellholedepth:	244
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1956-07-19	98.75	

U127
South **FED USGS** **USGS40000270052**
1/2 - 1 Mile
Higher

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-212127157560501		
Monloc name:	3-2156-01 W171 HALAW		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3543365
Longitude:	-157.9319776	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	25.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	608
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

V128
NE
1/2 - 1 Mile
Higher

HI WELLS **HI8000000002869**

Objectid:	1334	Wid:	3-2255-034
Island:	Oahu	Well name:	Aiea TH
Old name:	Not Reported		
Yr drilled:	1955		
Driller:	SAMSON-SMOCK		
Quad map:	9		
Long83dd:	-157.925555556		
Lat83dd:	21.38		
Gps:	0	Utm:	-1
Owner user:	C & H Sugar	Old number:	T56-
Well type:	Not Reported	Casing dia:	1
Ground el:	120		
Well depth:	121		
Solid case:	Not Reported	Perf case:	Not Reported
Use:	UNU - Unused	Use year:	Not Reported
Init head:	21.5	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	136		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-1
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 9-9-005:010
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	01-JAN-55
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002869

V129
NE
1/2 - 1 Mile
Higher

HI WELLS **HI8000000002870**

Objectid:	1335	Wid:	3-2255-035
Island:	Oahu	Well name:	Aiea Refinery 1
Old name:	Not Reported		
Yr drilled:	1956		
Driller:	PACIFIC DRLG		
Quad map:	9		
Long83dd:	-157.925555556		
Lat83dd:	21.38		
Gps:	0	Utm:	-1
Owner user:	A&B	Old number:	189-3A
Well type:	ROT	Casing dia:	16
Ground el:	119		
Well depth:	196		
Solid case:	151	Perf case:	Not Reported
Use:	UNU - Unused	Use year:	Not Reported
Init head:	21.1	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	135		
Test date:	7/2/1994	Test gpm:	700
Test ddown:	4.2	Test chlor:	300
Test temp:	22	Test unit:	C
Pump gpm:	1500		
Draft mgy:	377	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	1957		
Draft yr:	Not Reported	Bot hole:	-77
Bot solid:	-32	Bot perf:	Not Reported
Spec capac:	167		
Pump mgd:	2.16		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 9-9-005:010
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	13-JUL-56
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002870

V130
NE
1/2 - 1 Mile
Higher

HI WELLS **HI8000000002871**

Objectid:	1336	Wid:	3-2255-036
Island:	Oahu	Well name:	Aiea Refinery 2
Old name:	Not Reported		
Yr drilled:	1956		
Driller:	PACIFIC DRLG		
Quad map:	9		
Long83dd:	-157.925555556		
Lat83dd:	21.38		
Gps:	0	Utm:	-1
Owner user:	A&B	Old number:	189-3B
Well type:	ROT	Casing dia:	16
Ground el:	119		
Well depth:	240		
Solid case:	151	Perf case:	Not Reported
Use:	ABN - Sealed	Use year:	Not Reported
Init head:	20.5	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	155		
Test date:	Not Reported	Test gpm:	893
Test ddown:	6.8	Test chlor:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	1500		
Draft mgy:	362	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	1957		
Draft yr:	Not Reported	Bot hole:	-121
Bot solid:	-32	Bot perf:	Not Reported
Spec capac:	131		
Pump mgd:	2.16		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 9-9-005:010
Aqui code:	30201		
Latest hd:	Not Reported	Wcr:	01-JAN-56
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Site id:	HI8000000002871

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for HONOLULU County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 96701

Number of sites tested: 13

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	-0.015 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	0.600 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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EXHIBIT C

Architectural Inventory Survey

DAVID Y. IGE
GOVERNOR OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

KEKOA KALUHIWA
FIRST DEPUTY

JEFFREY T. PEARSON
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

December 7, 2015

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
P.O. Box 17907
Honolulu, HI 96817

LOG: 2015.02939, 2015.03572
DOC: 1511JLP38
Architecture, Archaeology
History and Culture

Dear Mr. Ouansafi:

SUBJECT: **Chapter 6E-8 and National Historic Preservation Act Section (NHPA) Section 106 Consultation – Department of Housing and Urban Development (HUD) Repair and Rehabilitation Project Department of Human Services, Hawai‘i Public Housing Authority (HPHA) Puuwai Momi Homes Rehabilitation Project – 99-132 Kohomua Street Halawa Ahupua‘a, ‘Ewa District, Island of O‘ahu TMK: (1) 9-9-003:056 and 064**

Thank you for your initial submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services (DHS), Hawaii Public Housing Authority (HPHA) consultation with SHPD in accordance with 36 CFR 800.3 and Hawaii Revised Statutes (HRS), Chapter 6E. We received your another submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience.

The submittal indicates that the HPHA is requesting the State Historic Preservation Officer’s (SHPO) concurrence with a determination of “no effect” for the proposed HUD repair and rehabilitation improvement projects involving 43 existing public housing developments located throughout the State over the next five (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 consultation on their behalf.

This letter addresses Puuwai MOmi Rehabilitation Project, 99-132 Kohomua Street. The HPHA has identified the area of potential effects (APE) as the 11.54 acre area parcel owned by the State (HPHA) which is identified as TMK: (1) 9-9-003:056 and 064 DHS/HPHA have indicated at this stage of the planning process, they are unclear whether the subject 11.54-acre project area will require any ground disturbances.

Our records indicate that no archaeological inventory survey has been conducted within the subject parcel and that no historic properties have been identified. However, based on nearby studies potential exists to encounter subsurface traditional Hawaiian and/or historic properties within the subject parcel.

The SHPD has reviewed the undertaking at 99-132 Kohomua Street, and the SHPO’s determination is **no adverse effect** pursuant to NHPA Section 106 and **no historic properties affected** pursuant to HRS §6E-8 within the APE **provided the following conditions are met:**

- If ground disturbing activity is anticipated, DHS must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation;
- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;

- Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;
- Submit a TMK map showing the full extent of the project area within the affected parcel/s;
- Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Summary of land use history, such as previous intensive cultivation, grubbing or grading;
- Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions regarding archaeological resources or concerns please contact Susan Lebo at (808) 692-8019 or at Susan.A.Lebo@hawaii.gov. For any history and cultural concerns please contact Kaʻāhiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov. Please contact Jessica Puff at Jessica.L.Puff@hawaii.gov or (808) 692-8023 for any questions regarding architectural concerns or this letter.

Sincerely,

Susan A. Lebo

Signed For

Alan A. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

PUUWAI MOMI

Project	Puuwai Momi
Architect	Associated Architects Halawa: Ken Akiyama, Kekoolani & Associates, and Ed Aotani
Built	1969, Renovated in 1995
National Register Eligibility	Not Eligible

Landscape Architect: Robert Fujiwara

Description

Puuwai Momi is located on a low hillside above Kamehameha Highway off Kohomua Street. It is bounded by these two streets as well as Salt Lake Boulevard and Makalapa Park on the backside of the hill. It sits in its own enclave, along with another HHA project, Makalapa Manor, which is not included in this study. A private residential neighborhood is situated next to these public housing areas on their south and east sides. The complex is comprised of 260 units housed in twenty seven buildings 11.54 acres. Across Kohomua Street from the housing project is an administrative office and maintenance shop building.

The buildings are sited in groups of two, three or four, in order to form green courtyards between them, although some are sited adjoining parking lots. Vehicular traffic is relegated to the periphery of the complex, in order to maintain an interior pedestrian zone.

Overview of the Site

The buildings are two and three stories high, are made of cmu with wide concrete bands and hoods over the entry doors as accents. Recessed window bays add further relief to the facades resulting in an array of receding and advancing planes. They feature flat roofs and sit on poured in place, reinforced concrete slab foundations. Concrete steps lead up to the second story units, which in turn have internal stairs leading to their third floors. The steps have wrought iron railings. The buildings are composed of a number of one, two, three and four bedroom units combined in different arrangements resulting in a variety of building forms. Some buildings feature the fronts and rears of some units on the same elevation. Certain of the larger units include rear service lanai which are enclosed by approximately 5feet high wood slat fences.

Three Stories Buildings

Two Stories Building

Wrought Iron Railings

Fronts and Rears on the Same Elevation

The entire housing complex underwent a major upgrading in 1995. At this time all the original jalousie windows were replaced with anodized aluminum awning and casement windows. All exterior and interior doors were replaced, and the kitchens and baths were completely remodeled with new cabinets, counters and backsplashes. The shower/tubs were provided new tile wainscots at this time as well. The interior stairs were given new rubber treads Also at this time, the original trash enclosures were rebuilt in concrete rather than wood. Because of these all-encompassing alterations, Puuwai Momi no longer retains its historic integrity.

Much of the historic landscaping for this project no longer exists, although a few original coconut and monkey pod trees still remain on the property .

Renovated Kitchen

Renovated Bathroom

History and Significance

Puuwai Momi was built on former Navy lands which adjoined Halawa Housing. Just prior to World War II, the Navy built barracks in Halawa in the area aound the sadium and the freeway interchanges. After the war, the Navy retained ownership of the land and buildings, but allowed the state's Hawaii Housing Authority to use the wood buildings and Quonset huts for temporary emergency housing for low- and moderate-income families.

There were about 1,000 families living in Halawa Housing in 1966 when the city's Honolulu Redevelopment Agency announced plans to build a stadium in Halawa. The State and City pledged they would erect replacement housing for the low income families displaced by their projects. HHA negotiated with the Navy to obtain about twelve acres next to Kamehameha Highway, only a few blocks away from Halawa Housing. The Navy declared the tract surplus, and HHA obtained the land from the General Services Administration. Approximately one hundred and thirty substandard Navy housing units stood on the property, and were demolished by HHA. In an effort to relocate the persons displaced from Halawa Housing, the HHA constructed Puuwai Momi as well as the adjoining Makalapa Manor and Hale Ola in Pearl City. By the time Halawa Housing was demolished, only a quarter of the families qualified for low-income or State housing.

In April 1968, HHA obtained final zoning approval for these lands, and ground breaking took place in July 1968. Reed & Martin were selected as the contractors for the new housing project. The first increment of Puuwai Momi, with its 48 units, opened in July 1969. All the original tenants in phase I were relocated from the Halawa Housing. The entire complex was completed on schedule in December 1969.

Costing $23,000 per unit, Puuwai Momi was the most expensive public housing project in Hawaii on a per-unit basis for its time. The newspapers found, "The design is unusual for low-rent public housing. Each unit is different. The two- and three-story buildings are arranged in clusters around miniparks. And youngsters can go to a five acre park adjacent to the housing project without crossing any roads. . . . The project has a light, airy atmosphere with use of pastel colors on the interior and exterior of the buildings. Ten years ago these walls would have been all white, with black tile floors."[32]

As the newspapers noted, Puuwai Momi did try to reduce the institutional environment associated with earlier housing projects. The modern design of the buildings is distinctive, and the site plan attempted to foster an open green space atmosphere, with the buildings clustered around "miniparks." However, the density of the project, which was greater than the former Halawa Housing from which many of the new tenants came, in many ways counteracts the other aspects of the design. Regardless, the design of Puuwai Momi does reflect the HHA effort to develop less institutional appearing settings and its move away from the Zeilenbau plan by employing a highly modified form of the perimeter block plan as a means to mitigate the scale of this project.

Although Puuwai Momi is associated with the redevelopment of the Halawa area into a place dominated by highway interchanges and the Aloha Stadium, as well as the HHA's efforts to accommodate the low-income families displaced by this construction, the 1995 renovation which included historic windows replaced with bronzed anodized aluminum windows, original interior and exterior doors replaced, and kitchen and bathrooms completely renovated, of the housing

32 Star Bulletin, July 14, 1969.

project has compromised the historic character of the complex, and it does not appear to meet the criteria for listing in the National Register of Historic Places.

Sign of Puuwai Momi
Puuwai Momi translates as “Heart of Pearl”

EXHIBIT D

Noise Assessment

Introduction

The Hawaiʻi Public Housing Authority (HPHA) initiated Environmental Reviews (ER) for their existing housing projects statewide in preparation of applying for Federal funding from the U.S. Department of Housing and Urban Development (HUD) to implement various rehabilitation improvements. HPHA is planning to implement various types of rehabilitation improvements to a total of 70 housing projects that are located on five (5) islands within the State of Hawaiʻi (Hawaiʻi, Maui, Molokaʻi, Oʻahu, and Kauaʻi).

Project Location

The Puʻuwai Momi housing project is situated just south of Aloha Stadium off of Kamehameha Highway, a six-lane, two-way divided highway with access provided by Kohomua Street, a two-lane, two-way roadway. The property is bordered by Kamehameha Highway and the Makalapa Neighborhood Park to the west, apartment complexes to the south, and Salt Lake Blvd, a two-lane, one-way roadway to the north. A project location map (Figure 1) shows the roadway network and identifies the proposed railway line in relation to the project area.

Day/Night Noise Level Assessment Summary

HUD's noise policy aims to protect citizens against excessive noise in their communities and places of residence. Adequate consideration to noise exposures and sources of noise is an integral part of the urban environment and must be evaluated. HUD’s policy requires noise attenuation measures be provided when proposed projects are to be located in high noise areas. Within the HUD Noise Assessment Guidelines, potential noise sources are examined for projects located within 15 miles of a military or civilian airport, 1,000 feet from a major road or 3,000 feet from a rail line.

This assessment utilized the Day/Night Noise Level Electronic Assessment Tool provided by the Environmental Planning Division of HUD to calculate site day/night noise levels (DNLs). DNL is based on sound levels measured in relative intensity of sound, or decibels (dB), on the “A” weighted scale (dBA). This scale most closely approximates the response characteristics of the human ear to sound. The higher the number on the scale, the louder is the sound. DNL represents noise exposure events over a 24-hour period. To account for human sensitivity to noise between the hours of 10 p.m. and 7 a.m., noise events occurring during these hours receive a “penalty” when the DNL is calculated. Each nighttime event is measured as if ten daytime events occurred.

HUD's regulations do not contain standards for interior noise levels. Rather a goal of 45 decibels is set forth and the attenuation requirements are geared toward achieving that goal. It is assumed that with standard construction any building will provide sufficient attenuation so that if the exterior level is 65 Ldn or less, the interior level will be 45 Ldn or less. Attenuation measures to meet these interior goals shall be employed where feasible. Emphasis shall be given to noise sensitive interior spaces such as bedrooms. Minimum attenuation requirements are prescribed in Sec. 51.104(a) of HUD’s Environmental Criteria and Standards. The following table identifies the site acceptability standards and addresses requirements for deviations from the standard.

Site Acceptability Standards

	Day-night average sound level (Ldn)	Special approvals and requirements
Acceptable	Not exceeding 65 Ldn	None
Normally Unacceptable	Above 65 Ldn but not exceeding 75 Ldn	Special Approvals Environmental Review Attenuation
Unacceptable	Above 75 Ldn	Special Approvals Environmental Review Attenuation

(see Standards in 24 CFR Part 51.103)

For modernization and rehabilitation projects located in all noise exposed areas, HUD shall encourage noise attenuation features in alterations. For major or substantial rehabilitation projects in the Normally Unacceptable and Unacceptable noise zones, HUD shall actively seek to have project sponsors incorporate noise attenuation features, given the extent and nature of the rehabilitation being undertaken and the level of exterior noise exposure. In Unacceptable noise zones, HUD shall strongly encourage conversion of noise-exposed sites to land uses compatible with the high noise levels.

Puʻuwai Momi Day/Night Noise Level Assessment Summary

The noise level assessment tool requires inputs from roadway and railway traffic, aircraft noise, and loud impulse sounds in order to calculate a combined DNL. The Puʻuwai Momi housing project is a noise sensitive use, as is the case with all HPHA housing projects, and is within the threshold distances of an airport, major roadway, and a future rail line.

Airports

The Puʻuwai Momi housing project is approximately 3 miles from the Honolulu International Airport and Hickam Air Force Base, falling within the criteria of 15 miles. Both Hickam and Honolulu Airport have a joint-use agreement in place for use of the shared facilities, including runways. The airport's noise exposure maps indicate that the housing project does not lie within any of the identified noise exposure contours.

Major Roadways

Two major roadways are present within one thousand feet of the Puʻuwai Momi housing project. These roads are Kamehameha Highway to the west and Salt Lake Boulevard to the north. Traffic data obtained from the State Department of Transportation, Highways Division, and the County Department of Transportation Services for these two roads show a heavy volume of peak and non-peak traffic. Volume, distance to roads, vehicle type, average speed, etc. were obtained in order to calculate the site-specific road DNL.

The Puʻuwai Momi housing project does not incorporate roadway noise barriers at the perimeter of the site. Photos 1, 2 and 3 below show that the major roadways, Kamehameha Highway and Salt Lake Boulevard are immediately adjacent to the housing project, but there are no sound barriers in place. Currently, only chain link and aluminum fencing exist between the housing project and the roadways.

Photo 1 – Intersection of Kamehameha Highway and Salt Lake Boulevard; the future railway line will be constructed between Kamehameha Highway and the Puʻuwai Momi housing project

Photo 1 – No sound barriers currently exist between Kamehameha Highway and the Puʻuwai Momi housing project; only chain link fence exists

Photo 2 – No sound barriers currently exist between the Salt Lake Boulevard ramp and the Puʻuwai Momi housing project; only an aluminum fence exists

Railways

The Honolulu Rail Transit Project is a planned 20-mile elevated rail line with 21 stations. The project will connect West Oʻahu with downtown Honolulu and Ala Moana Center via Honolulu International Airport. It will take 42 minutes to travel the entire route. The system features modern electric steelwheel trains, each able to carry hundreds of passengers. The rail line is expected to be fully operational, from Kapolei to Ala Moana Center, in 2019. The rail line passes by the Puʻuwai Momi housing project and comes within 40 feet of the nearest residential buildings. Frequency of train travel, average speed, and distance, among others, were obtained from the Honolulu Authority for Rapid Transportation (HART) in order to calculate the site- specific rail DNL.

Railway noise mitigation has already been incorporated into the design of the fixed guideway structure as well as the train wheels themselves. The elevated guideway will be constructed with a 3-foot parapet wall on both sides of the guideway. This will exceed the height of the

wheels where a majority of the rail noise is generated. Additionally, the rail vehicles will be covered with a wheel skirt outside of the wheels to block noise from the wheels, reducing rail vehicle noise by 3 to 5 dBA. In cases where wheel skirts and parapet walls are insufficient to eliminate all noise impacts, sound absorptive materials will be used on guideway structures, providing at least 3 dBA of noise reduction.

Loud Impulse Sounds

Sites in the vicinity of installations producing load impulsive sounds, such as sonic booms or explosions, are contributors to noise levels at the site. Often, Department of Defense installations, including artillery firing and bombing practice ranges fall under this category. The contribution to the site's DNL produced by the loud impulsive sound shall have 8 dB added to it in assessing the acceptability of a site. No loud impulse sounds were identified affecting this housing project.

Day-Night Sound Level (DNL)

Based on the results of the DNL calculator, Puʻuwai Momi is exposed to Normally Unacceptable noise with a combined DNL of 71.5 dB. Refer to Table 1, DNL Calculator Results, below for the inputs required for this calculation. Therefore in order to achieve an acceptable status, appropriate sound attenuation measures must be provided.

Table 1: DNL Calculator Results

DNL Calculator			
Site ID	Puʻuwai Momi		
Record Date	4/14/2015		
User's Name	Aaron		
Road # 1 Name:	Kamehameha Highway		
Road #1			
Vehicle Type	**Cars/Medium Trucks**	**Heavy Trucks**	
Effective Distance	173	173	
Distance to Stop Sign			
Average Speed	35	35	
Average Daily Trips (ADT)	28137	978	
Night Fraction of ADT	22	22	
Road Gradient (%)		1	
Vehicle DNL	61.7	67.2	
Road # 1 DNL:			**68.3**
Road # 2 Name:	Salt Lake Boulevard		
Road #2			
Vehicle Type	**Cars/Medium Trucks**	**Heavy Trucks**	
Effective Distance	47	47	
Distance to Stop Sign			
Average Speed	25	25	
Average Daily Trips (ADT)	6946	85	
Night Fraction of ADT	13	13	
Road Gradient (%)		1	
Vehicle DNL	59.9	63.7	
Road # 1 DNL:			**65.3**
Railroad #1 Track Identifier:	HHCTCP		
Rail # 1			
Train Type	**Electric**		
Effective Distance	40		
Average Train Speed	30		
Engines per Train	1		
Railway cars per Train	4		
Average Train Operations (ATO)	240		
Night Fraction of ATO	15		
Railway whistles or horns?	Yes:	No: **X**	
Bolted Tracks?	Yes:	No: **X**	
Train DNL			**65.8**
Airport Noise Level	N/A		
Loud Impulse Sounds?	Yes:	No: **X**	
Combined DNL for all Road and Rail sources			**71.5**
Combined DNL including Airport Site DNL with Loud Impulse Sound	N/A		

Mitigation Options

Due to the fact that the Puʻuwai Momi housing project DNL is in excess of 65 decibels, the following options are available:

- *No Action Alternative:* Cancel the project at this location
- *Other Reasonable Alternatives:* Choose an alternate site
- *Mitigation:*
    - Contact your Field or Regional Environmental Officer
    - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
    - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses
    - Incorporate natural or man-made barriers. (See The Noise Guidebook)

For the modernization and rehabilitation projects being proposed, the only practicable option is to provide noise attenuation features. Puʻuwai Momi is an existing housing project and canceling modernization and/or rehabilitation projects to improve the facilities is impractical. In addition, relocation of the housing project is not feasible due to the volume of affected residents. It is recommended that HPHA conduct a full noise level assessment at the Puʻuwai Momi housing project due to the Normally Unacceptable noise level expected at this site. A noise level assessment will inform and guide the implementation of the following noise attenuation recommendations.

Railway Noise Mitigation

Although the railway will be designed with noise mitigating technologies, it is recommended that a noise level assessment be performed at this site that includes the effects of the proposed railway. In all likelihood, the proposed railway will magnify the existing noise level at this site. HART conducted noise assessments within the Honolulu High-Capacity Transit Corridor Project (HHCTCP) environmental impact statement (EIS), but did not identify this location as a site that would experience moderate or severe noise impacts. Therefore, it is recommended that HPHA consult with HART regarding the possibility of using sound absorptive materials on the guideway or additional mitigation measures in order to reduce the noise levels specifically adjacent to the Puʻuwai Momi housing project. The use of sound absorptive material along other sections of the guideway were addressed in the EIS and may provide examples of cases where noise levels must be reduced beyond that provided by wheel skirts and parapet walls. Additional noise attenuation features for the railway will help to alleviate the Normally Unacceptable noise levels expected at this site.

Roadway Noise Mitigation

Noise barriers such as walls or earthen berms, or a combination of both, are potential solutions to reducing the amount of noise that reaches the receiver. It is recommended that HPHA conduct further investigation regarding the effectiveness of barrier performance at the Puʻuwai Momi housing project by conducting a site-specific noise level assessment. In order to assist housing authorities in this evaluation, HUD created a barrier performance module that provides the barrier's effectiveness on noise reduction based on inputs such as; barrier height, noise source height, observer height, distance to the noise source, distance to the noise barrier, distance to the observer, and the line of sight angle. It is possible that barrier implementation

may reduce the calculated site DNL below the threshold of 65 decibels, bringing the housing project within acceptable standards.

If the use of barriers is not possible then the only alternative available is to provide noise reduction measures within the structures to reduce the interior noise exposure level. Modifying residences to air-conditioned or forced ventilation, instead of natural ventilation, is one possible mitigation measure. This measure also entails replacement of jalousie windows with standard storm windows with acoustical gaskets. This approach is the least desirable because the Puʻuwai Momi housing project does have outdoor areas and activities associated with them that remain exposed to high noise levels.

HAWAII PUBLIC HOUSING AUTHORITY

ENVIRONMENTAL REVIEW

HALE LAULIMA

Pearl City, O`ahu

AMP 30
HPHA No. 1027

Prepared for:

State of Hawaii
Hawaii Public Housing Authority

Prepared by:

HHF PLANNERS
places for people

U.S. Department of Housing and Urban Development
451 Seventh Street, SW
Washington, DC 20410
www.hud.gov

espanol.hud.gov

Environmental Review for Activity/Project that is Categorically Excluded Subject to Section 58.5

Pursuant to 24 CFR 58.35(a)

Project Information

Project Name: Hale Laulima (AMP 30)

Responsible Entity: Hawaii Public Housing Authority
1002 North School Street
Honolulu, HI 96817

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

State/Local Identifier: State of Hawai‘i

Preparer: Mr. Scott Ezer, Vice President
HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawai‘i 96813

Certifying Officer Name and Title: Mr. David Y. Ige
Governor, State of Hawai‘i

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

Consultant (if applicable): HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawai‘i 96813

Direct Comments to: Mr. Hakim Ouansafi, Executive Director
Hawaii Public Housing Authority
1002 North School Street
Honolulu, Hawai‘i 96817

Project Location: 1184 Waimano Home Road
Pearl City, Hawai‘i 96782

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]**:**

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a "major construction activity" and would involve one or a combination of several HUD designated categories of actions.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent;
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons;
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland;
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation;
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls);
7. Interior and exterior renovations and rehabilitation;
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site;
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Level of Environmental Review Determination:

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.5. Compliance with and completion of conformance determinations for other statute, executive order, or regulation has been completed and support the Categorical Exclusion.

Funding Information

Grant Number	HUD Program	Funding Amount
To be determined	Capital Fund	To be determined
To be determined	Economic Development Initiative Special Project Grant	To be determined
To be determined	Other Grants	To be determined

Estimated Total HUD Funded Amount:

To be determined by HUD using a formula and based upon Federal budget.

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]**:**

Depends upon funds available.

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	*The project is not within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.*
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☒	*The State of Hawai'i does not have any designated coastal barrier resource units. (http://www.fws.gov/CBRA/Maps/Mapper.html)*
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes ☐ No ☒	*As indicated in the Flood Insurance Rate Panel 15003C0239G, Revised January 1, 2011, this project is located in Zone D (unstudied areas where flood hazards are undetermined, but flooding is possible). Based on its description, this project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.*

STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5		
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes ☐ No ☒	*The State of Hawai'i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. EPA's Green Book for currently designated "nonattainment areas" as of June 2015. Planned repair and rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.*
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes ☐ No ☒	*Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai'i's Coastal Zone Management (CZM) program.*
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☐ No ☒	*There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.*
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes ☒ No ☐	*The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices, while project-specific mitigation measures are identified in the following section.*
Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes ☐ No ☒	*There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.*

Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes ☐ No ☒	*The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.*
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes ☐ No ☒	*The project site is located in Zone D, unstudied areas where flood hazards are undetermined, but flooding is possible. A field inspection and information obtained from the property manager confirmed no major flooding issues within the project site.*
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes ☐ No ☒	*Subject housing site was first occupied in 1981 and is 34 years old. To be eligible for listing in the National Register of Historic Places (NRHP), a property must meet the National Register criteria for evaluation which involves examining its integrity, significance, and age (generally at least 50 years old). Due to its age, this housing project does not meet the eligibility criteria to be evaluated for the NRHP. In a letter to the State Historic Preservation Officer dated July 23, 2015, the HPHA determined that no historic properties would be affected by repair and rehabilitation improvements for this housing project. No comments or objections about this no effect determination were received.*
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes ☐ No ☒	*The project site is not situated along a highway or major arterial roadway that has a high volume of vehicular traffic that may generate significant noise. The HUD noise calculator estimated noise levels at the project site to be 49.2 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.*
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes ☐ No ☒	*The housing project is located within the O‘ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation.*

Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☐ No ☒	*There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.* *(http://www.fws.gov/wetlands/data/mapper.HTML)*
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes ☐ No ☒	*There are no Wild and Scenic Rivers in Hawai'i, which excludes this project from mitigation or formal consultation requirements (http://www.rivers.gov/map.php)*
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes ☐ No ☒	*Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, these improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects on minority populations and low-income populations. Improvements should benefit low-income and minority populations living within this housing project.*

Field Inspection (Date and completed by)**:** June 18, 2015
Questor Lau, Planner
HHF Planners

Summary of Findings and Conclusions:

Repair and rehabilitation improvements implemented for this existing housing project by HPHA should not result in significant environmental impacts based upon research data collected, a field inspection, consultation with the site manager and maintenance staff, consultation with pertinent resource agencies, and prior HPHA experience implementing repair and rehabilitation improvements. Therefore, repair and rehabilitation improvements would comply and be consistent with the statutes, executive orders, and regulations addressed. Furthermore, HPHA would evaluate improvements planned to ensure the work is consistent with the designated categories of actions described under the project description section. Compliance with these factors evaluated are further addressed in the attached Source Documentation Statutory Worksheet along with relevant technical reports/assessments.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Law, Authority, or Factor	Mitigation Measure
Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	*Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.* *Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.* *Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.* *Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.* *Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo'i, impoundments or other vegetated water bodies.* *1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols.* *2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.*

	3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area. *In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.* *<u>Additional Measures:</u> The following additional measures would be implemented:* *1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.*

Determination:

☒ This categorically excluded activity/project converts to **EXEMPT** per Section 58.34(a)(12), because it does not require any mitigation for compliance with any listed statutes or authorities, nor requires any formal permit or license; **Funds may be committed and drawn down after certification of this part** for this (now) EXEMPT project; OR

☐ This categorically excluded activity/project cannot convert to Exempt status because one or more statutes or authorities listed at Section 58.5 requires formal consultation or mitigation. Complete consultation/mitigation protocol requirements, **publish NOI/RROF and obtain "Authority to Use Grant Funds"** (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR

☐ This project is not categorically excluded OR, if originally categorically excluded, is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

Preparer Signature: Scott Ezer Date: 11-10-15

Name/Title/Organization: Mr. Scott Ezer, Vice President
HHF Planners

Responsible Entity Agency Official Signature:

David Y. Ige Date: APR 28 2016

Name/Title: Mr. David Y. Ige, Governor

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

Hale Laulima (HA # 1027)

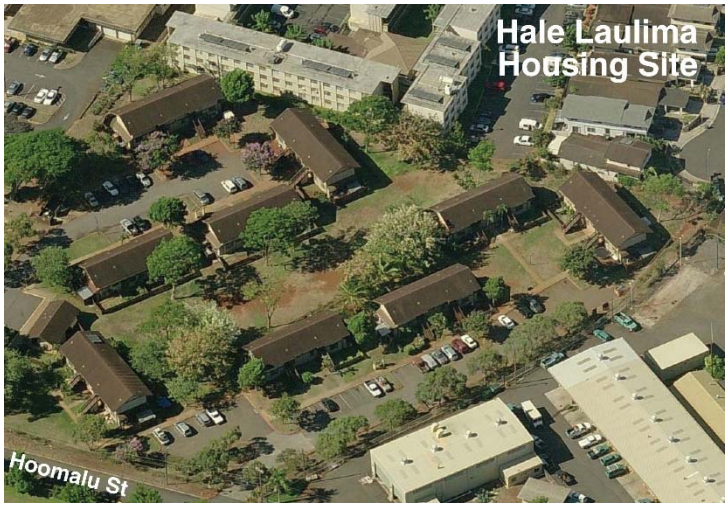
TMK: (1) 9-7-094:025

Hawai‘i Public Housing Authority (HPHA) Environmental Review

SOURCE DOCUMENTATION (SD) STATUTORY WORKSHEET

Site Visit Date: June 18, 2015
Prepared By: Questor Lau

The Hale Laulima housing project is located in the Pearl City district on the island of O‘ahu. Pearl City is located between the residential communities of Waipio to the west, and ‘Aiea to the east. The housing project site is situated off Waimano Home Road with access provided by Ho‘omalu Street. The property is bordered by the Pearl City Bus Complex to the north, the Henry and Jeanette Weinberg Pearl City Complex to the east, and a residential area to the south. This housing project is within HPHA’s Asset Management Project (AMP) 30 which includes four other housing projects in the vicinity of Pearl Harbor on the South Shore of O‘ahu.



Hale Laulima was first occupied in 1981 and has a street address of 1184 Waimano Home Road. This property consists of 3.96 acres, and it is identified as Tax Map Key (TMK) No. (1) 9-7-094:025. The housing project is comprised of nine 2-story townhome buildings providing a total of 36 housing units having a range of 2-bedrooms and 3-bedrooms per unit, and a one-story common area building which houses administrative offices and management operations. The State’s land use designation for the property is the “Urban District,” and the City’s zoning for the site is A-1 Low-Density Apartment.

The project site is not located within a tsunami evacuation zone, and the entire site is located in Flood Zone D, an area of undetermined flood hazard (Community Panel Number 15003C0239G, Revised January 1, 2011). The property is adjacent to Flood Zone X, an area of minimal flood hazard.

The following figures in Exhibit A provide supporting information on this housing project:

Figure 1: Location Map
Figure 2: TMK Map
Figure 3: Site Map
Figure 4: Flood Map

COMPLIANCE FACTORS

I. AIRPORT CLEAR ZONES AND ACCIDENT POTENTIAL ZONES (24 CFR PART 51D)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The housing project does not lie within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: 24 CFR 51 (D).

Honolulu International Airport Master Plan - 2010 (August 1994), State Department of Transportation, Airports Division;

*Hawai`i Airports and Flying Safety Guide (2012-13, Fifth Edition, Revision 1)* Hawai`i Department of Transportation, Airports Division; and

http://hidot.hawaii.gov/airports/files/2013/01/Airport-Safety-Guide-2012-2013-5rev1.pdf

II. COASTAL BARRIER RESOURCES (COASTAL BARRIER IMPROVEMENT ACT OF 1990 [16 USC 3501])

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i does not have any designated coastal barrier resource units.

SUPPORTING DOCUMENTATION:

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/cbra/maps/mapper.html (Date accessed: 6/30/15).

III. FLOOD INSURANCE (FLOOD DISASTER PROTECTION ACT OF 1973 AND NATIONAL FLOOD INSURANCE REFORM ACT OF 1994 [42 USC 4001-4128 AND 42 USC 5154a])

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program.

As indicated in the Flood Insurance Rate Panel 15003C0239G, Revised January 1, 2011, this project is located in Zone D (unstudied areas where flood hazards are undetermined, but flooding is possible). Based on its description, this project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal signs of previous flooding problems. An interview with the Maintenance Supervisor also determined that major ponding or flooding issues are currently not an issue for the project site.

Printed: Flood Insurance Rate Map, Community Panel Number 1551660880C, Revised: January 19, 2011, FIRM Index Date: November 05, 2014.

Hawai`i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 7/27/15)

IV. CLEAN AIR ACT (40 CFR PARTS 6, 51, 93)

SUPPORTING DOCUMENTS	
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. Environmental Protection Agency's Green Book for currently designated "nonattainment areas" as of June 2015. Planned rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.

SUPPORTING DOCUMENTATION:

Printed: *State of Hawai‘i Annual Summary 2013 Air Quality Data*. State of Hawai'i, Department of Health, July 2014.

U.S. Environmental Protection Agency website at: http://epa.gov/airquality/greenbk/

V. COASTAL ZONE MANAGEMENT ACT (16 USC 1451, SECTIONS 307 (C), (D)

CONTACT:

Mr. John Nakagawa
Office of Planning
Department of Business, Economic Development & Tourism
State of Hawai‘i
P.O. Box 2359
Honolulu, Hawai'i, 96804-2359

	SUPPORTING DOCUMENTS
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai‘i's Coastal Zone Management (CZM) program.

SUPPORTING DOCUMENTATION:

Contact: In an email to the Office of Planning (OP) dated July 27, 2015, the HPHA determined that the use of HUD funds for the implementation of repair and rehabilitation improvements does not require review for consistency with Hawai‘i's CZM program. The OP confirmed this determination in an email dated July 28, 2015 and it is included in the Appendices.

Experience: Previous reviews conducted by OP in 2003, 2005, and 2010 determined that projects receiving federal funds from HUD do not require CZM federal consistency review. OP's current determination confirms this condition is still applicable. Copies of these prior documentations are included in the Appendices.

VI. CONTAMINATION AND TOXIC SUBSTANCES (24 CFR PART 50.3 & 58.5(I)(2))

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Project Not Affected.

There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.

SUPPORTING DOCUMENTATION:

Field: A site inspection and interview with the Asset Management Project (AMP) Manager and Maintenance Supervisor revealed no presence of any toxic or radioactive materials on the project site that warrant concern. There is an unmarked, secured storage building at the south-east portion of the property.

Study: Environmental Data Resources, Inc. (EDR), conducted a search of available environmental records and prepared a Radius Map Report (Inquiry Number 4237094.2s, March 17, 2015). EDR reviewed more than 25 federal and statewide regulatory databases for information regarding the treatment, storage, disposal and release of toxic chemicals at the project site and within specific radii (generally 1 mile) of the site. A Detail Map within the EDR report documents those sites identified within a 0.25 mile radius of the project site. The EDR report in Exhibit B includes the results of their research findings.

The EDR report notes the following activities within a 0.125 mile radius of the project site: Board of Water Supply Mānana Corp Yard was classified as a Conditionally Exempt Small Quantity Generator (Handler). No violations were found for this site. Oʻahu Transit Services situated at Waimano Home Rd was classified as a Small Small Quantity Generator (Handler). Wastes include: batteries, lamps, pesticides, thermostats, ignitable waste, lead, and nonhalogenated solvents. No violations we found for this site. City and County of Honolulu Pearl City Bus Facility contains several currently in use tanks (52,000 gallons total) that store gasoline and diesel.

The Pearl Harbor Naval Complex, US Naval Command, is identified as a National Priority List site (NPL) that is located within 0.125 miles of this housing site. The NPL is the list of national priorities among the known releases or threatened releases of hazardous substances, pollutants, or contaminants throughout the U.S., and is intended primarily to guide the EPA in determining which sites warrant further investigation such as this naval station. However, this project site was not identified as a Formerly Used Defense Site (FUDS) by the U.S. Army Corps of Engineers and is not subject to any cleanup actions for Department of Defense-generated contamination.

VII. ENDANGERED SPECIES (50 CFR PART 402)

CONTACT:
Mr. Loyal Mehrhoff, Field Supervisor
Pacific Islands Administrator
Fish and Wildlife Services
U.S. Department of the Interior
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawai'i 96813
Tel. #: 792-9400

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Adverse Effect Subject to Mitigation

The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices.

SUPPORTING DOCUMENTATION:

Contact: A letter from the HPHA dated July 24, 2015 was submitted to the Pacific Island Administrator for the FWS determining that repair and rehabilitation improvements that may be implemented using HUD funds for this housing project would have no likelihood of effect on any listed species or proposed species, or existing or proposed designated critical habitat subject to certain measures. Concurrence with this determination along with proposed minimization and avoidance measures was received from the FWS in a letter dated September 28, 2015 which is included in the Appendices. This housing project is subject to the following minimization and avoidance measures.

Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.

Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.

Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.

Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and

maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.

Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo‘i, impoundments or other vegetated water bodies.

1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols.
2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.
3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.

In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.

Additional Measures: The following additional measures would be implemented:

1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.

Experience: The FWS was previously consulted as part of environmental reviews that were completed in 2005 (39 housing projects) and 2010 (70 housing projects) which supported the determination that repair and rehabilitation improvements would either: 1) have no likelihood of effect for certain housing projects; or 2) not likely adversely affect federally listed species or critical habitat for certain housing projects subject to mitigative measures. A summary of these consultation efforts follows.

2005 Consultation: In a letter dated July 15, 2005, the Housing and Community Development Corporation of Hawai‘i (predecessor to the HPHA), determined that the implementation of minor repair and rehabilitation improvements for 39 housing projects would not have an adverse effect on federally-listed species or critical habitat. In a letter dated August 11, 2005, the FWS concurred with the HCDCH determination.

2010 Consultation: In a letter dated May 17, 2010, the HPHA informed the FWS that HUD funds would be used to immediately implement repair and rehabilitation improvements for six housing projects on O‘ahu and the island of Hawai`i. In a subsequent letter dated May 21, 2010, the FWS was informed that HPHA would be using HUD funds to implement minor repair and rehabilitation improvements for 64 projects throughout the State. In both letters, the HPHA determined that the repair and rehabilitation improvements were not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat. Based on further consultation and a

meeting with FWS staff on June 24, 2010, the HPHA determined that repair and rehabilitation improvements for most of their housing projects would not likely adversely affect any listed or proposed species, or existing or proposed designated habitat, subject to various mitigative measures for certain housing projects.

VIII. EXPLOSIVE AND FLAMMABLE OPERATIONS (24 CFR PART 51C)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

SUPPORTING DOCUMENTATION:

Field: Field inspection was limited to the exterior of residential buildings and associated structures for this housing project. No above-ground explosive or flammable material storage containers in excess of 100 gallons were observed at the site.

Printed: 24 CFR Part 51, Subpart C addresses acceptable separation distance from above-ground explosive or flammable fuels or chemical containers. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

IX. FARMLANDS PROTECTION (7 CFR PART 658)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. Since the property consists of an existing housing development within an urbanized area, no farmlands would be impacted by the implementation of repair and rehabilitation improvements.

Printed: The property is designated for "Urban" use by the State Land Use Commission and the County's zoning for the parcel is RD-3.75 Double-Family Residential District.

Hawai`i Office of Planning website at: http://planning.hawaii.gov/gis/
(Date accessed: 6/30/2015)

X. FLOODPLAIN MANAGEMENT (EXECUTIVE ORDER 11988, 24 CFR PART 55)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program

The project site is located in Zone D, unstudied areas where flood hazards are undetermined, but flooding is possible. A field inspection and information obtained from the property manager confirmed no major flooding issues within the project site.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal signs of previous flooding problems. An interview with the Maintenance Supervisor also determined that no major ponding or flooding issues have occurred on the project site.

Printed: Flood Insurance Rate Map, County of Hawai'i, Hawai'i Community Panel Number 1551660880C, Revised: January 19, 2011, FIRM Index Date: November 05, 2014.

Hawai`i Department of Land and Natural Resources website at:
http://gis.hawaiinfip.org/FHAT/ (Date accessed7/21/15)

XI. HISTORIC PRESERVATION (NATIONAL HISTORIC PRESERVATION ACT OF 1966; SECTIONS 106 AND 110; 36 CFR, PART 800)

CONTACT:

Ms. Suzanne Case, Chairperson
Department of Land and Natural Resources (DLNR)
State of Hawai‘i
1151 Punchbowl Street
Honolulu, Hawai‘i 96813
Tel. #: 587-0400

SUPPORTING DOCUMENTS

X	Field
X	Contact
X	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Effect on Historic Properties

Hale Ho‘olulu was initially occupied in 1981 and is 34 years old. To be eligible for listing in the National Register of Historic Places (NRHP), a property must meet the National Register criteria for evaluation which involves examining its integrity, significance, and age (generally at least 50 years old). Due to its age, this housing project does not meet the eligibility criteria to be evaluated for the NRHP. In a letter to the State Historic Preservation Officer (SHPO) dated July 23, 2015, the HPHA determined that no historic properties would be affected (no effect) by repair and rehabilitation improvements for this housing project. No comments or objections about this no effect determination were received.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not locate any existing or potential archaeological sites (e.g., heiau) or cultural features on the property. An interview with the property manager and maintenance supervisor indicates that no known sites or features are present on the property.

Contact: A letter from the HPHA dated July 23, 2015, which is included in the Appendix, was submitted to the State Historic Preservation Officer [SHPO] (Chair of State Board of Land and Natural Resources) as part of Section 106 consultation determining that no historic properties would be affected (no effect) by repair and rehabilitation improvements that may be implemented using HUD funds for this housing project. The SHPO did not submit any comments or objections on the “no effect” determination for this housing project, which included follow-up e-mails with the State Historic Preservation Division regarding a response. On September 28, 2015, notice of HPHA’s determination was also distributed to several native Hawaiian organizations and the various County Planning Departments. No concerns or opposition to this determination was received.

Printed: A review of the U.S. National Parks Service website for the National Register of Historic Places did not identify any historic properties within the limits of this housing project. A similar review of the State DLNR website for the State Register of Historic Places revealed that there are no historic properties within the project site.

National Register: U.S. National Park Service website at:
http://www.nps.gov/nr/research/ (Date accessed: 7/2/15).

State Register: Hawai`i Department of Land and Natural Resources website at:
http://dlnr.hawaii.gov/shpd/state-register/ (Date accessed: 7/2/15).

Experience: In letter to the State Historic Preservation Officer (SHPO) dated April 19, 2011, the HPHA determined that minor repair and rehabilitation improvement at 57 public housing projects throughout Hawai'i (including this housing site) would have "no effect" on historic properties. The SHPO had no comments or objections on the "no effect" determination.

XII. NOISE ABATEMENT CONTROL (24 CFR PART 51B)

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Within HUD Noise Standards

The project site is not situated along a highway or major arterial roadway that has a high volume of vehicular traffic that may generate significant noise. The HUD noise calculator estimated noise levels at the project site to be 49.2 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

SUPPORTING DOCUMENTATION:

Field: There were no significant noise generating sources identified within the project site during the site inspection. The subject housing site is located at the end of a cul-de-sac (Lokahi Place) and is expected to have low volumes of traffic because traffic in this area would only be to existing residences. Furthermore, an interview with the AMP Manager and Maintenance Supervisor did not identify any loud noise producing sources in the area. As a result, notable noise sources are predominantly associated with vehicular traffic along adjacent roadways. Traffic noise did not appear significant during the site visit.

Study: The HUD day/night noise level calculator was used to estimate approximate traffic noise levels at the project site. Waimano Home Road is a primary County roadway located approximately 310 feet east of the project site. Waimano Home Road serves vehicular traffic entering and exiting Pearl City along with providing access to other surrounding urban areas. The project site is accessed through a smaller unnamed roadway that connects to Waimano Home Road and would have considerably less average daily traffic because it only serves a few properties in the area and terminates near the project site. Given the distance of the center line of Waimano Home Road to the project site (about 310 feet), the estimated noise levels at the project site using this HUD calculator was 49.2 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

XIII. SOLE SOURCE AQUIFER (40 CFR PART 149)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact on Sole Source Aquifer

The housing project is located within the O'ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation. However, if exceptional circumstances require compliance steps with any of these authorities, such compliance must be established and documented prior to approving the site-specific loan or grant.

SUPPORTING DOCUMENTATION:

Printed: This determination was based upon review of the Sole Source Aquifer Memorandum of 4/30/90 (Sections II.B.1 and II.B.2) and consideration of the type of rehabilitation related improvements that would be conducted for this project.

XIV. WETLANDS PROTECTION (EXECUTIVE ORDER 11990)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the property did not identify the presence of any wetlands.

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/wetlands/data/mapper.html (Date accessed 7/23/2015).

XV. WILD AND SCENIC RIVERS ACT (16 USC 1271, SECTION 7 (B), (C))

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no Wild and Scenic Rivers in Hawai‘i, which excludes this project from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: National Wild and Scenic Rivers System website at: http://www.rivers.gov/index.php (Date accessed: 6/30/2015).

XVI. ENVIRONMENTAL JUSTICE (EXECUTIVE ORDER NO. 12898)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Conflict with Requirements

Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, repair and rehabilitation improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations. Repair and rehabilitation improvements should benefit low-income and minority populations living within this housing project.

SUPPORTING DOCUMENTATION:

Printed: Executive Order 12898.

U.S. Department of Housing and Urban Development website at: https://www.hudexchange.info/environmental-review/environmental-justice/

EXHIBIT A

Location Map, TMK Map, Site Map, Flood Map, and Site Photos

Source: State of Hawaiʻi GIS Data and Google Earth Pro - 1/12/13

HONOLULU RAIL TRANSIT

Transit Corridor

Transit Station

HPHA No. 1027 - Hale Laulima (AMP 30)

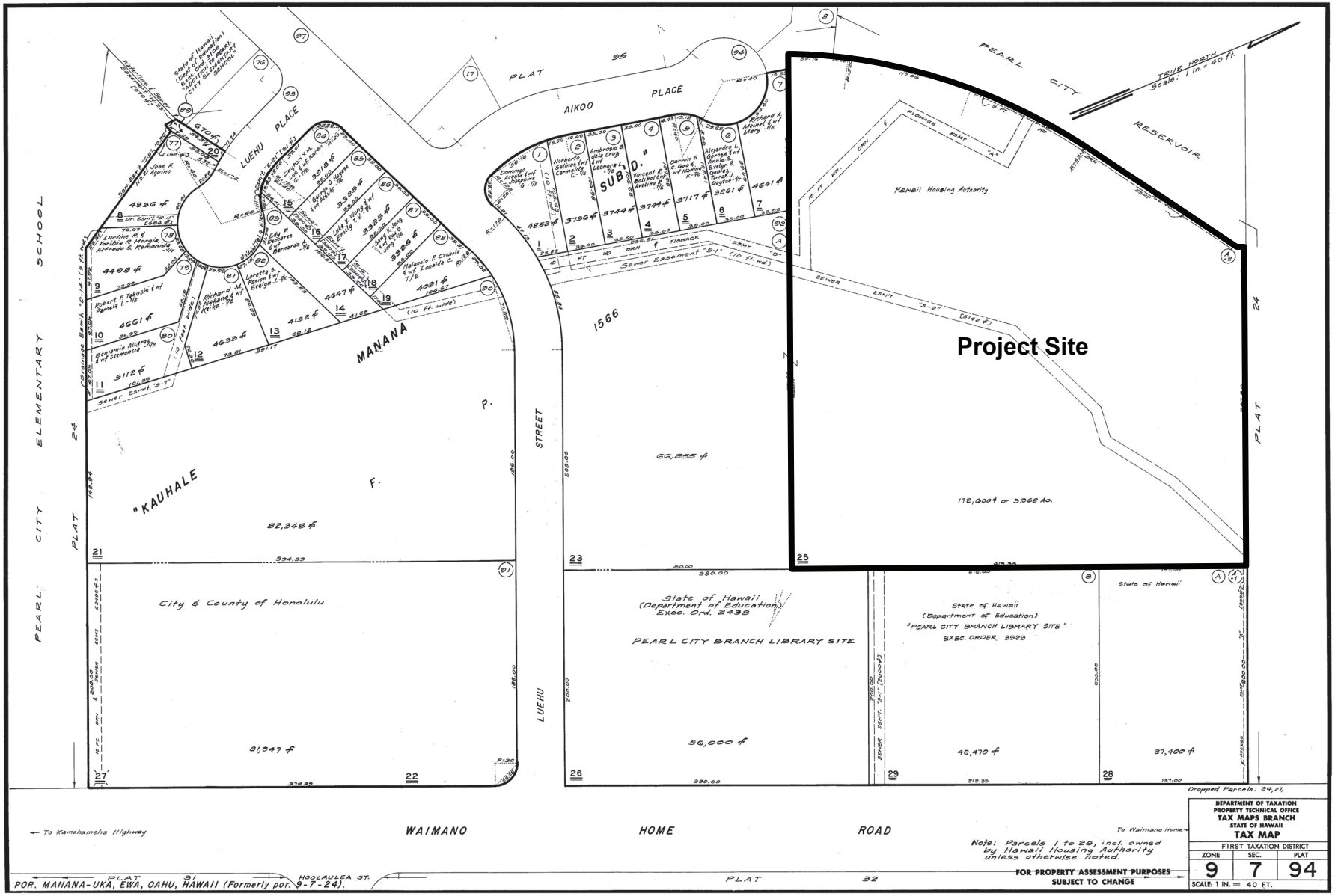
Figure 1 - Project Location Map

Pearl City, Oʻahu

1,000 FT

FEET

HHF PLANNERS
places for people



HPHA No. 1027 - Hale Laulima (AMP 30)

Figure 2 - TMK Map

Pearl City, O'ahu

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1027 - Hale Laulima (AMP 30)

Figure 3 - Site Map

Pearl City, O'ahu

50 FEET

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

LEGEND

Zone D - Unstudied Area

HPHA No. 1027 - Hale Laulima (AMP 30)

Figure 4 - Flood Map

Pearl City, O'ahu

50 FEET

HHF PLANNERS
places for people

HALE LAULIMA
SITE PHOTOS

Subject housing site feeds into Waimano Home Road, a county minor arterial road adjacent to the housing site

Hoomalu Street (fronting the subject housing site) and surrounding neighborhood

Plaque, dated 1980

Entrance to housing site

Construction sign at entry, announcing work at the rear of the housing site

Trash pickup area

HALE LAULIMA
SITE PHOTOS

Standard curbing along parking areas channel runoff away from housing units

Wide open spacing between housing structures

Project's southern boundary, side yard condition (apartment on adjacent property, at left)

Rear buildings ungoing renovation at time of site visit

Retaining wall and fencing along southerwestern corner of site.

Storage Area and workshop

EXHIBIT B

EDR Radius Map Report

Hale Laulima
1184 Waimano Home Rd.
Pearl City, HI 96782

Inquiry Number: 4237094.2s
March 17, 2015

EDR Summary Radius Map Report

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

FORM-NULL-PVC

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

1184 WAIMANO HOME RD.
HONOLULU County, HI 96782

COORDINATES

Latitude (North):	21.3980000 - 21' 23' 52.80''
Longitude (West):	157.9699000 - 157' 58' 11.64''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	606776.6
UTM Y (Meters):	2366407.5
Elevation:	98 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	USGS 7.5 min quad index

MAPPED SITES SUMMARY

Target Property Address:
1184 WAIMANO HOME RD.
, HI 96782

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
Reg	PEARL HARBOR NAVAL S		DOD	Same	3542, WSW
Reg	PEARL HARBOR NAVAL S		DOD	Same	1210, SSE
Reg	PEARL HARBOR NAVAL C	US NAVAL COMMAND	NPL, CERCLIS, US ENG CONTROLS, US INST CONTROL,...	Same	236, NNE
A1	BWS MANANA CORP YARD	1186 WAIMANO HOME RD	RCRA-CESQG, FINDS	Lower	464, East
A2	OAHU TRANSIT SERVICE	1200 WAIMANO HOME RD	RCRA-SQG, FINDS	Lower	530, ENE
A3	PEARL CITY BUS FACIL	1200 WAIMANO HOME RO	UST, Financial Assurance	Lower	530, ENE
B4	PEARL CITY POLICE ST	1100 WAIMANO HOME RD	LUST, UST, Financial Assurance	Lower	937, South
B5	PEARL CITY TEXACO	1099 WAIMANO HOME RD	SHWS, LUST, UST, Financial Assurance	Lower	943, South
C6	CCH DEPARTMENT OF FA	999 MAKOLU STREET	RCRA-SQG	Higher	1212, WNW
C7	SAM'S CLUB #6410	1019 MAKOLU ST	LUST, UST, Financial Assurance	Higher	1257, WNW
8	TESORO 2GO #61016	922 KAMEHAMEHA HWY	LUST, UST, Financial Assurance	Lower	1438, SSW
9	FUKUOKAS INC. (AKA P	905 KAMEHAMEHA HWY	LUST, UST	Lower	1489, SSW
D10	MID PAC PETROLEUM LL	826 KAMEHAMEHA HWY	LUST, UST, Financial Assurance	Lower	1745, SSE
D11	HOLIDAY ACTION GAS -	850 KAMEHAMEHA HWY	LUST, UST, SPILLS, Financial Assurance	Lower	1772, SSE
12	S. KURASHIGE	1015 LEHUA AVE	LUST, UST	Lower	1804, South
13	USDOD DRMO HAWAII	MANANA STORAGE AREA	RCRA-TSDF, CORRACTS, RCRA NonGen / NLR, PADS	Lower	1893, West
14	PEARL CITY FUEL ANNE	LEHUA AVE	CERCLIS	Lower	1949, WSW
15	PEARL CITY URBAN GAR	962 2ND ST	SHWS, ENG CONTROLS, INST CONTROL	Lower	2556, SSW
16	HICKAM POL ST21, SPI	LEHUA AVE & A ST	SHWS, INST CONTROL	Lower	3132, SSW
17	HICKAM POL ST02, SPI	96-130 FARRINGTON HW	SHWS	Lower	3563, West
18	HAWAII ARMY NATIONAL	96-1176 WAIHONA ST	SHWS	Lower	3833, NW
19	96-1217 WAIHONA STRE	96-1217 WAIHONA ST	SHWS, SPILLS, ENG CONTROLS, INST CONTROL	Lower	3891, NW
20	WATERFRONT MANOR	96-023 WAIAWA RD	SHWS	Lower	4491, SW
E21	CHEVRON WAIAU	475 KAMEHAMEHA AVE	SHWS, SPILLS, AIRS	Lower	4619, SE
E22	WAIAU GENERATING STA	475 KAMEHAMEHA HWY	RCRA-TSDF, CERC-NFRAP, CORRACTS, RCRA-SQG, 2020...	Lower	4619, SE
23	HICKAM POL ST14, SPI	606 LEHUA AVE	SHWS	Lower	4900, SSW

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: A review of the NPL list, as provided by EDR, and dated 12/16/2014 has revealed that there is 1 NPL site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PEARL HARBOR NAVAL C	***US NAVAL COMMAND***	***NNE 0 - 1/8 (0.045 mi.)***	***0***	***7***

Federal CERCLIS list

CERCLIS: A review of the CERCLIS list, as provided by EDR, and dated 10/25/2013 has revealed that there are 2 CERCLIS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PEARL HARBOR NAVAL C	***US NAVAL COMMAND***	***NNE 0 - 1/8 (0.045 mi.)***	***0***	***7***
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
PEARL CITY FUEL ANNE	LEHUA AVE	WSW 1/4 - 1/2 (0.369 mi.)	14	11

Federal RCRA CORRACTS facilities list

CORRACTS: A review of the CORRACTS list, as provided by EDR, and dated 12/09/2014 has revealed that

there are 2 CORRACTS sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
USDOD DRMO HAWAII	***MANANA STORAGE AREA***	***W 1/4 - 1/2 (0.359 mi.)***	***13***	***11***
WAIAU GENERATING STA	***475 KAMEHAMEHA HWY***	***SE 1/2 - 1 (0.875 mi.)***	***E22***	***12***

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: A review of the RCRA-TSDF list, as provided by EDR, and dated 12/09/2014 has revealed that there is 1 RCRA-TSDF site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
USDOD DRMO HAWAII	***MANANA STORAGE AREA***	***W 1/4 - 1/2 (0.359 mi.)***	***13***	***11***

Federal RCRA generators list

RCRA-SQG: A review of the RCRA-SQG list, as provided by EDR, and dated 12/09/2014 has revealed that there are 2 RCRA-SQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CCH DEPARTMENT OF FA	999 MAKOLU STREET	WNW 1/8 - 1/4 (0.230 mi.)	C6	8
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
OAHU TRANSIT SERVICE	***1200 WAIMANO HOME RD***	***ENE 0 - 1/8 (0.100 mi.)***	***A2***	***7***

RCRA-CESQG: A review of the RCRA-CESQG list, as provided by EDR, and dated 12/09/2014 has revealed that there is 1 RCRA-CESQG site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
BWS MANANA CORP YARD	***1186 WAIMANO HOME RD***	***E 0 - 1/8 (0.088 mi.)***	***A1***	***7***

Federal institutional controls / engineering controls registries

US ENG CONTROLS: A review of the US ENG CONTROLS list, as provided by EDR, and dated 09/18/2014 has revealed that there is 1 US ENG CONTROLS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PEARL HARBOR NAVAL C	***US NAVAL COMMAND***	***NNE 0 - 1/8 (0.045 mi.)***	***0***	***7***

US INST CONTROL: A review of the US INST CONTROL list, as provided by EDR, and dated 09/18/2014 has revealed that there is 1 US INST CONTROL site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PEARL HARBOR NAVAL C	***US NAVAL COMMAND***	***NNE 0 - 1/8 (0.045 mi.)***	***0***	***7***

State- and tribal - equivalent CERCLIS

SHWS: A review of the SHWS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 9 SHWS sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
PEARL CITY TEXACO	***1099 WAIMANO HOME RD***	***S 1/8 - 1/4 (0.179 mi.)***	***B5***	***8***
PEARL CITY URBAN GAR	***962 2ND ST***	***SSW 1/4 - 1/2 (0.484 mi.)***	***15***	***11***
HICKAM POL ST21, SPI	***LEHUA AVE & A ST***	***SSW 1/2 - 1 (0.593 mi.)***	***16***	***11***
HICKAM POL ST02, SPI	96-130 FARRINGTON HW	W 1/2 - 1 (0.675 mi.)	17	11
HAWAII ARMY NATIONAL	96-1176 WAIHONA ST	NW 1/2 - 1 (0.726 mi.)	18	12
96-1217 WAIHONA STRE	***96-1217 WAIHONA ST***	***NW 1/2 - 1 (0.737 mi.)***	***19***	***12***
WATERFRONT MANOR	96-023 WAIAWA RD	SW 1/2 - 1 (0.851 mi.)	20	12
CHEVRON WAIAU	***475 KAMEHAMEHA AVE***	***SE 1/2 - 1 (0.875 mi.)***	***E21***	***12***
HICKAM POL ST14, SPI	606 LEHUA AVE	SSW 1/2 - 1 (0.928 mi.)	23	13

State and tribal leaking storage tank lists

LUST: A review of the LUST list, as provided by EDR, and dated 12/16/2014 has revealed that there are 8 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAM'S CLUB #6410	***1019 MAKOLU ST***	***WNW 1/8 - 1/4 (0.238 mi.)***	***C7***	***9***
Facility Status: Site Cleanup Completed (NFA)				

Lower Elevation	Address	Direction / Distance	Map ID	Page
PEARL CITY POLICE ST	***1100 WAIMANO HOME RD***	***S 1/8 - 1/4 (0.177 mi.)***	***B4***	***8***
Facility Status: Site Cleanup Completed (NFA)				
PEARL CITY TEXACO	***1099 WAIMANO HOME RD***	***S 1/8 - 1/4 (0.179 mi.)***	***B5***	***8***
Facility Status: Site Cleanup Completed (NFA)				
TESORO 2GO #61016	***922 KAMEHAMEHA HWY***	***SSW 1/4 - 1/2 (0.272 mi.)***	***8***	***9***
Facility Status: Confirmed Release				
FUKUOKAS INC. (AKA P	***905 KAMEHAMEHA HWY***	***SSW 1/4 - 1/2 (0.282 mi.)***	***9***	***9***
Facility Status: Site Cleanup Completed (NFA)				
MID PAC PETROLEUM LL	***826 KAMEHAMEHA HWY***	***SSE 1/4 - 1/2 (0.330 mi.)***	***D10***	***10***
Facility Status: Site Cleanup Completed (NFA)				
HOLIDAY ACTION GAS -	***850 KAMEHAMEHA HWY***	***SSE 1/4 - 1/2 (0.336 mi.)***	***D11***	***10***
Facility Status: Site Cleanup Completed (NFA)				

Lower Elevation	Address	Direction / Distance	Map ID	Page
S. KURASHIGE	***1015 LEHUA AVE***	***S 1/4 - 1/2 (0.342 mi.)***	***12***	***10***
Facility Status: Site Cleanup Completed (NFA)				

State and tribal registered storage tank lists

UST: A review of the UST list, as provided by EDR, and dated 12/18/2014 has revealed that there are 4 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAM'S CLUB #6410	***1019 MAKOLU ST***	***WNW 1/8 - 1/4 (0.238 mi.)***	***C7***	***9***

Lower Elevation	Address	Direction / Distance	Map ID	Page
PEARL CITY BUS FACIL	***1200 WAIMANO HOME RO***	***ENE 0 - 1/8 (0.100 mi.)***	***A3***	***8***
PEARL CITY POLICE ST	***1100 WAIMANO HOME RD***	***S 1/8 - 1/4 (0.177 mi.)***	***B4***	***8***
PEARL CITY TEXACO	***1099 WAIMANO HOME RD***	***S 1/8 - 1/4 (0.179 mi.)***	***B5***	***8***

State and tribal institutional control / engineering control registries

ENG CONTROLS: A review of the ENG CONTROLS list, as provided by EDR, and dated 12/02/2014 has revealed that there is 1 ENG CONTROLS site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
PEARL CITY URBAN GAR	***962 2ND ST***	***SSW 1/4 - 1/2 (0.484 mi.)***	***15***	***11***

INST CONTROL: A review of the INST CONTROL list, as provided by EDR, and dated 12/02/2014 has revealed that there is 1 INST CONTROL site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
PEARL CITY URBAN GAR	***962 2ND ST***	***SSW 1/4 - 1/2 (0.484 mi.)***	***15***	***11***

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

DOD: A review of the DOD list, as provided by EDR, and dated 12/31/2005 has revealed that there are 2 DOD sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PEARL HARBOR NAVAL S		WSW 1/2 - 1 (0.671 mi.)	0	7

EXECUTIVE SUMMARY

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PEARL HARBOR NAVAL S		SSE 1/8 - 1/4 (0.229 mi.)	0	7

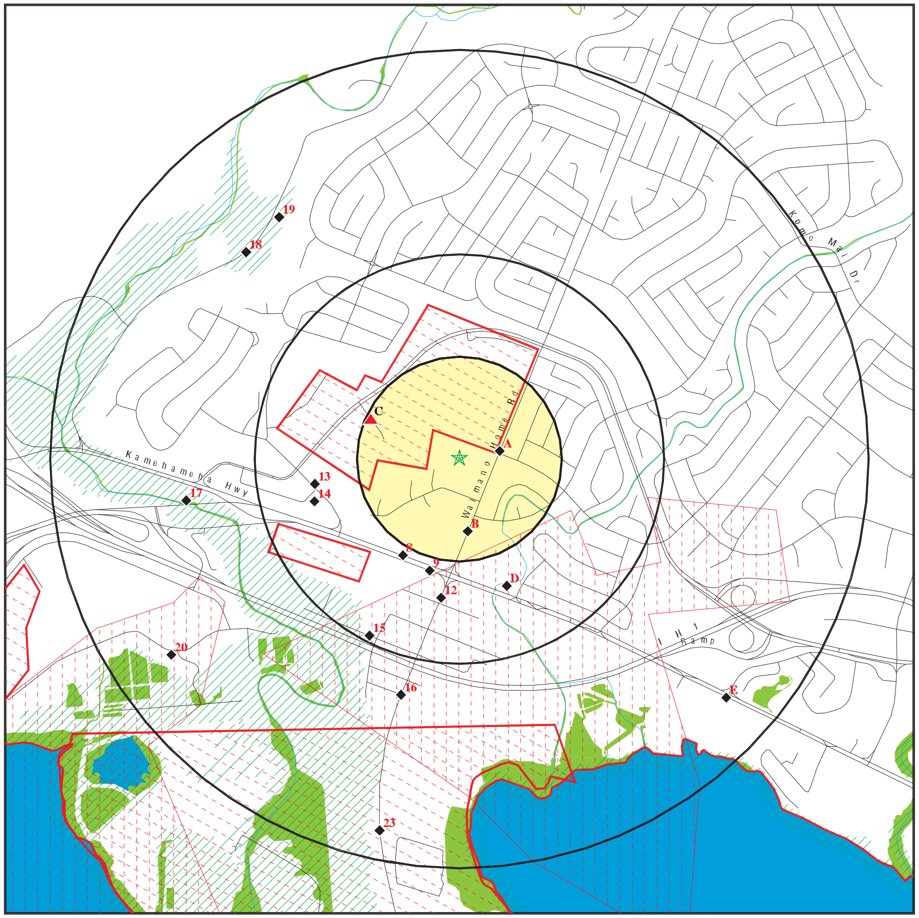
ROD: A review of the ROD list, as provided by EDR, and dated 11/25/2013 has revealed that there is 1 ROD site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PEARL HARBOR NAVAL C	***US NAVAL COMMAND***	***NNE 0 - 1/8 (0.045 mi.)***	***0***	***7***

Count: 9 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
MILILANI	1000893811	KIPAPA FUEL STORAGE ANNEX	OFF ROUTE 99 (KAMEHAMEHA HWY)	96789	CERCLIS
PEARL CITY	1006819602	WAIAWA STREAM TRIBUTARY, PEARL CIT	2ND ST	96782	SHWS, SPILLS
PEARL CITY	S110061553	HICKAM POL ST19, SPILL SITE ST19	ALONG LEHUA AVE, BETWEEN 2ND S	96782	SHWS
PEARL CITY	S110061550	HICKAM POL ST16, SPILL SITE ST16	BETWEEN KULEANA RD & ENTRANCE	96782	SHWS
PEARL CITY	S110061561	HICKAM POL ST27, SPILL SITE 27 (FO	S OF FARRINGTON HWY OFF-RAMP;	96782	SHWS
PEARL CITY	S110061562	HICKAM POL ST28, SPILL SITE 28 (FO	SW OF LEHUA AVE & A ST INTERSE	96782	SHWS
PEARL CITY	S106820987	WAIAWA SHAFT	WAIHONA ST	96782	SHWS
PEARL HARBOR	S115488691	CHEVRON'S PIPELINE OIL SPILL AT WA	KAMEHAMEHA HWY	96782	SHWS, INST CONTROL
PEARL HARBOR	S110061737	PHFISC, PEARL CITY FUEL ANNEX	LEHUA AVE	96782	SHWS, ENG CONTROLS

OVERVIEW MAP - 4237094.2S



0 1/4 1/2 1 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Hale Laulima	CLIENT: Helber , Hastert, and Fee Planners
ADDRESS: 1184 Waimano Home Rd. Pearl City HI 96782	CONTACT: Aaron Mann
	INQUIRY #: 4237094.2s
LAT/LONG: 21.398 / 157.9699	DATE: March 17, 2015 5:38 pm

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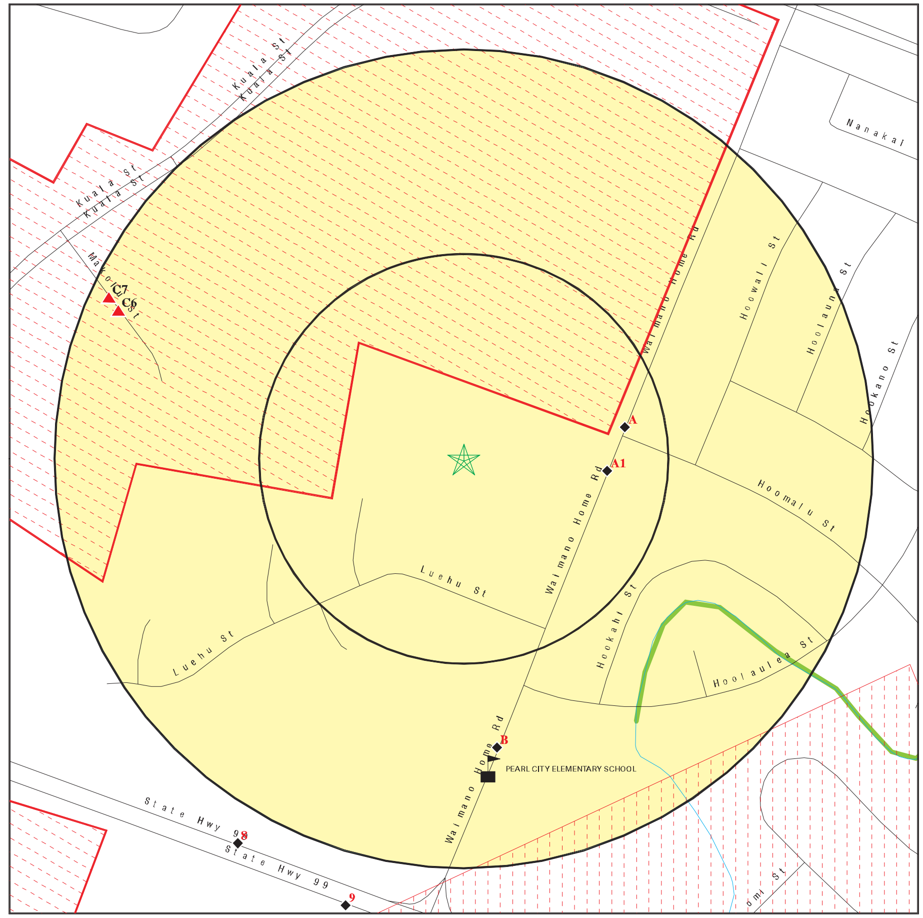
DETAIL MAP - 4237094.2S



0 1/16 1/8 1/4 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

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	INQUIRY #: 4237094.2s
LAT/LONG: 21.398 / 157.9699	DATE: March 17, 2015 5:38 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		1	0	0	0	NR	1
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		1	0	1	NR	NR	2
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	1	1	NR	2
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	1	NR	NR	1
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		1	1	NR	NR	NR	2
RCRA-CESQG	0.250		1	0	NR	NR	NR	1
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		1	0	0	NR	NR	1
US INST CONTROL	0.500		1	0	0	NR	NR	1
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
SHWS	1.000		0	1	1	7	NR	9
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	3	5	NR	NR	8
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250		1	3	NR	NR	NR	4

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		0	0	1	NR	NR	1
INST CONTROL	0.500		0	0	1	NR	NR	1
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	1	0	1	NR	2
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		1	0	0	0	NR	1
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		0	0	NR	NR	NR	0
EDR US Hist Cleaners	0.250		0	0	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
RGA HWS	TP		NR	NR	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
DOD Region WSW 1/2-1 3542 ft.	**PEARL HARBOR NAVAL STATION** **PEARL HARBOR NAVAL STATIO (County), HI** Click here for full text details	**DOD**	**CUSA147745 N/A**
DOD Region SSE 1/8-1/4 1210 ft.	**PEARL HARBOR NAVAL STATION** **PEARL HARBOR NAVAL STATIO (County), HI** Click here for full text details	**DOD**	**CUSA147744 N/A**
NPL Region NNE < 1/8 236 ft.	**PEARL HARBOR NAVAL COMPLEX** **US NAVAL COMMAND** **PEARL HARBOR, HI 96860** Click here for full text details **NPL** EPA Id: HI4170090076 **CERCLIS** EPA Id: HI4170090076	**NPL** **CERCLIS** **US ENG CONTROLS** **US INST CONTROL** **ROD** **PRP**	**1000707626** **HI4170090076**
A1 East < 1/8 0.088 mi. 464 ft. **Relative: Lower**	**BWS MANANA CORP YARD** **1186 WAIMANO HOME RD** **PEARL CITY, HI 96782** Click here for full text details **RCRA-CESQG** EPA Id: HIR000033308	**RCRA-CESQG** **FINDS**	**1004688958** **HIR000033308**
A2 ENE < 1/8 0.100 mi. 530 ft. **Relative: Lower**	**OAHU TRANSIT SERVICES INC PC** **1200 WAIMANO HOME RD** **PEARL CITY, HI 96782** Click here for full text details **RCRA-SQG** EPA Id: HIR000040527	**RCRA-SQG** **FINDS**	**1004688969** **HIR000040527**

A3 ENE < 1/8 0.100 mi. 530 ft. — **Relative: Lower**

PEARL CITY BUS FACILITY
1200 WAIMANO HOME ROAD
PEARL CITY, HI 96782

Database(s): **UST, Financial Assurance**
EDR ID Number: **U003762155**
EPA ID Number: **N/A**

Click here for full text details

UST
Facility Id: 9-203663
Tank Status: Currently In Use

B4 South 1/8-1/4 0.177 mi. 937 ft. — **Relative: Lower**

PEARL CITY POLICE STATION
1100 WAIMANO HOME RD
PEARL CITY, HI 96782

Database(s): **LUST, UST, Financial Assurance**
EDR ID Number: **U003221947**
EPA ID Number: **N/A**

Click here for full text details

LUST
Facility Id: 9-200116
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-200116
Tank Status: Permanently Out of Use
Tank Status: Currently In Use

B5 South 1/8-1/4 0.179 mi. 943 ft. — **Relative: Lower**

PEARL CITY TEXACO
1099 WAIMANO HOME RD
PEARL CITY, HI 96782

Database(s): **SHWS, LUST, UST, Financial Assurance**
EDR ID Number: **U001236135**
EPA ID Number: **N/A**

Click here for full text details

LUST
Facility Id: 9-200345
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-200345
Tank Status: Permanently Out of Use

C6 WNW 1/8-1/4 0.230 mi. 1212 ft. — **Relative: Higher**

CCH DEPARTMENT OF FACILITY MAINTENANCE
999 MAKOLU STREET
PEARL CITY, HI 96782

Database(s): **RCRA-SQG**
EDR ID Number: **1016956251**
EPA ID Number: **HIP000142265**

Click here for full text details

RCRA-SQG
EPA Id: HIP000142265

C7 WNW 1/8-1/4 0.238 mi. 1257 ft. — **Relative: Higher**

SAM'S CLUB #6410
1019 MAKOLU ST
PEARL CITY, HI 96782

Database(s): **LUST, UST, Financial Assurance**
EDR ID Number: **U004155571**
EPA ID Number: **N/A**

Click here for full text details

LUST
Facility Id: 9-202666
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-202666
Tank Status: Currently In Use
Tank Status: Permanently Out of Use

---

8 SSW 1/4-1/2 0.272 mi. 1438 ft. — **Relative: Lower**

TESORO 2GO #61016
922 KAMEHAMEHA HWY
PEARL CITY, HI 96782

Database(s): **LUST, UST, Financial Assurance**
EDR ID Number: **U003402881**
EPA ID Number: **N/A**

Click here for full text details

LUST
Facility Id: 9-201703
Facility Status: Confirmed Release

UST
Facility Id: 9-201703
Tank Status: Currently In Use
Tank Status: Permanently out of Use

---

9 SSW 1/4-1/2 0.282 mi. 1489 ft. — **Relative: Lower**

FUKUOKAS INC. (AKA PEARL CITY TAVERN)
905 KAMEHAMEHA HWY
PEARL CITY, HI 96782

Database(s): **LUST, UST**
EDR ID Number: **U001236376**
EPA ID Number: **N/A**

Click here for full text details

LUST
Facility Id: 9-201665
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-201665
Tank Status: Permanently Out of Use

D10
SSE
1/4-1/2
0.330 mi.
1745 ft.

Relative: Lower

MID PAC PETROLEUM LLC 255069 (PREV: HI-WAY SERVICE)
826 KAMEHAMEHA HWY
PEARL CITY, HI 96782

LUST
UST
Financial Assurance

U001236035
N/A

Click here for full text details

LUST
Facility Id: 9-200033
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-200033
Tank Status: Permanently out of Use
Tank Status: Permanently Out of Use
Tank Status: Currently in Use

D11
SSE
1/4-1/2
0.336 mi.
1772 ft.

Relative: Lower

HOLIDAY ACTION GAS - PEARL CITY
850 KAMEHAMEHA HWY
PEARL CITY, HI 96782

LUST
UST
SPILLS
Financial Assurance

U001235482
N/A

Click here for full text details

LUST
Facility Id: 9-101430
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-101430
Tank Status: Permanently Out of Use

12
South
1/4-1/2
0.342 mi.
1804 ft.

Relative: Lower

S. KURASHIGE
1015 LEHUA AVE
PEARL CITY, HI 96782

LUST
UST

U003541840
N/A

Click here for full text details

LUST
Facility Id: 9-201702
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-201702
Tank Status: Permanently Out of Use

13
West
1/4-1/2
0.359 mi.
1893 ft.

Relative: Lower

USDOD DRMO HAWAII
MANANA STORAGE AREA WAIMANO
PEARL CITY, HI 96782

RCRA-TSDF
CORRACTS
RCRA NonGen / NLR
PADS

1000208488
HI3170090002

Click here for full text details

RCRA-TSDF
EPA Id: HI3170090002

RCRA NonGen / NLR
EPA Id: HI3170090002

14
WSW
1/4-1/2
0.369 mi.
1949 ft.

Relative: Lower

PEARL CITY FUEL ANNEX
LEHUA AVE
PEARL CITY, HI 96782

CERCLIS

1000363837
HI3170090010

Click here for full text details

CERCLIS
EPA Id: HI3170090010

15
SSW
1/4-1/2
0.484 mi.
2556 ft.

Relative: Lower

PEARL CITY URBAN GARDEN CENTER
962 2ND ST
PEARL CITY, HI 96782

SHWS
ENG CONTROLS
INST CONTROL

S108008598
N/A

Click here for full text details

16
SSW
1/2-1
0.593 mi.
3132 ft.

Relative: Lower

HICKAM POL ST21, SPILL SITE ST21 & VALVE PIT 29
LEHUA AVE & A ST
PEARL CITY, HI 96782

SHWS
INST CONTROL

S110061555
N/A

Click here for full text details

17
West
1/2-1
0.675 mi.
3563 ft.

Relative: Lower

HICKAM POL ST02, SPILL SITE ST02 & VALVE PIT 26
96-130 FARRINGTON HWY
PEARL CITY, HI 96782

SHWS

S110061536
N/A

Click here for full text details

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
18 **NW** **1/2-1** **0.726 mi.** **3833 ft.** **Relative:** **Lower**	**HAWAII ARMY NATIONAL GUARD WAIAWA GULCH** **96-1176 WAIHONA ST** **PEARL CITY, HI 96782** Click here for full text details	**SHWS**	**S108008523** **N/A**
19 **NW** **1/2-1** **0.737 mi.** **3891 ft.** **Relative:** **Lower**	**96-1217 WAIHONA STREET** **96-1217 WAIHONA ST** **PEARL CITY, HI** Click here for full text details	**SHWS** **SPILLS** **ENG CONTROLS** **INST CONTROL**	**S111677041** **N/A**
20 **SW** **1/2-1** **0.851 mi.** **4491 ft.** **Relative:** **Lower**	**WATERFRONT MANOR** **96-023 WAIAWA RD** **PEARL CITY, HI 96782** Click here for full text details	**SHWS**	**1006819591** **N/A**
E21 **SE** **1/2-1** **0.875 mi.** **4619 ft.** **Relative:** **Lower**	**CHEVRON WAIAU** **475 KAMEHAMEHA AVE** **PEARL CITY, HI 96782** Click here for full text details **AIRS** Facility Id: 0239-01-C	**SHWS** **SPILLS** **AIRS**	**S106816709** **N/A**
E22 **SE** **1/2-1** **0.875 mi.** **4619 ft.** **Relative:** **Lower**	**WAIAU GENERATING STATION AND BASEYARD** **475 KAMEHAMEHA HWY** **PEARL CITY, HI** Click here for full text details **RCRA-TSDF** EPA Id: HIT000610873 **CERC-NFRAP** EPA Id: HIT000610873 **RCRA-SQG** EPA Id: HIT000610873	**RCRA-TSDF** **CERC-NFRAP** **CORRACTS** **RCRA-SQG** **2020 COR ACTION**	**1000146685** **HIT000610873**

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
23 **SSW** **1/2-1** **0.928 mi.** **4900 ft.** **Relative:** **Lower**	**HICKAM POL ST14, SPILL SITE ST14 & VALVE PIT 30** **606 LEHUA AVE** **PEARL CITY, HI 96782** Click here for full text details	**SHWS**	**S110061548** **N/A**

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
HI	AIRS	List of Permitted Facilities	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	BROWNFIELDS	Brownfields Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	CDL	Clandestine Drug Lab Listing	Department of Health	08/04/2010	09/10/2010	10/22/2010
HI	DRYCLEANERS	Permitted Drycleaner Facility Listing	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	ENG CONTROLS	Engineering Control Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	Financial Assurance	Financial Assurance Information Listing	Department of Health	12/01/2014	12/19/2014	01/28/2015
HI	INST CONTROL	Sites with Institutional Controls	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	LUST	Leaking Underground Storage Tank Database	Department of Health	12/16/2014	12/19/2014	01/28/2015
HI	RGA HWS	Recovered Government Archive State Hazardous Waste Facilitie	Department of Health		07/01/2013	01/08/2014
HI	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Health		07/01/2013	01/17/2014
HI	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	Department of Health		07/01/2013	01/03/2014
HI	SHWS	Sites List	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	SPILLS	Release Notifications	Department of Health	12/02/2014	12/22/2014	01/28/2015
HI	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	03/10/2012	01/03/2013	02/11/2013
HI	SWF/LF	Permitted Landfills in the State of Hawaii	Department of Health	09/17/2012	04/03/2013	05/10/2013
HI	UIC	Underground Injection Wells Listing	Department of Health	02/07/2013	02/12/2013	04/09/2013
HI	UST	Underground Storage Tank Database	Department of Health	12/18/2014	12/19/2014	01/28/2015
HI	VCP	Voluntary Response Program Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	04/22/2013	03/03/2015	03/09/2015
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2011	02/26/2013	04/19/2013
US	CERCLIS	Comprehensive Environmental Response, Compensation, and Liab	EPA	10/25/2013	11/11/2013	02/13/2014
US	CERCLIS-NFRAP	CERCLIS No Further Remedial Action Planned	EPA	10/25/2013	11/11/2013	02/13/2014
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	07/01/2014	09/10/2014	10/20/2014
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	01/23/2015	02/13/2015	03/09/2015
US	CORRACTS	Corrective Action Report	EPA	12/09/2014	12/29/2014	01/29/2015
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DELISTED NPL	National Priority List Deletions	EPA	12/16/2014	01/08/2015	02/09/2015
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	07/31/2012	08/07/2012	09/18/2012
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EDR US Hist Auto Stat	EDR Exclusive Historic Gas Stations	EDR, Inc.			
US	EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	09/29/2014	09/30/2014	11/06/2014
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	07/21/2014	10/07/2014	10/20/2014
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
US	FEMA UST	Underground Storage Tank Listing	FEMA	01/01/2010	02/16/2010	04/12/2010
US	FINDS	Facility Index System/Facility Registry System	EPA	08/16/2014	09/10/2014	10/20/2014
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	06/06/2014	09/10/2014	09/18/2014
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	12/29/2014	12/30/2014	03/09/2015
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	01/23/2015	02/06/2015	03/09/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	02/01/2013	05/01/2013	11/01/2013

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	01/30/2015	02/05/2015	03/09/2015
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/10/2015	03/13/2015
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	01/28/2015	01/30/2015	03/13/2015
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	01/08/2015	01/08/2015	02/09/2015
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2005	12/08/2006	01/11/2007
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	02/01/2013	05/01/2013	01/27/2014
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	01/30/2015	02/05/2015	03/13/2015
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/13/2015	03/13/2015
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	01/29/2015	01/30/2015	03/13/2015
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	12/14/2014	02/13/2015	03/13/2015
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	09/29/2014	10/01/2014	11/06/2014
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	11/25/2014	11/26/2014	01/29/2015
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	02/18/2014	03/18/2014	04/24/2014
US	LUCIS	Land Use Control Information System	Department of the Navy	12/03/2014	12/12/2014	01/29/2015
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	12/29/2014	01/08/2015	01/29/2015
US	NPL	National Priority List	EPA	12/16/2014	01/08/2015	02/09/2015
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	07/01/2014	10/15/2014	11/17/2014
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	02/01/2011	10/19/2011	01/10/2012
US	PRP	Potentially Responsible Parties	EPA	10/25/2013	10/17/2014	10/20/2014
US	Proposed NPL	Proposed National Priority List Sites	EPA	12/16/2014	01/08/2015	02/09/2015
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	10/07/2014	10/08/2014	10/20/2014
US	RCRA NonGen / NLR	RCRA - Non Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RMP	Risk Management Plans	Environmental Protection Agency	08/01/2014	08/12/2014	11/06/2014
US	ROD	Records Of Decision	EPA	11/25/2013	12/12/2013	02/24/2014
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	03/07/2011	03/09/2011	05/02/2011
US	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2011	07/31/2013	09/13/2013
US	TSCA	Toxic Substances Control Act	EPA	12/31/2012	01/15/2015	01/29/2015
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	09/14/2010	10/07/2011	03/01/2012
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/16/2014	10/31/2014	11/17/2014
US	US AIRS MINOR	Air Facility System Data	EPA	10/16/2014	10/31/2014	11/17/2014

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	12/22/2014	12/22/2014	01/29/2015
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	11/19/2014	11/21/2014	01/29/2015
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	12/30/2014	12/31/2014	01/29/2015
US	Oil/Gas Pipelines	GeoData Digital Line Graphs from 1:100,000-Scale Maps	USGS			
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
US	USGS 7.5' Topographic Map	Scanned Digital USGS 7.5' Topographic Map (DRG)	USGS			

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

HALE LAULIMA
1184 WAIMANO HOME RD.
PEARL CITY, HI 96782

TARGET PROPERTY COORDINATES

Latitude (North):	21.398 - 21˚ 23' 52.80''
Longitude (West):	157.9699 - 157˚ 58' 11.64''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	606776.6
UTM Y (Meters):	2366407.5
Elevation:	98 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	21157-D8 WAIPAHU, HI
Most Recent Revision:	Not reported

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

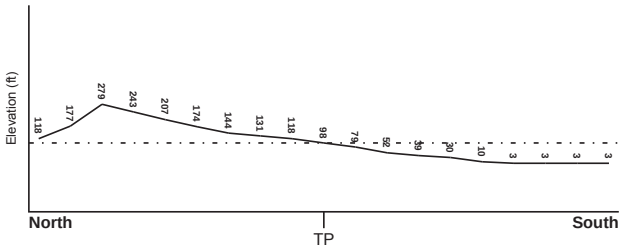
TOPOGRAPHIC INFORMATION

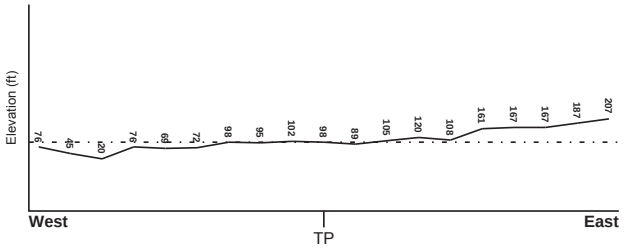
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SSW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 98 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
HONOLULU, HI	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 15003C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
WAIPAHU	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

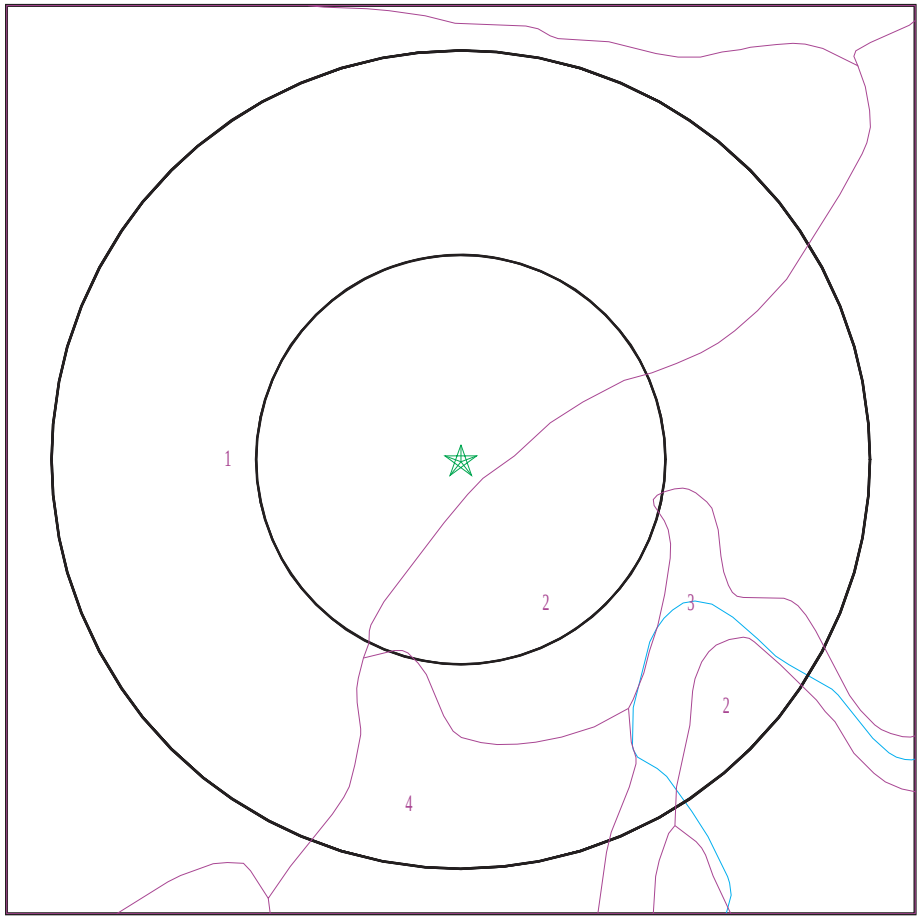
Era: -
System: -
Series: -
Code: N/A *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: -

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4237094.2s



★ Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME: Hale Laulima ADDRESS: 1184 Waimano Home Rd. Pearl City HI 96782 LAT/LONG: 21.398 / 157.9699	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.2s DATE: March 17, 2015 5:38 pm

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DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Molokai

Soil Surface Texture: silty clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	14 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	ML-K (proposed)	Max: 14 Min: 4.23	Max: 7.8 Min: 6.6
2	14 inches	72 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	ML-K (proposed)	Max: 4.23 Min: 1.41	Max: 7.8 Min: 6.6

Soil Map ID: 2

Soil Component Name: Molokai

Soil Surface Texture: silty clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	14 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	ML-K (proposed)	Max: 14 Min: 4.23	Max: 7.8 Min: 6.6
2	14 inches	72 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	ML-K (proposed)	Max: 4.23 Min: 1.41	Max: 7.8 Min: 6.6

Soil Map ID: 3

Soil Component Name: Helemano

Soil Surface Texture: silty clay

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	ML-K (proposed)	Max: 42 Min: 14.11	Max: 7.3 Min: 5.6
2	9 inches	40 inches	paragravelly silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	ML-K (proposed)	Max: 42.34 Min: 4.23	Max: 7.3 Min: 5.6
3	40 inches	59 inches	very paragravelly silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	ML-K (proposed)	Max: 14 Min: 4.23	Max: 7.3 Min: 5.6

Soil Map ID: 4

Soil Component Name: Honouliuli

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	14 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4 Min: 0.42	Max: 7.3 Min: 6.6
2	14 inches	68 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 7.8 Min: 6.6

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
B3	USGS40000270584	1/8 - 1/4 Mile NE
C5	USGS40000270592	1/8 - 1/4 Mile NW
C7	USGS40000270613	1/8 - 1/4 Mile NNW
B8	USGS40000270596	1/8 - 1/4 Mile NE
B9	USGS40000270597	1/8 - 1/4 Mile NE
B10	USGS40000270598	1/8 - 1/4 Mile NE
E14	USGS40000270492	1/4 - 1/2 Mile SW
15	USGS40000270463	1/4 - 1/2 Mile South
F20	USGS40000270466	1/4 - 1/2 Mile SSW
F21	USGS40000270465	1/4 - 1/2 Mile SSW
F22	USGS40000270464	1/4 - 1/2 Mile SSW

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
G23	USGS40000270474	1/4 - 1/2 Mile SW
G24	USGS40000270467	1/4 - 1/2 Mile SW
G25	USGS40000270471	1/4 - 1/2 Mile SW
G30	USGS40000270469	1/2 - 1 Mile SW
G31	USGS40000270468	1/2 - 1 Mile SW
I33	USGS40000270443	1/2 - 1 Mile SW
H34	USGS40000270411	1/2 - 1 Mile SSE
I36	USGS40000270444	1/2 - 1 Mile SW
I37	USGS40000270426	1/2 - 1 Mile SW
H39	USGS40000270400	1/2 - 1 Mile SSE
J40	USGS40000270386	1/2 - 1 Mile South
I43	USGS40000270450	1/2 - 1 Mile SW
M44	USGS40000270454	1/2 - 1 Mile SW
N45	USGS40000270515	1/2 - 1 Mile WSW
K46	USGS40000270372	1/2 - 1 Mile South
L48	USGS40000270412	1/2 - 1 Mile SSW
L55	USGS40000270401	1/2 - 1 Mile SSW
M56	USGS40000270451	1/2 - 1 Mile SW
K62	USGS40000270367	1/2 - 1 Mile South
M63	USGS40000270445	1/2 - 1 Mile SW
I66	USGS40000270424	1/2 - 1 Mile SW
N67	USGS40000270475	1/2 - 1 Mile WSW
J71	USGS40000270371	1/2 - 1 Mile SSE
L74	USGS40000270395	1/2 - 1 Mile SSW
M75	USGS40000270446	1/2 - 1 Mile SW
M76	USGS40000270447	1/2 - 1 Mile SW
O77	USGS40000270472	1/2 - 1 Mile WSW
M78	USGS40000270452	1/2 - 1 Mile SW
79	USGS40000270370	1/2 - 1 Mile SSE
N82	USGS40000270493	1/2 - 1 Mile WSW
O83	USGS40000270455	1/2 - 1 Mile WSW
M85	USGS40000270431	1/2 - 1 Mile SW
P88	USGS40000270549	1/2 - 1 Mile WSW
Q89	USGS40000270432	1/2 - 1 Mile SW
P94	USGS40000270563	1/2 - 1 Mile West
Q95	USGS40000270427	1/2 - 1 Mile SW
Q96	USGS40000270433	1/2 - 1 Mile SW
Q99	USGS40000270428	1/2 - 1 Mile SW
Q100	USGS40000270434	1/2 - 1 Mile SW
T103	USGS40000270648	1/2 - 1 Mile NNE
T104	USGS40000270647	1/2 - 1 Mile NNE
T105	USGS40000270650	1/2 - 1 Mile NNE
T106	USGS40000270649	1/2 - 1 Mile NNE
S107	USGS40000270396	1/2 - 1 Mile SW
R117	USGS40000270379	1/2 - 1 Mile SE
R118	USGS40000270380	1/2 - 1 Mile SE
R119	USGS40000270378	1/2 - 1 Mile SE
R120	USGS40000270376	1/2 - 1 Mile SE
R121	USGS40000270377	1/2 - 1 Mile SE
R122	USGS40000270384	1/2 - 1 Mile SE
R123	USGS40000270385	1/2 - 1 Mile SE
R124	USGS40000270383	1/2 - 1 Mile SE

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
R125	USGS40000270381	1/2 - 1 Mile SE
R126	USGS40000270382	1/2 - 1 Mile SE
U129	USGS40000270435	1/2 - 1 Mile SW
V134	USGS40000270565	1/2 - 1 Mile West
V136	USGS40000270566	1/2 - 1 Mile West
U138	USGS40000270418	1/2 - 1 Mile SW
W141	USGS40000270309	1/2 - 1 Mile SSW
X142	USGS40000270456	1/2 - 1 Mile WSW
W145	USGS40000270310	1/2 - 1 Mile SSW
W146	USGS40000270302	1/2 - 1 Mile SSW
Y147	USGS40000270631	1/2 - 1 Mile NW
Y148	USGS40000270630	1/2 - 1 Mile NW
Y149	USGS40000270633	1/2 - 1 Mile NW
Y150	USGS40000270632	1/2 - 1 Mile NW
Y155	USGS40000270637	1/2 - 1 Mile NW
Y156	USGS40000270638	1/2 - 1 Mile NW
Y157	USGS40000270639	1/2 - 1 Mile NW
Y158	USGS40000270634	1/2 - 1 Mile NW
Y159	USGS40000270635	1/2 - 1 Mile NW
Y160	USGS40000270636	1/2 - 1 Mile NW
Y161	USGS40000270643	1/2 - 1 Mile NW
Y162	USGS40000270644	1/2 - 1 Mile NW
Y163	USGS40000270645	1/2 - 1 Mile NW
Y164	USGS40000270640	1/2 - 1 Mile NW
Y165	USGS40000270641	1/2 - 1 Mile NW
Y166	USGS40000270642	1/2 - 1 Mile NW
Z178	USGS40000270366	1/2 - 1 Mile SE
W180	USGS40000270297	1/2 - 1 Mile SSW
AA182	USGS40000270417	1/2 - 1 Mile ESE
AB184	USGS40000270571	1/2 - 1 Mile West
AB185	USGS40000270572	1/2 - 1 Mile West

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A2	HI0000331	0 - 1/8 Mile NW

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	HI8000000003179	0 - 1/8 Mile NNW
B4	HI8000000003181	1/8 - 1/4 Mile NE
C6	HI8000000003187	1/8 - 1/4 Mile NW
D11	HI8000000003197	1/4 - 1/2 Mile NE
D12	HI8000000003198	1/4 - 1/2 Mile NE
E13	HI8000000003114	1/4 - 1/2 Mile SW

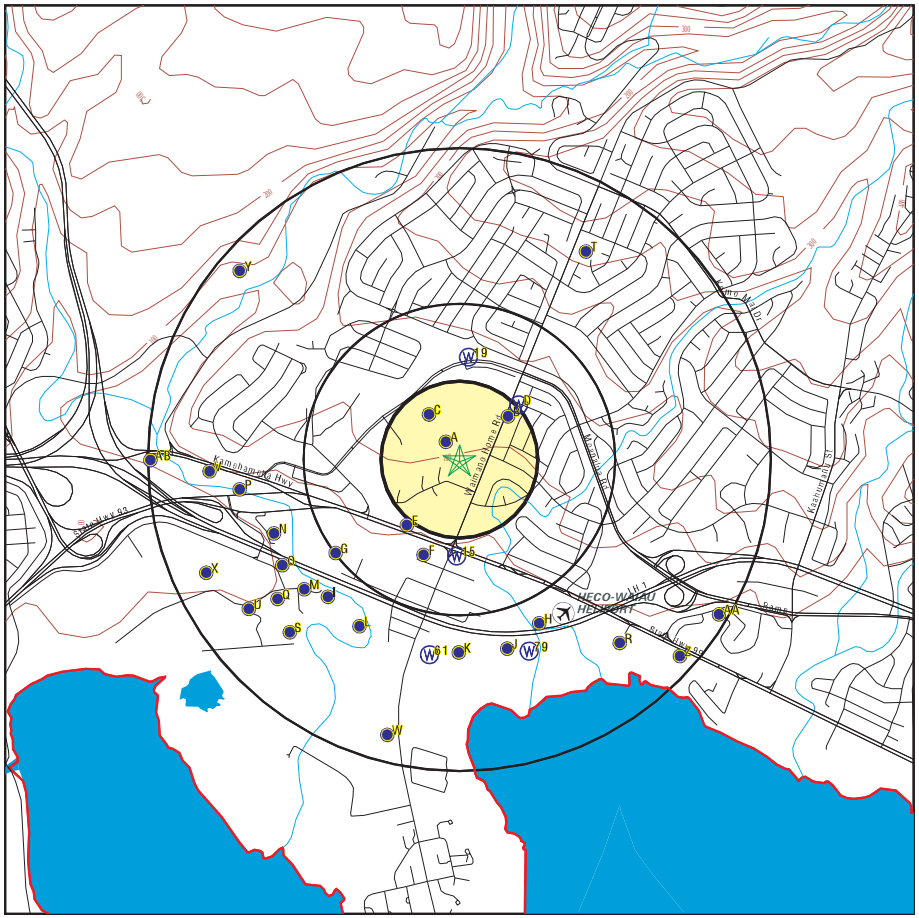
STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
F16	HI8000000003085	1/4 - 1/2 Mile SSW
F17	HI8000000003084	1/4 - 1/2 Mile SSW
F18	HI8000000003083	1/4 - 1/2 Mile SSW
19	HI8000000003215	1/4 - 1/2 Mile North
G26	HI8000000003081	1/2 - 1 Mile SW
G27	HI8000000003082	1/2 - 1 Mile SW
G28	HI8000000003079	1/2 - 1 Mile SW
G29	HI8000000003080	1/2 - 1 Mile SW
H32	HI8000000003020	1/2 - 1 Mile SSE
I35	HI8000000003042	1/2 - 1 Mile SW
H38	HI8000000003015	1/2 - 1 Mile SSE
K41	HI8000000002985	1/2 - 1 Mile South
L42	HI8000000003019	1/2 - 1 Mile SSW
L47	HI8000000003014	1/2 - 1 Mile SSW
I49	HI8000000003053	1/2 - 1 Mile SW
I50	HI8000000003052	1/2 - 1 Mile SW
M51	HI8000000003070	1/2 - 1 Mile SW
I52	HI8000000003041	1/2 - 1 Mile SW
J53	HI8000000002986	1/2 - 1 Mile South
N54	HI8000000003102	1/2 - 1 Mile WSW
J57	HI8000000002987	1/2 - 1 Mile SSE
I58	HI8000000003051	1/2 - 1 Mile SW
I59	HI8000000003065	1/2 - 1 Mile SW
L60	HI8000000003010	1/2 - 1 Mile SSW
61	HI8000000002980	1/2 - 1 Mile South
N64	HI8000000003089	1/2 - 1 Mile WSW
J65	HI8000000002988	1/2 - 1 Mile SSE
I68	HI8000000003040	1/2 - 1 Mile SW
M69	HI8000000003064	1/2 - 1 Mile SW
M70	HI8000000003063	1/2 - 1 Mile SW
N72	HI8000000003086	1/2 - 1 Mile WSW
M73	HI8000000003069	1/2 - 1 Mile SW
N80	HI8000000003113	1/2 - 1 Mile WSW
O81	HI8000000003075	1/2 - 1 Mile WSW
M84	HI8000000003050	1/2 - 1 Mile SW
M86	HI8000000003049	1/2 - 1 Mile SW
P87	HI8000000003126	1/2 - 1 Mile West
Q90	HI8000000003039	1/2 - 1 Mile SW
P91	HI8000000003159	1/2 - 1 Mile West
Q92	HI8000000003048	1/2 - 1 Mile SW
Q93	HI8000000003047	1/2 - 1 Mile SW
Q97	HI8000000003038	1/2 - 1 Mile SW
Q98	HI8000000003046	1/2 - 1 Mile SW
R101	HI8000000003011	1/2 - 1 Mile SE
S102	HI8000000003009	1/2 - 1 Mile SW
R108	HI8000000002994	1/2 - 1 Mile SE
R109	HI8000000002995	1/2 - 1 Mile SE
R110	HI8000000002992	1/2 - 1 Mile SE
R111	HI8000000002993	1/2 - 1 Mile SE
R112	HI8000000002996	1/2 - 1 Mile SE
R113	HI8000000002999	1/2 - 1 Mile SE
R114	HI8000000003000	1/2 - 1 Mile SE

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
R115	HI8000000002997	1/2 - 1 Mile SE
R116	HI8000000002998	1/2 - 1 Mile SE
T127	HI8000000003257	1/2 - 1 Mile NNE
T128	HI8000000003258	1/2 - 1 Mile NNE
R130	HI8000000003012	1/2 - 1 Mile SE
V131	HI8000000003164	1/2 - 1 Mile West
V132	HI8000000003163	1/2 - 1 Mile West
T133	HI8000000003259	1/2 - 1 Mile NNE
V135	HI8000000003162	1/2 - 1 Mile West
U137	HI8000000003032	1/2 - 1 Mile SW
W139	HI8000000002933	1/2 - 1 Mile SSW
X140	HI8000000003074	1/2 - 1 Mile WSW
W143	HI8000000002932	1/2 - 1 Mile SSW
W144	HI8000000002923	1/2 - 1 Mile SSW
Y151	HI8000000003239	1/2 - 1 Mile NW
Y152	HI8000000003238	1/2 - 1 Mile NW
Y153	HI8000000003241	1/2 - 1 Mile NW
Y154	HI8000000003240	1/2 - 1 Mile NW
Y167	HI8000000003246	1/2 - 1 Mile NW
Y168	HI8000000003247	1/2 - 1 Mile NW
Y169	HI8000000003245	1/2 - 1 Mile NW
Y170	HI8000000003243	1/2 - 1 Mile NW
Y171	HI8000000003244	1/2 - 1 Mile NW
Y172	HI8000000003251	1/2 - 1 Mile NW
Y173	HI8000000003252	1/2 - 1 Mile NW
Y174	HI8000000003250	1/2 - 1 Mile NW
Y175	HI8000000003248	1/2 - 1 Mile NW
Y176	HI8000000003249	1/2 - 1 Mile NW
Z177	HI8000000002982	1/2 - 1 Mile SE
W179	HI8000000002910	1/2 - 1 Mile SSW
AA181	HI8000000003033	1/2 - 1 Mile ESE
AB183	HI8000000003168	1/2 - 1 Mile West

PHYSICAL SETTING SOURCE MAP - 4237094.2s



County Boundary
Major Roads
Contour Lines
Airports
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons

0 1/4 1/2 1 Miles

Groundwater Flow Direction
Indeterminate Groundwater Flow at Location
Groundwater Flow Varies at Location

SITE NAME: Hale Laulima ADDRESS: 1184 Waimano Home Rd. Pearl City HI 96782 LAT/LONG: 21.398 / 157.9699	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.2s DATE: March 17, 2015 5:38 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
A1 **NNW** **0 - 1/8 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003179**
A2 **NW** **0 - 1/8 Mile** **Higher**	Click here for full text details	**FRDS PWS**	**HI0000331**
B3 **NE** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270584**
B4 **NE** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003181**
C5 **NW** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270592**
C6 **NW** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003187**
C7 **NNW** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270613**
B8 **NE** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270596**
B9 **NE** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270597**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
B10 **NE** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270598**
D11 **NE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003197**
D12 **NE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003198**
E13 **SW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003114**
E14 **SW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270492**
15 **South** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270463**
F16 **SSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003085**
F17 **SSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003084**
F18 **SSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003083**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
19 **North** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003215**
F20 **SSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270466**
F21 **SSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270465**
F22 **SSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270464**
G23 **SW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270474**
G24 **SW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270467**
G25 **SW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270471**
G26 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003081**
G27 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003082**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
G28 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003079**
G29 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003080**
G30 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270469**
G31 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270468**
H32 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003020**
I33 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270443**
H34 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270411**
I35 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003042**
I36 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270444**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
I37 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270426**
H38 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003015**
H39 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270400**
J40 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270386**
K41 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002985**
L42 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003019**
I43 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270450**
M44 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270454**
N45 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270515**

Map ID Direction Distance Elevation		Database	EDR ID Number
K46 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270372**
L47 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003014**
L48 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270412**
I49 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003053**
I50 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003052**
M51 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003070**
I52 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003041**
J53 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002986**
N54 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003102**

Map ID Direction Distance Elevation		Database	EDR ID Number
L55 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270401**
M56 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270451**
J57 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002987**
I58 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003051**
I59 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003065**
L60 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003010**
61 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002980**
K62 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270367**
M63 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270445**

Map ID Direction Distance Elevation		Database	EDR ID Number
N64 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003089**
J65 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002988**
I66 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270424**
N67 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270475**
I68 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003040**
M69 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003064**
M70 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003063**
J71 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270371**
N72 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003086**

Map ID Direction Distance Elevation		Database	EDR ID Number
M73 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003069**
L74 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270395**
M75 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270446**
M76 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270447**
O77 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270472**
M78 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270452**
79 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270370**
N80 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003113**
O81 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003075**

Map ID Direction Distance Elevation		Database	EDR ID Number
N82 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270493**
O83 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270455**
M84 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003050**
M85 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270431**
M86 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003049**
P87 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003126**
P88 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270549**
Q89 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270432**
Q90 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003039**

Map ID Direction Distance Elevation		Database	EDR ID Number
P91 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003159**
Q92 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003048**
Q93 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003047**
P94 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270563**
Q95 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270427**
Q96 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270433**
Q97 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003038**
Q98 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003046**
Q99 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270428**

Map ID Direction Distance Elevation		Database	EDR ID Number
Q100 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270434**
R101 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003011**
S102 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003009**
T103 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270648**
T104 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270647**
T105 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270650**
T106 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270649**
S107 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270396**
R108 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002994**

Map ID Direction Distance Elevation		Database	EDR ID Number
R109 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002995**
R110 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002992**
R111 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002993**
R112 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002996**
R113 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002999**
R114 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003000**
R115 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002997**
R116 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002998**
R117 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270379**

Map ID Direction Distance Elevation		Database	EDR ID Number
R118 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270380**
R119 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270378**
R120 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270376**
R121 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270377**
R122 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270384**
R123 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270385**
R124 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270383**
R125 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270381**
R126 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270382**

Map ID Direction Distance Elevation		Database	EDR ID Number
T127 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003257**
T128 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003258**
U129 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270435**
R130 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003012**
V131 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003164**
V132 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003163**
T133 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003259**
V134 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270565**
V135 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003162**

Map ID Direction Distance Elevation		Database	EDR ID Number
V136 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270566**
U137 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003032**
U138 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270418**
W139 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002933**
X140 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003074**
W141 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270309**
X142 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270456**
W143 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002932**
W144 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002923**

Map ID Direction Distance Elevation		Database	EDR ID Number
W145 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270310**
W146 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270302**
Y147 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270631**
Y148 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270630**
Y149 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270633**
Y150 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270632**
Y151 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003239**
Y152 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003238**
Y153 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003241**

Map ID Direction Distance Elevation		Database	EDR ID Number
Y154 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003240**
Y155 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270637**
Y156 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270638**
Y157 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270639**
Y158 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270634**
Y159 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270635**
Y160 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270636**
Y161 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270643**
Y162 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270644**

Map ID Direction Distance Elevation		Database	EDR ID Number
Y163 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270645**
Y164 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270640**
Y165 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270641**
Y166 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270642**
Y167 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003246**
Y168 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003247**
Y169 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003245**
Y170 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003243**
Y171 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003244**

Map ID Direction Distance Elevation		Database	EDR ID Number
Y172 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003251**
Y173 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003252**
Y174 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003250**
Y175 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003248**
Y176 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003249**
Z177 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002982**
Z178 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270366**
W179 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002910**
W180 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270297**

Map ID Direction Distance Elevation		Database	EDR ID Number
AA181 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003033**
AA182 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270417**
AB183 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003168**
AB184 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270571**
AB185 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270572**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for HONOLULU County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 96782

Number of sites tested: 16

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.000 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	1.000 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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HAWAII PUBLIC HOUSING AUTHORITY

ENVIRONMENTAL REVIEW

WAIPAHU I

Waipahu, O`ahu

AMP 30
HPHA No. 1038

Prepared for:

State of Hawaii
Hawaii Public Housing Authority

Prepared by:

HHF PLANNERS
places for people

U.S. Department of Housing and Urban Development
451 Seventh Street, SW
Washington, DC 20410
www.hud.gov

espanol.hud.gov

Environmental Review for Activity/Project that is Categorically Excluded Subject to Section 58.5

Pursuant to 24 CFR 58.35(a)

Project Information

Project Name: Waipahu I (AMP 30)

Responsible Entity: Hawaii Public Housing Authority
1002 North School Street
Honolulu, HI 96817

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

State/Local Identifier: State of Hawai‘i

Preparer: Mr. Scott Ezer, Vice President
HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawai‘i 96813

Certifying Officer Name and Title: Mr. David Y. Ige
Governor, State of Hawai‘i

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

Consultant (if applicable): HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawai‘i 96813

Direct Comments to: Mr. Hakim Ouansafi, Executive Director
Hawaii Public Housing Authority
1002 North School Street
Honolulu, Hawai‘i 96817

Project Location: 94-111 Pupuole Place
Waipahu, Hawai‘i 96797

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]**:**

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a "major construction activity" and would involve one or a combination of several HUD designated categories of actions.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent;
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons;
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland;
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation;
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls);
7. Interior and exterior renovations and rehabilitation;
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site;
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Level of Environmental Review Determination:

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.5. Compliance with and completion of conformance determinations for other statute, executive order, or regulation has been completed and support the Categorical Exclusion.

Funding Information

Grant Number	HUD Program	Funding Amount
To be determined	Capital Fund Grants	To be determined
To be determined	Economic Development Initiative Special Project Grant	To be determined
To be determined	Other Grants	To be determined

Estimated Total HUD Funded Amount:

To be determined by HUD using a formula and based upon Federal budget.

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]**:**

Depends on funds available.

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	*The project is not within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.*
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☒	*The State of Hawai'i does not have any designated coastal barrier resource units. (http://www.fws.gov/CBRA/Maps/Mapper.html)*
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes ☐ No ☒	*As indicated in the Flood Insurance Rate Panel 15003C0238G, Revised January 19, 2011, this project is located in Zone D (unstudied areas where flood hazards are undetermined, but flooding is possible). Based on its description, this project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.*

STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5		
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes ☐ No ☒	*The State of Hawai'i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. EPA's Green Book for currently designated "nonattainment areas" as of June 2015. Planned repair and rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.*
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes ☐ No ☒	*Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai'i's Coastal Zone Management (CZM) program.*
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☐ No ☒	*There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.*
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes ☒ No ☐	*The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (USFWS) in their letter dated September 28, 2015 which is included in the Appendices, while project-specific mitigation measures are identified in the following section.*
Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes ☐ No ☒	*There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.*

Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes ☐ No ☒	*The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.*
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes ☐ No ☒	*The project site is located in Zone D, unstudied areas where flood hazards are undetermined, but flooding is possible. A field inspection and information obtained from the AMP Manager confirmed no major flooding issues within the project site.*
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes ☐ No ☒	*Waipahu I was first occupied in 1970 and is 45 years old. To be eligible for listing in the National Register of Historic Places (NRHP), a property must meet the National Register criteria for evaluation which involves examining its integrity, significance, and age (generally at least 50 years old). Due to its age, this housing project does not meet the eligibility criteria to be evaluated for the NRHP. In a letter to the State Historic Preservation Officer dated July 23, 2015, the HPHA determined that no historic properties would be affected by repair and rehabilitation improvements for this housing project. No comments or objections about this no effect determination were received.*
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes ☐ No ☒	*The project site is not situated along a highway or major arterial roadway that has a high volume of vehicular traffic that may generate significant noise. The HUD noise calculator estimated noise levels at the project site to be 44.3 dBA (road), 48.6 dBA (rail) and 50 dBA (combined). Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.*

Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes ☐ No ☒	*The housing project is located within the O'ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation.*
Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☐ No ☒	*There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.* *(http://www.fws.gov/wetlands/data/mapper.HTML)*
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes ☐ No ☒	*There are no Wild and Scenic Rivers in Hawai'i, which excludes this project from mitigation or formal consultation requirements (http://www.rivers.gov/map.php)*
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes ☐ No ☒	*Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, these improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects on minority populations and low-income populations. Improvements should benefit low-income and minority populations living within this housing project.*

Field Inspection (Date and completed by)**:** June 18, 2015
Questor Lau, Planner
HHF Planners

Summary of Findings and Conclusions:

Repair and rehabilitation improvements implemented for this existing housing project by HPHA should not result in significant environmental impacts based upon research data collected, a field inspection, consultation with the site manager and maintenance staff, consultation with pertinent resource agencies, and prior HPHA experience implementing repair and rehabilitation improvements. Therefore, repair and rehabilitation improvements would comply and be consistent with the statutes, executive orders, and regulations addressed. Furthermore, HPHA would evaluate improvements planned to ensure the work is consistent with the designated categories of actions described under the project description section. Compliance with these factors evaluated are

further addressed in the attached Source Documentation Statutory Worksheet along with relevant technical reports/assessments.

Law, Authority, or Factor	Mitigation Measure
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	*Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.* *Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.* *Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.* *Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.* *Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo'i, impoundments or other vegetated water bodies.* *1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols.* *2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.* *3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring*

	(within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area. *In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.* *<u>Additional Measures</u>: The following additional measures would be implemented:* *1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.*

Determination:

☒ This categorically excluded activity/project converts to **EXEMPT** per Section 58.34(a)(12), because it does not require any mitigation for compliance with any listed statutes or authorities, nor requires any formal permit or license; **Funds may be committed and drawn down after certification of this part** for this (now) EXEMPT project; OR

☐ This categorically excluded activity/project cannot convert to Exempt status because one or more statutes or authorities listed at Section 58.5 requires formal consultation or mitigation. Complete consultation/mitigation protocol requirements, **publish NOI/RROF and obtain "Authority to Use Grant Funds"** (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR

☐ This project is not categorically excluded OR, if originally categorically excluded, is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

Preparer Signature: Scott Ezer Date: 11-10-15

Name/Title/Organization: Mr. Scott Ezer, Vice President
HHF Planners

Responsible Entity Agency Official Signature:

David Y. Ige Date: APR 28 2016

Name/Title: Mr. David Y. Ige, Governor

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

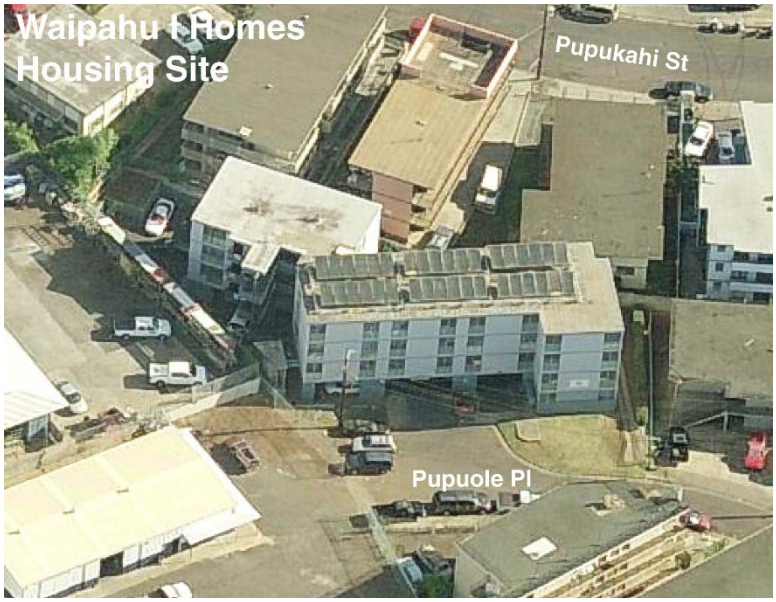
Waipahu I (HA # 1038)

TMK: (1) 9-4-039:019

Hawai‘i Public Housing Authority (HPHA) Environmental Review

SOURCE DOCUMENTATION (SD) STATUTORY WORKSHEET

Site Visit Date: June 18, 2015
Prepared By: Questor Lau



The Waipahu I housing project is located in the Waipahu district on the island of O‘ahu. The Waipahu community is generally located east of Pearl City, and bounded by the H-1 Freeway to the north and Pearl Harbor’s West Loch to the South.

The housing project site is situated off of Pupuole Street with vehicle access to the ground floor parking lot provided from Pupuole Place. The property is bordered by low-rise apartment buildings and is located approximately one quarter mile southwest from Waipahu Intermediate School. This housing project is within HPHA’s Asset Management Project (AMP) 30 which includes four other housing projects

Waipahu I was first occupied in 1970 and has a street address of 94-111 Pupuole Place. This property consists of 0.26 acres, and it is identified as Tax Map Key (TMK) No. (1) 9-4-039:019. The housing project is comprised of one four-story apartment building providing a total of 19 housing units of both 2- and 3-bedrooms per unit. The State’s land use designation for the property is the “Urban District”, and the City’s zoning for the site is A-2 Medium-Density Apartment.

The project site is not located within a tsunami evacuation zone, and the entire site is located in Flood Zone D, an area of undetermined flood hazard (Community Panel Number 15003C0238G, Revised January 19, 2011).

The following figures in Exhibit A provide supporting information on this housing project:

Figure 1: Location Map
Figure 2: TMK Map
Figure 3: Site Map
Figure 4: Flood Map

COMPLIANCE FACTORS

I. AIRPORT CLEAR ZONES AND ACCIDENT POTENTIAL ZONES (24 CFR PART 51D)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The housing project does not lie within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: 24 CFR 51 (D).

Honolulu International Airport Master Plan - 2010 (August 1994), State Department of Transportation, Airports Division;

*Hawai`i Airports and Flying Safety Guide (2012-13, Fifth Edition, Revision 1)* Hawai`i Department of Transportation, Airports Division; and

http://hidot.hawaii.gov/airports/files/2013/01/Airport-Safety-Guide-2012-2013-5rev1.pdf

II. COASTAL BARRIER RESOURCES (COASTAL BARRIER IMPROVEMENT ACT OF 1990 [16 USC 3501])

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i does not have any designated coastal barrier resource units.

SUPPORTING DOCUMENTATION:

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/cbra/maps/mapper.html (Date accessed: 6/30/15).

III. FLOOD INSURANCE (FLOOD DISASTER PROTECTION ACT OF 1973 AND NATIONAL FLOOD INSURANCE REFORM ACT OF 1994 [42 USC 4001-4128 AND 42 USC 5154a])

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program.

As indicated in the Flood Insurance Rate Panel 15003C0238G, Revised January 19, 2011, this project is located in Zone D (unstudied areas where flood hazards are undetermined, but flooding is possible). Based on its description, this project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal signs of previous flooding problems. An interview with the Maintenance Supervisor also determined that major ponding or flooding issues are currently not an issue for the project site.

Printed: Flood Insurance Rate Map Panel 15003C0238G, Revised January 19, 2011.

Hawai`i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 7/27/15)

IV. CLEAN AIR ACT (40 CFR PARTS 6, 51, 93)

SUPPORTING DOCUMENTS	
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. Environmental Protection Agency's Green Book for currently designated "nonattainment areas" as of June 2015. Planned rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.

SUPPORTING DOCUMENTATION:

Printed: *State of Hawai‘i Annual Summary 2013 Air Quality Data*. State of Hawai'i, Department of Health, July 2014.

U.S. Environmental Protection Agency website at: http://epa.gov/airquality/greenbk/

V. COASTAL ZONE MANAGEMENT ACT (16 USC 1451, SECTIONS 307 (C), (D)

CONTACT:

Mr. John Nakagawa
Office of Planning
Department of Business, Economic Development & Tourism
State of Hawai‘i
P.O. Box 2359
Honolulu, Hawai'i, 96804-2359

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai‘i's Coastal Zone Management (CZM) program.

SUPPORTING DOCUMENTATION:

Contact: In an email to the Office of Planning (OP) dated July 27, 2015, the HPHA determined that the use of HUD funds for the implementation of repair and rehabilitation improvements does not require review for consistency with Hawai‘i's CZM program. The OP confirmed this determination in an email dated July 28, 2015 and it is included in the Appendices.

Experience: Previous reviews conducted by OP in 2003, 2005, and 2010 determined that projects receiving federal funds from HUD do not require CZM federal consistency review. OP's current determination confirms this condition is still applicable. Copies of these prior documentations are included in the Appendices.

VI. CONTAMINATION AND TOXIC SUBSTANCES (24 CFR PART 50.3 & 58.5(I)(2))

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Project Not Affected.

There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.

SUPPORTING DOCUMENTATION:

Field: A site inspection and interview with the Asset Management Project (AMP) Manager and Maintenance Supervisor revealed no presence of any toxic or radioactive materials on the project site that warrant concern. There is an unmarked, secured storage area on the first floor, however the AMP Manager and Maintenance Supervisor stated that no hazardous or toxic materials are stored on site.

Study: Environmental Data Resources, Inc. (EDR), conducted a search of available environmental records and prepared a Radius Map Report (Inquiry Number 4237094.14s, March 17, 2015). EDR reviewed more than 25 federal and statewide regulatory databases for information regarding the treatment, storage, disposal and release of toxic chemicals at the project site and within specific radii (generally 1 mile) of the site. A Detail Map within the EDR report documents those sites identified within a 0.25 mile radius of the project site. The EDR report in Exhibit B includes the results of their research findings.

The EDR report notes the following activities within a 0.125 mile radius of the project site: Edwards and Sands Construction Company had an Underground Storage Tank (UST) that is Permanently Out of Use. M. Shiroma Painting Company is classified as a Small Small Quantity Generator (Handler); no violations were found for that site. Western Engineering is a Conditionally Exempt Small Quantity Generator (Handler); no violations were found for that site. On Site Enterprises is classified as a Non-Generator (Handler); no violations were found for that site.

The project site was not identified as a Formerly Used Defense Site (FUDS) by the U.S. Army Corps of Engineers and is not subject to any cleanup actions for Department of Defense-generated contamination.

VII. ENDANGERED SPECIES (50 CFR PART 402)

CONTACT:
Mr. Loyal Mehrhoff, Field Supervisor
Pacific Islands Administrator
Fish and Wildlife Services
U.S. Department of the Interior
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawai‘i 96813
Tel. #: 792-9400

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Adverse Effect Subject to Mitigation

The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices.

SUPPORTING DOCUMENTATION:

Contact: A letter from the HPHA dated July 24, 2015 was submitted to the Pacific Island Administrator for the FWS determining that repair and rehabilitation improvements that may be implemented using HUD funds for this housing project would have no likelihood of effect on any listed species or proposed species, or existing or proposed designated critical habitat subject to certain measures. Concurrence with this determination along with proposed minimization and avoidance measures was received from the FWS in a letter dated September 28, 2015 which is included in the Appendices. This housing project is subject to the following minimization and avoidance measures.

Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.

Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.

Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.

Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.

Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo'i, impoundments or other vegetated water bodies.

1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols.
2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.

3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.

In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.

Additional Measures: The following additional measures would be implemented:

1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.

Experience: The FWS was previously consulted as part of environmental reviews that were completed in 2005 (39 housing projects) and 2010 (70 housing projects) which supported the determination that repair and rehabilitation improvements would either: 1) have no likelihood of effect for certain housing projects; or 2) not likely adversely affect federally listed species or critical habitat for certain housing projects subject to mitigative measures. A summary of these consultation efforts follows.

2005 Consultation: In a letter dated July 15, 2005, the Housing and Community Development Corporation of Hawai'i (predecessor to the HPHA), determined that the implementation of minor repair and rehabilitation improvements for 39 housing projects would not have an adverse effect on federally-listed species or critical habitat. In a letter dated August 11, 2005, the FWS concurred with the HCDCH determination.

2010 Consultation: In a letter dated May 17, 2010, the HPHA informed the FWS that HUD funds would be used to immediately implement repair and rehabilitation improvements for six housing projects on O'ahu and the island of Hawai`i. In a subsequent letter dated May 21, 2010, the FWS was informed that HPHA would be using HUD funds to implement minor repair and rehabilitation improvements for 64 projects throughout the State. In both letters, the HPHA determined that the repair and rehabilitation improvements were not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat. Based on further consultation and a meeting with FWS staff on June 24, 2010, the HPHA determined that repair and rehabilitation improvements for most of their housing projects would not likely adversely affect any listed or proposed species, or existing or proposed designated habitat, subject to various mitigative measures for certain housing projects.

VIII. EXPLOSIVE AND FLAMMABLE OPERATIONS (24 CFR PART 51C)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

SUPPORTING DOCUMENTATION:

Field: Field inspection was limited to the exterior of residential buildings and associated structures for this housing project. No above-ground explosive or flammable material storage containers in excess of 100 gallons were observed at the site.

Printed: 24 CFR Part 51, Subpart C addresses acceptable separation distance from above-ground explosive or flammable fuels or chemical containers. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

IX. FARMLANDS PROTECTION (7 CFR PART 658)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. Since the property consists of an existing housing development within an urbanized area, no farmlands would be impacted by the implementation of repair and rehabilitation improvements.

Printed: The property is designated for “Urban” use by the State Land Use Commission and the County’s zoning for the parcel is RD-3.75 Double-Family Residential District.

Hawai`i Office of Planning website at: http://planning.hawaii.gov/gis/
(Date accessed: 6/30/2015)

X. FLOODPLAIN MANAGEMENT (EXECUTIVE ORDER 11988, 24 CFR PART 55)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program

The project site is located in Zone D, unstudied areas where flood hazards are undetermined, but flooding is possible. A field inspection and information obtained from the AMP Manager confirmed no major flooding issues within the project site.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal signs of previous flooding problems. An interview with the Maintenance Supervisor also determined that no major ponding or flooding issues have occurred on the project site.

Printed: Flood Insurance Rate Panel 15003C0238G, Revised January 19, 2011.

Hawai`i Department of Land and Natural Resources website at:
http://gis.hawaiinfip.org/FHAT/ (Date accessed7/21/15)

XI. HISTORIC PRESERVATION (NATIONAL HISTORIC PRESERVATION ACT OF 1966; SECTIONS 106 AND 110; 36 CFR, PART 800)

CONTACT:

Ms. Suzanne Case, Chairperson
Department of Land and Natural Resources (DLNR)
State of Hawai'i
1151 Punchbowl Street
Honolulu, Hawai'i 96813
Tel. #: 587-0400

SUPPORTING DOCUMENTS	
X	Field
X	Contact
X	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Effect on Historic Properties

The Waipahu I housing project was first occupied in 1970 and is 45 years old. To be eligible for listing in the National Register of Historic Places (NRHP), a property must meet the National Register criteria for evaluation which involves examining its integrity, significance, and age (generally at least 50 years old). Due to its age, this housing project does not meet the eligibility criteria to be evaluated for the NRHP. In

a letter to the State Historic Preservation Officer (SHPO) dated July 23, 2015, the HPHA determined that no historic properties would be affected (no effect) by repair and rehabilitation improvements for this housing project. No comments or objections about this no effect determination were received.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not locate any existing or potential archaeological sites (e.g., heiau) or cultural features on the property. An interview with the property manager and maintenance supervisor indicates that no known sites or features are present on the property.

Contact: A letter from the HPHA dated July 23, 2015, which is included in the Appendix, was submitted to the State Historic Preservation Officer [SHPO] (Chair of State Board of Land and Natural Resources) as part of Section 106 consultation determining that no historic properties would be affected (no effect) by repair and rehabilitation improvements that may be implemented using HUD funds for this housing project. The SHPO did not submit any comments or objections on the "no effect" determination for this housing project, which included follow-up e-mails with the State Historic Preservation Division regarding a response. On September 28, 2015, notice of HPHA's determination was also distributed to several native Hawaiian organizations and the various County Planning Departments. No concerns or opposition to this determination was received.

Printed: A review of the U.S. National Parks Service website for the National Register of Historic Places did not identify any historic properties within the limits of this housing project. A similar review of the State DLNR website for the State Register of Historic Places revealed that there are no historic properties within the project site.

National Register: U.S. National Park Service website at:
http://www.nps.gov/nr/research/ (Date accessed: 7/2/15).

State Register: Hawai`i Department of Land and Natural Resources website at:
http://dlnr.hawaii.gov/shpd/state-register/ (Date accessed: 7/2/15).

Experience: In letter to the State Historic Preservation Officer (SHPO) dated April 19, 2011, the HPHA determined that minor repair and rehabilitation improvement at 57 public housing projects throughout Hawai'i (including this housing site) would have "no effect" on historic properties. The SHPO had no comments or objections on the "no effect" determination.

XII. NOISE ABATEMENT CONTROL (24 CFR PART 51B)

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Within HUD Noise Standards

The project site is not situated along a highway or major arterial roadway that has a high volume of vehicular traffic that may generate significant noise. The HUD noise calculator estimated noise levels at the project site to be 44.3 dBA (generated from the road), 48.6 dBA (from rail) and 50 dBA (road and rail combined). Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

SUPPORTING DOCUMENTATION:

Field: There were no significant noise generating sources identified within the project site during the site inspection. An interview with the AMP Manager and Maintenance Supervisor did not identify any loud noise producing sources in the area. As a result, notable noise sources are predominantly associated with vehicular traffic along adjacent roadways. Traffic noise did not appear significant during the site visit. There are speed bumps installed along the minor County roads leading to the subject housing site, with a posted speed limit of 20 miles per hour in these areas.

Study: The HUD day/night noise level calculator was used to estimate approximate traffic noise levels at the project site. Given the distance of the center line of Farrington Highway to the project site (about 560 feet), the estimated noise levels at the project site using this HUD calculator was 44.3 dBA (generated from the road), 48.6 dBA (from rail) and 50 dBA (road and rail combined). Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards.

The Honolulu Rail Transit Project corridor along Kamehameha Highway (under construction) will have elevated rail located approx. 560 from this subject housing project. Also, Farrington Highway is a primary State roadway serving vehicular traffic commuting to and from downtown Honolulu along with providing access to other surrounding urban areas. State Department of Transportation 2013 traffic count data available for Farrington Highway was used for the HUD noise calculation. Access to the subject housing site is from Farrington Highway through several minor County roads to Pupuole Street, which terminates at the subject housing site. Therefore, the subject housing site is expected to have significantly lower vehicle trips than Farrington Hwy.

Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

XIII. SOLE SOURCE AQUIFER (40 CFR PART 149)

	SUPPORTING DOCUMENTS
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact on Sole Source Aquifer

The housing project is located within the O'ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation. However, if exceptional circumstances require compliance steps with any of these authorities, such compliance must be established and documented prior to approving the site-specific loan or grant.

SUPPORTING DOCUMENTATION:

Printed: This determination was based upon review of the Sole Source Aquifer Memorandum of 4/30/90 (Sections II.B.1 and II.B.2) and consideration of the type of rehabilitation related improvements that would be conducted for this project.

XIV. WETLANDS PROTECTION (EXECUTIVE ORDER 11990)

	SUPPORTING DOCUMENTS
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the property did not identify the presence of any wetlands.

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/wetlands/data/mapper.html (Date accessed 7/23/2015).

XV. WILD AND SCENIC RIVERS ACT (16 USC 1271, SECTION 7 (B), (C))

	SUPPORTING DOCUMENTS
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no Wild and Scenic Rivers in Hawai‘i, which excludes this project from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: National Wild and Scenic Rivers System website at: http://www.rivers.gov/index.php (Date accessed: 6/30/2015).

XVI. ENVIRONMENTAL JUSTICE (EXECUTIVE ORDER NO. 12898)

	SUPPORTING DOCUMENTS
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Conflict with Requirements

Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, repair and rehabilitation improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations. Repair and rehabilitation improvements should benefit low-income and minority populations living within this housing project.

SUPPORTING DOCUMENTATION:

Printed: Executive Order 12898.

U.S. Department of Housing and Urban Development website at: https://www.hudexchange.info/environmental-review/environmental-justice/

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EXHIBIT A

Location Map, TMK Map, Site Map, Flood Map, and Site Photos

Source: State of Hawaiʻi GIS Data and Google Earth Pro - 1/12/13

HONOLULU RAIL TRANSIT

Transit Corridor

Transit Station

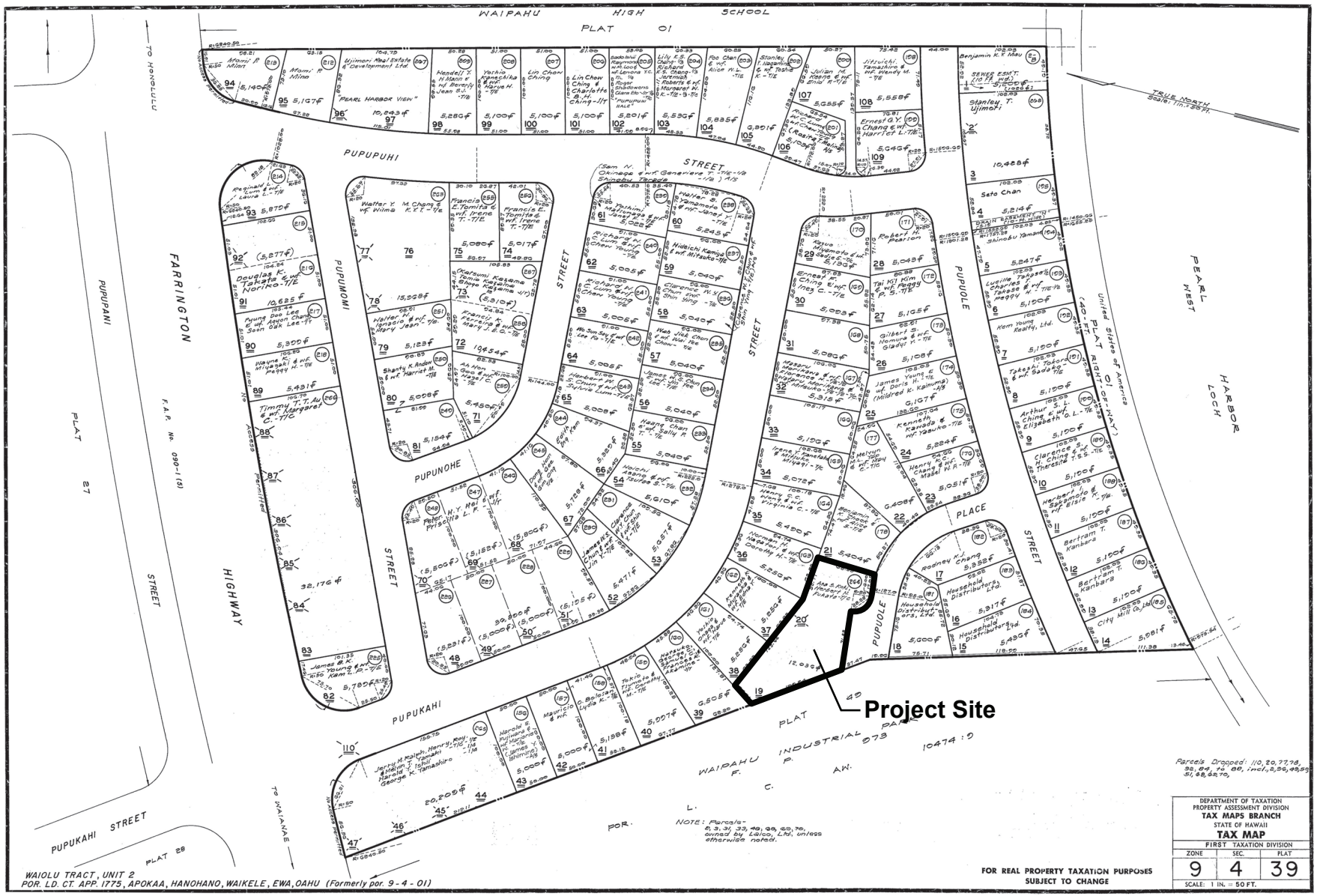
HPHA No. 1038 - Waipahu I (AMP 30)

Figure 1 - Project Location Map

Waipahu, Oʻahu

1,000 FT

HHF PLANNERS
places for people



HPHA No. 1038 - Waipahu I (AMP 30)

Figure 2 - TMK Map

Waipahu, O'ahu

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

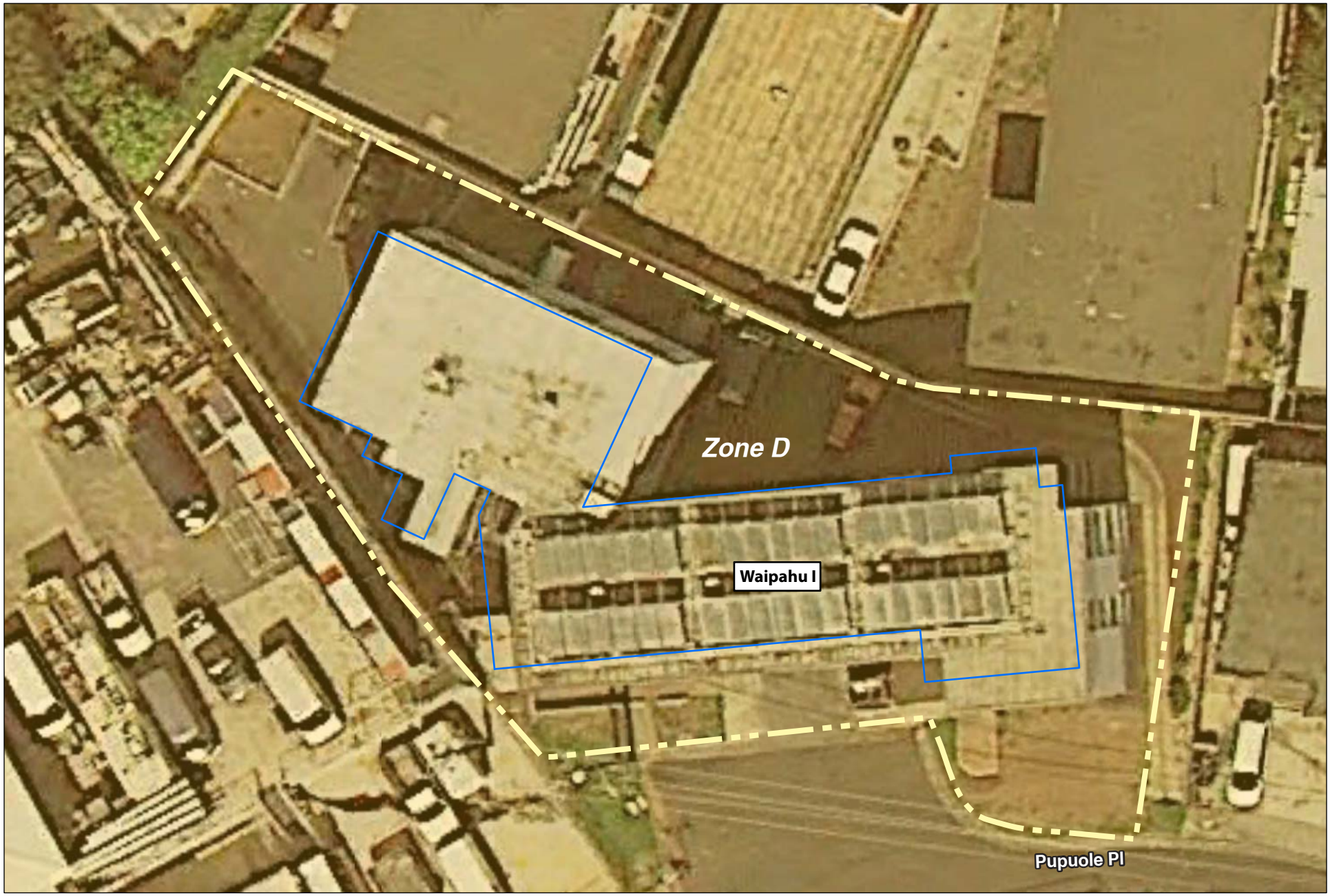
HPHA No. 1038 - Waipahu I (AMP 30)

Figure 3 - Site Map

Waipahu, O'ahu

20 FEET

HHF PLANNERS
places for people



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

LEGEND

Zone D - Unstudied Area

HPHA No. 1038 - Waipahu I (AMP 30)

Figure 4 - Flood Map

Waipahu, O'ahu

20 FEET

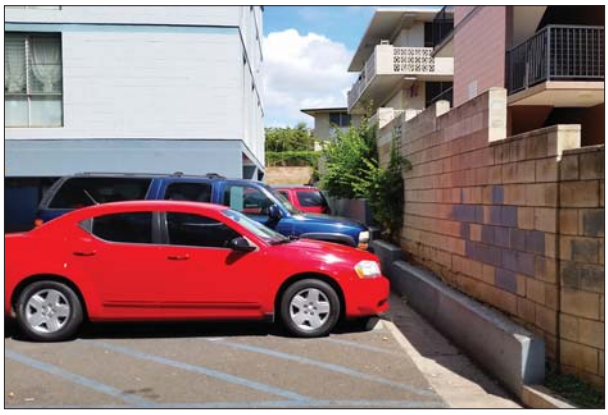
HHF PLANNERS
places for people

WAIPAHU I
SITE PHOTOS

Project frontage along Pupuole Place

View of Pupuole Place neighborhood from housing site

Concrete lined swale facilitates runoff along eastern property boundary



Project's northern boundary, facing west. Adjacent apartment buildings will help buffer noise impacts from future rail project

Housing site's rear boundary

Housing site's rear boundary

WAIPAHU I
SITE PHOTOS

Parking area, at grade, housing units above

Project's southern boundary, facing south

Gas meter; no above ground hazardous tanks on site

Hot water tank

Storage Area

Trash pickup area

EXHIBIT B

EDR Radius Map Report

Waipahu I
94-111 Pupupole St.
Waipahu, HI 96797

Inquiry Number: 4237094.14s
March 17, 2015

EDR Summary Radius Map Report

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

FORM-NULL-PVC

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

94-111 PUPUPOLE ST.
HONOLULU County, HI 96797

COORDINATES

Latitude (North):	21.3792000 - 21˚ 22' 45.12''
Longitude (West):	158.0165000 - 158˚ 0' 59.40''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	601958.9
UTM Y (Meters):	2364295.5
Elevation:	41 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	USGS 7.5 min quad index

Target Property:	S
Source:	USGS 7.5 min quad index

MAPPED SITES SUMMARY

Target Property Address:
94-111 PUPUPOLE ST.
, HI 96797

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
Reg	PEARL HARBOR NAVAL C	US NAVAL COMMAND	NPL, CERCLIS, US ENG CONTROLS, US INST CONTROL,...	Same	4029, ESE
A1	EDWARDS & SANDS CONS	94-116 PUPUOLE PL	UST, Financial Assurance	Lower	108, ESE
A2	EDWARDS & SANDS CONS	94-116 PUPUOLE PLACE	RCRA-SQG, FINDS	Lower	108, ESE
B3		94321 LEONUI ST	EDR US Hist Cleaners	Higher	206, WNW
B4		94321 LEONUI ST	EDR US Hist Auto Stat	Higher	206, WNW
B5	C. KEN'S CLEANERS HA	94-321 A LEONUI	DRYCLEANERS	Higher	207, WNW
6		94296 PUPUOLE ST	EDR US Hist Auto Stat	Lower	238, SSW
7		94117 PUPUKAHI ST	EDR US Hist Auto Stat	Higher	262, NNE
C8		94295 PUPUOLE ST	EDR US Hist Auto Stat	Lower	398, South
C9		94285 PUPUOLE ST	EDR US Hist Auto Stat	Lower	466, South
C10	WESTERN ENGINEERING	94 285 PUPUOLE ST	RCRA-CESQG, FINDS	Lower	472, South
11		94252 PUPUOLE ST	EDR US Hist Auto Stat	Higher	547, SW
12		94275 PUPUOLE ST	EDR US Hist Auto Stat	Higher	603, SSW
D13	ON SITE ENTERPRISES	94 321 LEONUI ST	RCRA NonGen / NLR, FINDS	Lower	621, West
D14		94279 LEONUI ST	EDR US Hist Auto Stat	Lower	635, WSW
E15		94173 LEOKANE ST	EDR US Hist Auto Stat	Lower	668, WSW
F16	DEPT OF EDUCATION ST	94299 FARRINGTON HWY	RCRA NonGen / NLR, FINDS	Lower	692, WNW
G17		94165 LEOKANE ST	EDR US Hist Auto Stat	Higher	755, SW
E18	OAHU PAVING CO., INC	94-170 LEOKANE ST	UST	Lower	767, WSW
H19	OKA AUTO PAINT & REP	94-279 LEONUI ST	RCRA-SQG	Lower	771, West
H20	OKA AUTO PAINT & REP	94-279 LEONUI ST	UST	Lower	771, West
G21	YELLOW FREIGHT SYSTE	94-164 LEOKANE ST	LUST, UST, Financial Assurance	Higher	782, SW
F22	7 ELEVEN WAIPAHU	94-264 FARRINGTON HW	RCRA-CESQG	Lower	803, WNW
I23	NEW CITY SHELL	94-380 PUPUPANI ST.	LUST, UST, Financial Assurance	Higher	841, North
I24	NEW CITY SHELL	94-380 PUPUPANI ST	RCRA-CESQG	Higher	841, North
I25		94366 PUPUPANI ST	EDR US Hist Cleaners	Higher	879, North
J26	DEPOT METALS LTD	94-188 LEOKANE ST	RCRA NonGen / NLR, FINDS	Lower	887, West
K27	HAN'S METALS, INC.	94-170 LEOKANE ST	RCRA NonGen / NLR	Lower	891, WSW
K28		94174 LEOKANE ST	EDR US Hist Auto Stat	Lower	893, WSW
J29		94267 FARRINGTON HW	EDR US Hist Auto Stat	Lower	934, WNW
L30	J R AUTO BODY	94 249 LEONUI ST	RCRA-CESQG, FINDS	Lower	941, WSW
L31		94249 LEONUI ST	EDR US Hist Auto Stat	Lower	960, WSW
M32	EDDIE S CAR ASSIST C	94 380 PUPUPANI ST	RCRA-CESQG, FINDS	Higher	973, NNE
N33		94143 LEOKANE ST	EDR US Hist Auto Stat	Lower	981, SSW
L34	KAMA'AINA KONCRETE (	94-233 LEONUI ST	LUST	Lower	994, WSW
O35	ALOHA PETROLEUM - CI	94-307 FARRINGTON HW	UST, Financial Assurance	Lower	1009, WNW
36	WILSON FOOD SERVICE	94-150 LEOKANE ST	LUST, UST	Lower	1022, SW
37		94264 FARRINGTON HW	EDR US Hist Auto Stat	Lower	1030, WNW
N38	REDONDO'S INC.	94-140 LEOKANE ST	LUST, UST	Lower	1038, SSW

MAPPED SITES SUMMARY

Target Property Address:
94-111 PUPUPOLE ST.
, HI 96797

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
O39		94245 FARRINGTON HW	EDR US Hist Auto Stat	Lower	1052, West
M40		94380 PUPUPANI ST	EDR US Hist Auto Stat	Higher	1059, NNE
P41	FREE TOWING HAWAII,	94-233 LEONUI ST	RCRA-CESQG, FINDS	Lower	1062, WSW
O42	EAST BAY TIRE COMPAN	94-299 FARRINGTON HW	LUST, UST	Lower	1063, West
43		94300 FARRINGTON HW	EDR US Hist Cleaners	Higher	1100, NW
O44	PAYLESS DRUG WAIPAHU	94 300 FARRINGTON HW	RCRA NonGen / NLR, FINDS	Lower	1103, WNW
Q45	HARRIS CARPET MILL -	94-129 LEOKANE ST	UST	Lower	1163, SSW
R46	BRANDY SIGNS	94-130 LEOKANE ST	RCRA NonGen / NLR	Lower	1173, SSW
Q47		94129 LEOKANE ST	EDR US Hist Auto Stat	Lower	1214, SSW
P48		94221 LEONUI ST	EDR US Hist Auto Stat	Lower	1217, WSW
R49	ZIPPYS INC REPAIR AM	94 130 LEOKANE ST	RCRA-CESQG, FINDS	Lower	1222, SSW
S50		94223 FARRINGTON HW	EDR US Hist Auto Stat	Lower	1229, West
S51	SHELLY MAZDA/HYUNDAI	94-223 FARRINGTON HW	SHWS, LUST, UST, SPILLS, ENG CONTROLS, INST...	Lower	1233, West
T52	FIRESTONE COMPLETE A	94 267 FARRINGTON HW	RCRA-CESQG	Lower	1274, West
T53	7-ELEVEN WAIPAHU	94-264 FARRINGTON HW	LUST, UST, Financial Assurance	Lower	1340, West
54	CITY MILL WAIPAHU	94-157 LEOLEO ST	LUST	Lower	1576, SW
55	BIONIC SELF-SERVE	94-485 FARRINGTON HW	LUST, UST, Financial Assurance	Higher	1713, NE
56	HT&T CO.,INC.	94-099 LEOKANE ST	LUST, UST	Lower	1726, SW
57	FINOVA HAWAIIAN HOLD	94-169 FARRINGTON HW	LUST, UST, Financial Assurance	Lower	1732, WSW
58	AMERICAN FENCE COMPA	94-086 LEOKANE ST	LUST, UST	Lower	1970, SW
U59	NISSAN OF WAIPAHU -	94-133 LEONUI ST	LUST, UST	Lower	1992, WSW
60	CUTTER MITSUBISHI DO	94 149 FARRINGTON HW	RCRA-CESQG, FINDS, LUST, UST	Lower	2079, WSW
61	EWA REPAIR SHOP INC.	94-303 WAIPAHU ST	SHWS, LUST, UST, INST CONTROL, Financial Assurance	Higher	2101, NW
U62	C&CH WAIPAHU FIRE ST	94-121 LEONUI ST	LUST, UST, Financial Assurance	Lower	2103, WSW
63	TESORO GAS EXPRESS #	94-120 FARRINGTON HW	LUST, UST, Financial Assurance	Higher	2215, West
64	GOODYEAR LEASED FACI	94-144 FARRINGTON HW	LUST, UST	Lower	2266, West
65	ALLIED MACHINERY COR	94-168 LEOOLE ST	LUST, UST	Lower	2274, WSW
66	NISSAN OF WAIPAHU -	94-119 FARRINGTON HW	LUST, UST	Lower	2330, WSW
V67	SHELLY MOTORS INC.	94-212 LEOKU ST	LUST, UST	Lower	2449, West
68	PFLUEGER CAR AND TRU	94-097 FARRINGTON HW	LUST, UST, Financial Assurance	Lower	2505, WSW
V69	TANDAL'S WAIPAHU 76	94-206 LEOKU ST	LUST, UST, Financial Assurance	Lower	2510, West
70	PACIFIC MACHINERY	94-025 FARRINGTON HW	RCRA-CESQG, SHWS, LUST, UST, SPILLS, Financial...	Lower	2887, WSW
71	WAIPAHU AUTO COMPANY		SHWS, SPILLS, INST CONTROL	Lower	3843, ENE
72	ABC CORPORATION DEPO	94-049 DEPOT RD	SHWS	Lower	3972, East
73	AMFAC/OAHU SUGAR COM	94-833 MAKAALOHA ST	SHWS, SPILLS, INST CONTROL, VCP	Higher	4136, NE
74	WAIPAHU INCINERATOR/	93-071 WAIPAHU DEPOT	SHWS, SPILLS	Lower	4187, East

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: A review of the NPL list, as provided by EDR, and dated 12/16/2014 has revealed that there is 1 NPL site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PEARL HARBOR NAVAL C	***US NAVAL COMMAND***	***ESE 1/2 - 1 (0.763 mi.)***	***0***	***7***

Federal RCRA generators list

RCRA-SQG: A review of the RCRA-SQG list, as provided by EDR, and dated 12/09/2014 has revealed that there are 2 RCRA-SQG sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
EDWARDS & SANDS CONS	***94-116 PUPUOLE PLACE***	***ESE 0 - 1/8 (0.020 mi.)***	***A2***	***7***
OKA AUTO PAINT & REP	94-279 LEONUI ST	W 1/8 - 1/4 (0.146 mi.)	H19	10

RCRA-CESQG: A review of the RCRA-CESQG list, as provided by EDR, and dated 12/09/2014 has revealed that there are 8 RCRA-CESQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NEW CITY SHELL	94-380 PUPUPANI ST	N 1/8 - 1/4 (0.159 mi.)	I24	11
EDDIE S CAR ASSIST C	***94 380 PUPUPANI ST***	***NNE 1/8 - 1/4 (0.184 mi.)***	***M32***	***13***

Lower Elevation	Address	Direction / Distance	Map ID	Page
WESTERN ENGINEERING	***94 285 PUPUOLE ST***	***S 0 - 1/8 (0.089 mi.)***	***C10***	***8***

Lower Elevation	Address	Direction / Distance	Map ID	Page
7 ELEVEN WAIPAHU	94-264 FARRINGTON HW	WNW 1/8 - 1/4 (0.152 mi.)	F22	11
J R AUTO BODY	***94 249 LEONUI ST***	***WSW 1/8 - 1/4 (0.178 mi.)***	***L30***	***12***
FREE TOWING HAWAII,	***94-233 LEONUI ST***	***WSW 1/8 - 1/4 (0.201 mi.)***	***P41***	***14***
ZIPPYS INC REPAIR AM	***94 130 LEOKANE ST***	***SSW 1/8 - 1/4 (0.231 mi.)***	***R49***	***16***
FIRESTONE COMPLETE A	94 267 FARRINGTON HW	W 1/8 - 1/4 (0.241 mi.)	T52	17

State- and tribal - equivalent CERCLIS

SHWS: A review of the SHWS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 7 SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EWA REPAIR SHOP INC.	***94-303 WAIPAHU ST***	***NW 1/4 - 1/2 (0.398 mi.)***	***61***	***19***
AMFAC/OAHU SUGAR COM	***94-833 MAKAALOHA ST***	***NE 1/2 - 1 (0.783 mi.)***	***73***	***23***

Lower Elevation	Address	Direction / Distance	Map ID	Page
SHELLY MAZDA/HYUNDAI	***94-223 FARRINGTON HW***	***W 1/8 - 1/4 (0.234 mi.)***	***S51***	***16***
PACIFIC MACHINERY	***94-025 FARRINGTON HW***	***WSW 1/2 - 1 (0.547 mi.)***	***70***	***22***
WAIPAHU AUTO COMPANY		***ENE 1/2 - 1 (0.728 mi.)***	***71***	***22***
ABC CORPORATION DEPO	94-049 DEPOT RD	E 1/2 - 1 (0.752 mi.)	72	23
WAIPAHU INCINERATOR/	***93-071 WAIPAHU DEPOT***	***E 1/2 - 1 (0.793 mi.)***	***74***	***23***

State and tribal leaking storage tank lists

LUST: A review of the LUST list, as provided by EDR, and dated 12/16/2014 has revealed that there are 24 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
YELLOW FREIGHT SYSTE	***94-164 LEOKANE ST***	***SW 1/8 - 1/4 (0.148 mi.)***	***G21***	***10***
Facility Status: Site Cleanup Completed (NFA)				
NEW CITY SHELL	***94-380 PUPUPANI ST.***	***N 1/8 - 1/4 (0.159 mi.)***	***I23***	***11***
Facility Status: Monitored Natural Attenuation				
BIONIC SELF-SERVE	***94-485 FARRINGTON HW***	***NE 1/4 - 1/2 (0.324 mi.)***	***55***	***17***
Facility Status: Site Cleanup Completed (NFA)				
EWA REPAIR SHOP INC.	***94-303 WAIPAHU ST***	***NW 1/4 - 1/2 (0.398 mi.)***	***61***	***19***
Facility Status: Site Cleanup Completed (NFA)				
TESORO GAS EXPRESS #	***94-120 FARRINGTON HW***	***W 1/4 - 1/2 (0.420 mi.)***	***63***	***20***
Facility Status: Site Cleanup Completed (NFA)				

Lower Elevation	Address	Direction / Distance	Map ID	Page
KAMA'AINA KONCRETE (	94-233 LEONUI ST	WSW 1/8 - 1/4 (0.188 mi.)	L34	13
Facility Status: Site Cleanup Completed (NFA)				
WILSON FOOD SERVICE	***94-150 LEOKANE ST***	***SW 1/8 - 1/4 (0.194 mi.)***	***36***	***13***
Facility Status: Site Cleanup Completed (NFA)				

Lower Elevation	Address	Direction / Distance	Map ID	Page
REDONDO'S INC.	***94-140 LEOKANE ST***	***SSW 1/8 - 1/4 (0.197 mi.)***	***N38***	***14***
Facility Status: Site Cleanup Completed (NFA)				
EAST BAY TIRE COMPAN	***94-299 FARRINGTON HW***	***W 1/8 - 1/4 (0.201 mi.)***	***O42***	***15***
Facility Status: Site Cleanup Completed (NFA)				
SHELLY MAZDA/HYUNDAI	***94-223 FARRINGTON HW***	***W 1/8 - 1/4 (0.234 mi.)***	***S51***	***16***
Facility Status: Site Cleanup Completed (NFA)				
7-ELEVEN WAIPAHU	***94-264 FARRINGTON HW***	***W 1/4 - 1/2 (0.254 mi.)***	***T53***	***17***
Facility Status: Site Cleanup Completed (NFA)				
CITY MILL WAIPAHU	94-157 LEOLEO ST	SW 1/4 - 1/2 (0.298 mi.)	54	17
Facility Status: Site Cleanup Completed (NFA)				
HT&T CO.,INC.	***94-099 LEOKANE ST***	***SW 1/4 - 1/2 (0.327 mi.)***	***56***	***18***
Facility Status: Site Cleanup Completed (NFA)				
FINOVA HAWAIIAN HOLD	***94-169 FARRINGTON HW***	***WSW 1/4 - 1/2 (0.328 mi.)***	***57***	***18***
Facility Status: Site Cleanup Completed (NFA)				
AMERICAN FENCE COMPA	***94-086 LEOKANE ST***	***SW 1/4 - 1/2 (0.373 mi.)***	***58***	***18***
Facility Status: Site Cleanup Completed (NFA)				
NISSAN OF WAIPAHU -	***94-133 LEONUI ST***	***WSW 1/4 - 1/2 (0.377 mi.)***	***U59***	***19***
Facility Status: Site Cleanup Completed (NFA)				
CUTTER MITSUBISHI DO	***94 149 FARRINGTON HW***	***WSW 1/4 - 1/2 (0.394 mi.)***	***60***	***19***
Facility Status: Site Cleanup Completed (NFA)				
C&CH WAIPAHU FIRE ST	***94-121 LEONUI ST***	***WSW 1/4 - 1/2 (0.398 mi.)***	***U62***	***20***
Facility Status: Site Assessment Ongoing				
GOODYEAR LEASED FACI	***94-144 FARRINGTON HW***	***W 1/4 - 1/2 (0.429 mi.)***	***64***	***20***
Facility Status: Site Cleanup Completed (NFA)				
ALLIED MACHINERY COR	***94-168 LEOOLE ST***	***WSW 1/4 - 1/2 (0.431 mi.)***	***65***	***21***
Facility Status: Site Cleanup Completed (NFA)				
NISSAN OF WAIPAHU -	***94-119 FARRINGTON HW***	***WSW 1/4 - 1/2 (0.441 mi.)***	***66***	***21***
Facility Status: Site Cleanup Completed (NFA)				
SHELLY MOTORS INC.	***94-212 LEOKU ST***	***W 1/4 - 1/2 (0.464 mi.)***	***V67***	***21***
Facility Status: Site Cleanup Completed (NFA)				
PFLUEGER CAR AND TRU	***94-097 FARRINGTON HW***	***WSW 1/4 - 1/2 (0.474 mi.)***	***68***	***21***
Facility Status: Site Cleanup Completed (NFA)				
TANDAL'S WAIPAHU 76	***94-206 LEOKU ST***	***W 1/4 - 1/2 (0.475 mi.)***	***V69***	***22***
Facility Status: Site Cleanup Completed (NFA)				

State and tribal registered storage tank lists

UST: A review of the UST list, as provided by EDR, and dated 12/18/2014 has revealed that there are 11 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
YELLOW FREIGHT SYSTE	***94-164 LEOKANE ST***	***SW 1/8 - 1/4 (0.148 mi.)***	***G21***	***10***
NEW CITY SHELL	***94-380 PUPUPANI ST.***	***N 1/8 - 1/4 (0.159 mi.)***	***I23***	***11***

Lower Elevation	Address	Direction / Distance	Map ID	Page
EDWARDS & SANDS CONS	***94-116 PUPUOLE PL***	***ESE 0 - 1/8 (0.020 mi.)***	***A1***	***7***

Lower Elevation	Address	Direction / Distance	Map ID	Page
OAHU PAVING CO., INC	94-170 LEOKANE ST	WSW 1/8 - 1/4 (0.145 mi.)	E18	10
OKA AUTO PAINT & REP	94-279 LEONUI ST	W 1/8 - 1/4 (0.146 mi.)	H20	10
ALOHA PETROLEUM - CI	***94-307 FARRINGTON HW***	***WNW 1/8 - 1/4 (0.191 mi.)***	***O35***	***13***
WILSON FOOD SERVICE	***94-150 LEOKANE ST***	***SW 1/8 - 1/4 (0.194 mi.)***	***36***	***13***
REDONDO'S INC.	***94-140 LEOKANE ST***	***SSW 1/8 - 1/4 (0.197 mi.)***	***N38***	***14***
EAST BAY TIRE COMPAN	***94-299 FARRINGTON HW***	***W 1/8 - 1/4 (0.201 mi.)***	***O42***	***15***
HARRIS CARPET MILL -	94-129 LEOKANE ST	SSW 1/8 - 1/4 (0.220 mi.)	Q45	15
SHELLY MAZDA/HYUNDAI	***94-223 FARRINGTON HW***	***W 1/8 - 1/4 (0.234 mi.)***	***S51***	***16***

State and tribal institutional control / engineering control registries

ENG CONTROLS: A review of the ENG CONTROLS list, as provided by EDR, and dated 12/02/2014 has revealed that there is 1 ENG CONTROLS site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SHELLY MAZDA/HYUNDAI	***94-223 FARRINGTON HW***	***W 1/8 - 1/4 (0.234 mi.)***	***S51***	***16***

INST CONTROL: A review of the INST CONTROL list, as provided by EDR, and dated 12/02/2014 has revealed that there are 2 INST CONTROL sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EWA REPAIR SHOP INC.	***94-303 WAIPAHU ST***	***NW 1/4 - 1/2 (0.398 mi.)***	***61***	***19***

Lower Elevation	Address	Direction / Distance	Map ID	Page
SHELLY MAZDA/HYUNDAI	***94-223 FARRINGTON HW***	***W 1/8 - 1/4 (0.234 mi.)***	***S51***	***16***

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

RCRA NonGen / NLR: A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 12/09/2014 has revealed that there are 6 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ON SITE ENTERPRISES	***94 321 LEONUI ST***	***W 0 - 1/8 (0.118 mi.)***	***D13***	***9***
DEPT OF EDUCATION ST	***94299 FARRINGTON HWY***	***WNW 1/8 - 1/4 (0.131 mi.)***	***F16***	***9***
DEPOT METALS LTD	***94-188 LEOKANE ST***	***W 1/8 - 1/4 (0.168 mi.)***	***J26***	***11***
HAN'S METALS, INC.	94-170 LEOKANE ST	WSW 1/8 - 1/4 (0.169 mi.)	K27	12
PAYLESS DRUG WAIPAHU	***94 300 FARRINGTON HW***	***WNW 1/8 - 1/4 (0.209 mi.)***	***O44***	***15***
BRANDY SIGNS	94-130 LEOKANE ST	SSW 1/8 - 1/4 (0.222 mi.)	R46	15

ROD: A review of the ROD list, as provided by EDR, and dated 11/25/2013 has revealed that there is 1 ROD site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PEARL HARBOR NAVAL C	***US NAVAL COMMAND***	***ESE 1/2 - 1 (0.763 mi.)***	***0***	***7***

DRYCLEANERS: A review of the DRYCLEANERS list, as provided by EDR, and dated 12/31/2014 has revealed that there is 1 DRYCLEANERS site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
C. KEN'S CLEANERS HA	94-321 A LEONUI	WNW 0 - 1/8 (0.039 mi.)	B5	8

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Auto Stat: A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there are 20 EDR US Hist Auto Stat sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	94321 LEONUI ST	WNW 0 - 1/8 (0.039 mi.)	B4	7
Not reported	94117 PUPUKAHI ST	NNE 0 - 1/8 (0.050 mi.)	7	8
Not reported	94252 PUPUOLE ST	SW 0 - 1/8 (0.104 mi.)	11	9
Not reported	94275 PUPUOLE ST	SSW 0 - 1/8 (0.114 mi.)	12	9
Not reported	94165 LEOKANE ST	SW 1/8 - 1/4 (0.143 mi.)	G17	10
Not reported	94380 PUPUPANI ST	NNE 1/8 - 1/4 (0.201 mi.)	M40	14

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	94296 PUPUOLE ST	SSW 0 - 1/8 (0.045 mi.)	6	8
Not reported	94295 PUPUOLE ST	S 0 - 1/8 (0.075 mi.)	C8	8
Not reported	94285 PUPUOLE ST	S 0 - 1/8 (0.088 mi.)	C9	8
Not reported	94279 LEONUI ST	WSW 0 - 1/8 (0.120 mi.)	D14	9
Not reported	94173 LEOKANE ST	WSW 1/8 - 1/4 (0.127 mi.)	E15	9
Not reported	94174 LEOKANE ST	WSW 1/8 - 1/4 (0.169 mi.)	K28	12
Not reported	94267 FARRINGTON HW	WNW 1/8 - 1/4 (0.177 mi.)	J29	12
Not reported	94249 LEONUI ST	WSW 1/8 - 1/4 (0.182 mi.)	L31	12
Not reported	94143 LEOKANE ST	SSW 1/8 - 1/4 (0.186 mi.)	N33	13
Not reported	94264 FARRINGTON HW	WNW 1/8 - 1/4 (0.195 mi.)	37	14
Not reported	94245 FARRINGTON HW	W 1/8 - 1/4 (0.199 mi.)	O39	14
Not reported	94129 LEOKANE ST	SSW 1/8 - 1/4 (0.230 mi.)	Q47	16
Not reported	94221 LEONUI ST	WSW 1/8 - 1/4 (0.230 mi.)	P48	16
Not reported	94223 FARRINGTON HW	W 1/8 - 1/4 (0.233 mi.)	S50	16

EXECUTIVE SUMMARY

EDR US Hist Cleaners: A review of the EDR US Hist Cleaners list, as provided by EDR, has revealed that there are 3 EDR US Hist Cleaners sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	94321 LEONUI ST	WNW 0 - 1/8 (0.039 mi.)	B3	7
Not reported	94366 PUPUPANI ST	N 1/8 - 1/4 (0.166 mi.)	I25	11
Not reported	94300 FARRINGTON HW	NW 1/8 - 1/4 (0.208 mi.)	43	15

Count: 11 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
EWA	S110061853	WAIPAHU GARDEN CENTER	ANIANI PL	96797	SHWS, BROWNFIELDS
EWA BEACH	S110061396	EAST KAPOLEI PESTICIDE MIXING/LOAD	FARRINGTON HWY	96706	SHWS, ENG CONTROLS, INST CONT
EWA BEACH	1001491879	EWA SUGAR/OAHU SUGAR CO. - PESTICI	.8 MILES SOUTH OF FARRINGTON H	96706	CERCLIS
EWA BEACH	1003880090	EWA SUGAR/OAHU SUGAR CO. - FUMIGAN	.8 MILES WEST OF FARRINGTON HY	96706	CERC-NFRAP
KAPOLEI	S106820144	PUMP 15 STATION, FORMER OAHU SUGAR	OLD FARRINGTON HWY	96707	SHWS
OAHU	1003879142	WAIPAHU WELLS	ON CANE ROAD OFF WAIPAHU STREE	96797	CERCLIS
WAIPAHU	S108008476	ALEXANDER AND BALDWIN MILLTOWN LEA	KOAKI ST	96797	SHWS, INST CONTROL, VCP
WAIPAHU	S115488671	94-143 LEOKANE STREET	94-143 LEOKANE ST	96797	SHWS, ENG CONTROLS, INST CONT
WAIPAHU	1006820121	CASTLE AND COOKE MANAGERS DRIVE	MANAGERS DR	96797	SHWS, SPILLS, INST CONTROL, VCP
WAIPAHU	S110061633	LOT 32 FORMER WAIPAHU SUGAR MILL D	WAIPAHU ST	96797	SHWS, INST CONTROL, VCP
WAIPAHU	S108008575	LOT 32 FORMER WAIPAHU SUGAR MILL A	WAIPAHU ST	96797	SHWS, INST CONTROL, VCP

OVERVIEW MAP - 4237094.14S

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Waipahu I ADDRESS: 94-111 Pupupole St. Walpahu HI 96797 LAT/LONG: 21.3792 / 158.0165	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.14s DATE: March 17, 2015 5:33 pm

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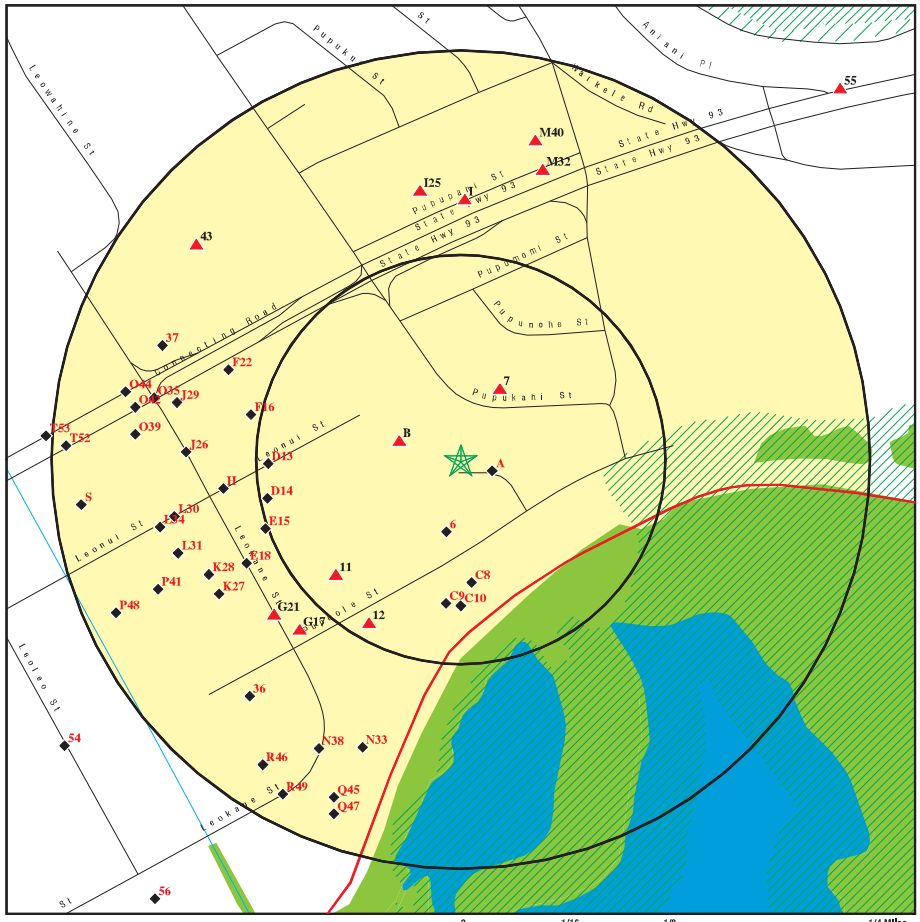
DETAIL MAP - 4237094.14S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Waipahu I ADDRESS: 94-111 Pupupole St. Walpahu HI 96797 LAT/LONG: 21.3792 / 158.0165	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.14s DATE: March 17, 2015 5:34 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	1	NR	1
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		1	1	NR	NR	NR	2
RCRA-CESQG	0.250		1	7	NR	NR	NR	8
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
SHWS	1.000		0	1	1	5	NR	7
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	7	17	NR	NR	24
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250		1	10	NR	NR	NR	11

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		0	1	0	NR	NR	1
INST CONTROL	0.500		0	1	1	NR	NR	2
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		1	5	NR	NR	NR	6
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	1	NR	1
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		1	0	NR	NR	NR	1
AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		8	12	NR	NR	NR	20
EDR US Hist Cleaners	0.250		1	2	NR	NR	NR	3
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
RGA HWS	TP		NR	NR	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
NPL **Region** **ESE** **1/2-1** **4029 ft.**	**PEARL HARBOR NAVAL COMPLEX** **US NAVAL COMMAND** **PEARL HARBOR, HI 96860** Click here for full text details **NPL** EPA Id: HI4170090076 **CERCLIS** EPA Id: HI4170090076	**NPL** **CERCLIS** **US ENG CONTROLS** **US INST CONTROL** **ROD** **PRP**	**1000707626** **HI4170090076**
A1 **ESE** **< 1/8** **0.020 mi.** **108 ft.** **Relative:** **Lower**	**EDWARDS & SANDS CONST. CO, INC.** **94-116 PUPUOLE PL** **WAIPAHU, HI 96797** Click here for full text details **UST** Facility Id: 9-200193 Tank Status: Permanently Out of Use	**UST** **Financial Assurance**	**U001236092** **N/A**
A2 **ESE** **< 1/8** **0.020 mi.** **108 ft.** **Relative:** **Lower**	**EDWARDS & SANDS CONST. CO, INC.** **94-116 PUPUOLE PLACE** **WAIPAHU, HI 96797** Click here for full text details **RCRA-SQG** EPA Id: HIR000139360	**RCRA-SQG** **FINDS**	**1012178271** **HIR000139360**
B3 **WNW** **< 1/8** **0.039 mi.** **206 ft.** **Relative:** **Higher**	**94321 LEONUI ST** **WAIPAHU, HI 96797** Click here for full text details	**EDR US Hist Cleaners**	**1015107761** **N/A**
B4 **WNW** **< 1/8** **0.039 mi.** **206 ft.** **Relative:** **Higher**	**94321 LEONUI ST** **WAIPAHU, HI 96797** Click here for full text details	**EDR US Hist Auto Stat**	**1015681273** **N/A**

B5
WNW
< 1/8
0.039 mi.
207 ft.

Relative: Higher

C. KEN'S CLEANERS HAWAII, INC.
94-321 A LEONUI
WAIPAHU, HI 96797

Click here for full text details

DRYCLEANERS — **S107769082** / **N/A**

6
SSW
< 1/8
0.045 mi.
238 ft.

Relative: Lower

94296 PUPUOLE ST
WAIPAHU, HI 96797

Click here for full text details

EDR US Hist Auto Stat — **1015681167** / **N/A**

7
NNE
< 1/8
0.050 mi.
262 ft.

Relative: Higher

94117 PUPUKAHI ST
WAIPAHU, HI 96797

Click here for full text details

EDR US Hist Auto Stat — **1015680817** / **N/A**

C8
South
< 1/8
0.075 mi.
398 ft.

Relative: Lower

94295 PUPUOLE ST
WAIPAHU, HI 96797

Click here for full text details

EDR US Hist Auto Stat — **1015681166** / **N/A**

C9
South
< 1/8
0.088 mi.
466 ft.

Relative: Lower

94285 PUPUOLE ST
WAIPAHU, HI 96797

Click here for full text details

EDR US Hist Auto Stat — **1015681156** / **N/A**

C10
South
< 1/8
0.089 mi.
472 ft.

Relative: Lower

WESTERN ENGINEERING LTD
94 285 PUPUOLE ST
WAIPAHU, HI 96797

Click here for full text details

RCRA-CESQG
EPA Id: HIR000050138

RCRA-CESQG FINDS — **1004688978** / **HIR000050138**

11
SW
< 1/8
0.104 mi.
547 ft.

Relative: Higher

94252 PUPUOLE ST
WAIPAHU, HI 96797

Click here for full text details

EDR US Hist Auto Stat — **1015681133** / **N/A**

12
SSW
< 1/8
0.114 mi.
603 ft.

Relative: Higher

94275 PUPUOLE ST
WAIPAHU, HI 96797

Click here for full text details

EDR US Hist Auto Stat — **1015681145** / **N/A**

D13
West
< 1/8
0.118 mi.
621 ft.

Relative: Lower

ON SITE ENTERPRISES
94 321 LEONUI ST
WAIPAHU, HI 96797

Click here for full text details

RCRA NonGen / NLR
EPA Id: HID984469163

RCRA NonGen / NLR FINDS — **1000823277** / **HID984469163**

D14
WSW
< 1/8
0.120 mi.
635 ft.

Relative: Lower

94279 LEONUI ST
WAIPAHU, HI 96797

Click here for full text details

EDR US Hist Auto Stat — **1015681146** / **N/A**

E15
WSW
1/8-1/4
0.127 mi.
668 ft.

Relative: Lower

94173 LEOKANE ST
WAIPAHU, HI 96797

Click here for full text details

EDR US Hist Auto Stat — **1015680935** / **N/A**

F16
WNW
1/8-1/4
0.131 mi.
692 ft.

Relative: Lower

DEPT OF EDUCATION STATE OF HAWAII
94299 FARRINGTON HWY
WAIPAHU, HI 96797

Click here for full text details

RCRA NonGen / NLR
EPA Id: HID982486797

RCRA NonGen / NLR FINDS — **1000393278** / **HID982486797**

G17
SW
1/8-1/4
0.143 mi.
755 ft.
Relative: Higher

94165 LEOKANE ST
WAIPAHU, HI 96797

EDR US Hist Auto Stat — **1015680917** / **N/A**

Click here for full text details

E18
WSW
1/8-1/4
0.145 mi.
767 ft.
Relative: Lower

OAHU PAVING CO., INC.
94-170 LEOKANE ST
WAIPAHU, HI 96797

UST — **U001236209** / **N/A**

Click here for full text details

UST
Facility Id: 9-200863
Tank Status: Permanently Out of Use

H19
West
1/8-1/4
0.146 mi.
771 ft.
Relative: Lower

OKA AUTO PAINT & REPAIR
94-279 LEONUI ST
WAIPAHU, HI 96797

RCRA-SQG — **1012178264** / **HIR000139253**

Click here for full text details

RCRA-SQG
EPA Id: HIR000139253

H20
West
1/8-1/4
0.146 mi.
771 ft.
Relative: Lower

OKA AUTO PAINT & REPAIR, INC.
94-279 LEONUI ST
WAIPAHU, HI 96797

UST — **U001236181** / **N/A**

Click here for full text details

UST
Facility Id: 9-200756
Tank Status: Permanently Out of Use

G21
SW
1/8-1/4
0.148 mi.
782 ft.
Relative: Higher

YELLOW FREIGHT SYSTEM, INC
94-164 LEOKANE ST
WAIPAHU, HI 96797

LUST
UST
Financial Assurance — **U001236140** / **N/A**

Click here for full text details

LUST
Facility Id: 9-200366
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-200366
Tank Status: Permanently Out of Use

F22
WNW
1/8-1/4
0.152 mi.
803 ft.
Relative: Lower

7 ELEVEN WAIPAHU
94-264 FARRINGTON HWY
WAIPAHU, HI 96797

RCRA-CESQG — **1004689057** / **HIR000105833**

Click here for full text details

RCRA-CESQG
EPA Id: HIR000105833

I23
North
1/8-1/4
0.159 mi.
841 ft.
Relative: Higher

NEW CITY SHELL
94-380 PUPUPANI ST.
WAIPAHU, HI 96797

LUST
UST
Financial Assurance — **U003541831** / **N/A**

Click here for full text details

LUST
Facility Id: 9-201029
Facility Status: Monitored Natural Attenuation

UST
Facility Id: 9-201029
Tank Status: Permanently Out of Use
Tank Status: Currently in Use

I24
North
1/8-1/4
0.159 mi.
841 ft.
Relative: Higher

NEW CITY SHELL
94-380 PUPUPANI ST
WAIPAHU, HI 96797

RCRA-CESQG — **1004689064** / **HIR000107805**

Click here for full text details

RCRA-CESQG
EPA Id: HIR000107805

I25
North
1/8-1/4
0.166 mi.
879 ft.
Relative: Higher

94366 PUPUPANI ST
WAIPAHU, HI 96797

EDR US Hist Cleaners — **1015107772** / **N/A**

Click here for full text details

J26
West
1/8-1/4
0.168 mi.
887 ft.
Relative: Lower

DEPOT METALS LTD
94-188 LEOKANE ST
WAIPAHU, HI 96797

RCRA NonGen / NLR
FINDS — **1000342649** / **HID981686801**

Click here for full text details

RCRA NonGen / NLR
EPA Id: HID981686801

K27
WSW
1/8-1/4
0.169 mi.
891 ft.

Relative: Lower

HAN'S METALS, INC.
94-170 LEOKANE ST
WAIPAHU, HI 96797

RCRA NonGen / NLR
1014952470
HIR000141259

Click here for full text details

RCRA NonGen / NLR
EPA Id: HIR000141259

K28
WSW
1/8-1/4
0.169 mi.
893 ft.

Relative: Lower

94174 LEOKANE ST
WAIPAHU, HI 96797

EDR US Hist Auto Stat
1015680936
N/A

Click here for full text details

J29
WNW
1/8-1/4
0.177 mi.
934 ft.

Relative: Lower

94267 FARRINGTON HWY
WAIPAHU, HI 96797

EDR US Hist Auto Stat
1015681142
N/A

Click here for full text details

L30
WSW
1/8-1/4
0.178 mi.
941 ft.

Relative: Lower

J R AUTO BODY
94 249 LEONUI ST
WAIPAHU, HI 96797

RCRA-CESQG
FINDS
1005415827
HIR000112854

Click here for full text details

RCRA-CESQG
EPA Id: HIR000112854

L31
WSW
1/8-1/4
0.182 mi.
960 ft.

Relative: Lower

94249 LEONUI ST
WAIPAHU, HI 96797

EDR US Hist Auto Stat
1015681102
N/A

Click here for full text details

M32
NNE
1/8-1/4
0.184 mi.
973 ft.

Relative: Higher

EDDIE S CAR ASSIST CENTER INC
94 380 PUPUPANI ST
WAIPAHU, HI 96797

RCRA-CESQG
FINDS
1004688769
HID033234287

Click here for full text details

RCRA-CESQG
EPA Id: HID033234287

N33
SSW
1/8-1/4
0.186 mi.
981 ft.

Relative: Lower

94143 LEOKANE ST
WAIPAHU, HI 96797

EDR US Hist Auto Stat
1015680880
N/A

Click here for full text details

L34
WSW
1/8-1/4
0.188 mi.
994 ft.

Relative: Lower

KAMA'AINA KONCRETE (FORMERLY MINI-MIX OAHU/L.T. KUWASAKI)
94-233 LEONUI ST
WAIPAHU, HI 96797

LUST
1006843795
N/A

Click here for full text details

LUST
Facility Id: 9-201465
Facility Status: Site Cleanup Completed (NFA)

O35
WNW
1/8-1/4
0.191 mi.
1009 ft.

Relative: Lower

ALOHA PETROLEUM - CIRCLE K
94-307 FARRINGTON HWY
WAIPAHU, HI 96797

UST
Financial Assurance
U003222089
N/A

Click here for full text details

UST
Facility Id: 9-202404
Tank Status: Permanently Out of Use

36
SW
1/8-1/4
0.194 mi.
1022 ft.

Relative: Lower

WILSON FOOD SERVICE
94-150 LEOKANE ST
WAIPAHU, HI 96797

LUST
UST
U001235070
N/A

Click here for full text details

LUST
Facility Id: 9-100158
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-100158
Tank Status: Permanently Out of Use

37
WNW
1/8-1/4
0.195 mi.
1030 ft.
Relative: Lower

94264 FARRINGTON HWY
WAIPAHU, HI 96797

Click here for full text details

EDR US Hist Auto Stat — **1015681141**, **N/A**

N38
SSW
1/8-1/4
0.197 mi.
1038 ft.
Relative: Lower

REDONDO'S INC.
94-140 LEOKANE ST
WAIPAHU, HI 96797

Click here for full text details

LUST — **U001236342**
UST — **N/A**

LUST
Facility Id: 9-201466
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-201466
Tank Status: Permanently Out of Use

O39
West
1/8-1/4
0.199 mi.
1052 ft.
Relative: Lower

94245 FARRINGTON HWY
WAIPAHU, HI 96797

Click here for full text details

EDR US Hist Auto Stat — **1015681101**, **N/A**

M40
NNE
1/8-1/4
0.201 mi.
1059 ft.
Relative: Higher

94380 PUPUPANI ST
WAIPAHU, HI 96797

Click here for full text details

EDR US Hist Auto Stat — **1015681346**, **N/A**

P41
WSW
1/8-1/4
0.201 mi.
1062 ft.
Relative: Lower

FREE TOWING HAWAII, LLC WAIPAHU SITE
94-233 LEONUI ST
WAIPAHU, HI 96797

Click here for full text details

RCRA-CESQG — **1014916458**
FINDS — **HIR000140509**

RCRA-CESQG
EPA Id: HIR000140509

O42
West
1/8-1/4
0.201 mi.
1063 ft.
Relative: Lower

EAST BAY TIRE COMPANY
94-299 FARRINGTON HWY
WAIPAHU, HI 96797

Click here for full text details

LUST — **U003967139**
UST — **N/A**

LUST
Facility Id: 9-203772
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-203772
Tank Status: Permanently Out of Use

43
NW
1/8-1/4
0.208 mi.
1100 ft.
Relative: Higher

94300 FARRINGTON HWY
WAIPAHU, HI 96797

Click here for full text details

EDR US Hist Cleaners — **1015107753**, **N/A**

O44
WNW
1/8-1/4
0.209 mi.
1103 ft.
Relative: Lower

PAYLESS DRUG WAIPAHU
94 300 FARRINGTON HWY
WAIPAHU, HI 96797

Click here for full text details

RCRA NonGen / NLR — **1000978840**
FINDS — **HI0000883389**

RCRA NonGen / NLR
EPA Id: HI0000883389

Q45
SSW
1/8-1/4
0.220 mi.
1163 ft.
Relative: Lower

HARRIS CARPET MILL - HAWAII
94-129 LEOKANE ST
WAIPAHU, HI 96797

Click here for full text details

UST — **U001236556**, **N/A**

UST
Facility Id: 9-202461
Tank Status: Permanently Out of Use

R46
SSW
1/8-1/4
0.222 mi.
1173 ft.
Relative: Lower

BRANDY SIGNS
94-130 LEOKANE ST
WAIPAHU, HI 96797

Click here for full text details

RCRA NonGen / NLR — **1014472029**, **HIP000140301**

RCRA NonGen / NLR
EPA Id: HIP000140301

Q47
SSW
1/8-1/4
0.230 mi.
1214 ft.
Relative: Lower

94129 LEOKANE ST
WAIPAHU, HI 96797

Click here for full text details

EDR US Hist Auto Stat — **1015680840** / **N/A**

P48
WSW
1/8-1/4
0.230 mi.
1217 ft.
Relative: Lower

94221 LEONUI ST
WAIPAHU, HI 96797

Click here for full text details

EDR US Hist Auto Stat — **1015681079** / **N/A**

R49
SSW
1/8-1/4
0.231 mi.
1222 ft.
Relative: Lower

ZIPPYS INC REPAIR AMD MAINT SHOP
94 130 LEOKANE ST
WAIPAHU, HI 96797

Click here for full text details

RCRA-CESQG
EPA Id: HID984468439

RCRA-CESQG — **1000688457**
FINDS — **HID984468439**

S50
West
1/8-1/4
0.233 mi.
1229 ft.
Relative: Lower

94223 FARRINGTON HWY
WAIPAHU, HI 96797

Click here for full text details

EDR US Hist Auto Stat — **1015681080** / **N/A**

S51
West
1/8-1/4
0.234 mi.
1233 ft.
Relative: Lower

SHELLY MAZDA/HYUNDAI
94-223 FARRINGTON HWY
WAIPAHU, HI 96797

Click here for full text details

SHWS — **U001236198** / **N/A**
LUST
UST
SPILLS
ENG CONTROLS
INST CONTROL

LUST
Facility Id: 9-200839
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-200839
Tank Status: Permanently Out of Use

T52
West
1/8-1/4
0.241 mi.
1274 ft.
Relative: Lower

FIRESTONE COMPLETE AUTO CARE
94 267 FARRINGTON HWY
WAIPAHU, HI 96797

Click here for full text details

RCRA-CESQG
EPA Id: HIR000096339

RCRA-CESQG — **1004689036** / **HIR000096339**

T53
West
1/4-1/2
0.254 mi.
1340 ft.
Relative: Lower

7-ELEVEN WAIPAHU
94-264 FARRINGTON HWY
WAIPAHU, HI 96797

Click here for full text details

LUST
Facility Id: 9-200323
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-200323
Tank Status: Currently in Use
Tank Status: Permanently Out of Use

LUST — **U001236126**
UST — **N/A**
Financial Assurance

54
SW
1/4-1/2
0.298 mi.
1576 ft.
Relative: Lower

CITY MILL WAIPAHU
94-157 LEOLEO ST
WAIPAHU, HI 96797

Click here for full text details

LUST
Facility Id: 9-203934
Facility Status: Site Cleanup Completed (NFA)

LUST — **S113830832** / **N/A**

55
NE
1/4-1/2
0.324 mi.
1713 ft.
Relative: Higher

BIONIC SELF-SERVE
94-485 FARRINGTON HWY
WAIPAHU, HI 96797

Click here for full text details

LUST
Facility Id: 9-201097
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-201097
Tank Status: Currently In Use

LUST — **U003222011**
UST — **N/A**
Financial Assurance

56
SW
1/4-1/2
0.327 mi.
1726 ft.

Relative: Lower

HT&T CO.,INC.
94-099 LEOKANE ST
WAIPAHU, HI 96797

LUST **U003541822**
UST **N/A**

Click here for full text details

LUST
Facility Id: 9-200711
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-200711
Tank Status: Permanently Out of Use

57
WSW
1/4-1/2
0.328 mi.
1732 ft.

Relative: Lower

FINOVA HAWAIIAN HOLDINGS, LLC DBA LEX BRODIE'S TIRE CO.
94-169 FARRINGTON HWY
WAIPAHU, HI 96797

LUST **U003222031**
UST **N/A**
Financial Assurance

Click here for full text details

LUST
Facility Id: 9-201467
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-201467
Tank Status: Permanently Out of Use
Tank Status: Currently In Use

58
SW
1/4-1/2
0.373 mi.
1970 ft.

Relative: Lower

AMERICAN FENCE COMPANY, LTD.
94-086 LEOKANE ST
WAIPAHU, HI 96797

LUST **U001236203**
UST **N/A**

Click here for full text details

LUST
Facility Id: 9-200845
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-200845
Tank Status: Permanently Out of Use

U59
WSW
1/4-1/2
0.377 mi.
1992 ft.

Relative: Lower

NISSAN OF WAIPAHU - SERVICE CENTER
94-133 LEONUI ST
WAIPAHU, HI 96797

LUST **U001237421**
UST **N/A**

Click here for full text details

LUST
Facility Id: 9-202522
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-202522
Tank Status: Permanently Out of Use

60
WSW
1/4-1/2
0.394 mi.
2079 ft.

Relative: Lower

CUTTER MITSUBISHI DODGE
94 149 FARRINGTON HWY
WAIPAHU, HI 96797

RCRA-CESQG **1000401591**
FINDS **HID981967672**
LUST
UST

Click here for full text details

RCRA-CESQG
EPA Id: HID981967672

LUST
Facility Id: 9-201495
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-201495
Tank Status: Permanently Out of Use

61
NW
1/4-1/2
0.398 mi.
2101 ft.

Relative: Higher

EWA REPAIR SHOP INC.
94-303 WAIPAHU ST
WAIPAHU, HI 96797

SHWS **U001236030**
LUST **N/A**
UST
INST CONTROL
Financial Assurance

Click here for full text details

LUST
Facility Id: 9-200024
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-200024
Tank Status: Permanently Out of Use
Tank Status: Currently In Use

U62
WSW
1/4-1/2
0.398 mi.
2103 ft.

Relative: Lower

C&CH WAIPAHU FIRE STATION — **LUST** — **U003914037**
94-121 LEONUI ST — **UST** — **N/A**
WAIPAHU, HI 96797 — **Financial Assurance**

Click here for full text details

LUST
Facility Id: 9-200098
Facility Status: Site Assessment Ongoing

UST
Facility Id: 9-200098
Tank Status: Permanently Out of Use

63
West
1/4-1/2
0.420 mi.
2215 ft.

Relative: Higher

TESORO GAS EXPRESS #61041 — **LUST** — **U004220497**
94-120 FARRINGTON HWY — **UST** — **N/A**
WAIPAHU, HI 96797 — **Financial Assurance**

Click here for full text details

LUST
Facility Id: 9-200922
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-200922
Tank Status: Currently In Use
Tank Status: Permanently Out of Use

64
West
1/4-1/2
0.429 mi.
2266 ft.

Relative: Lower

GOODYEAR LEASED FACILITY — **LUST** — **U003222133**
94-144 FARRINGTON HWY — **UST** — **N/A**
WAIPAHU, HI 96797

Click here for full text details

LUST
Facility Id: 9-203020
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-203020
Tank Status: Permanently Out of Use

65
WSW
1/4-1/2
0.431 mi.
2274 ft.

Relative: Lower

ALLIED MACHINERY CORPORATION — **LUST** — **U003155069**
94-168 LEOOLE ST — **UST** — **N/A**
WAIPAHU, HI 96797

Click here for full text details

LUST
Facility Id: 9-203248
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-203248
Tank Status: Permanently Out of Use

66
WSW
1/4-1/2
0.441 mi.
2330 ft.

Relative: Lower

NISSAN OF WAIPAHU - SHOWROOOM — **LUST** — **U003222038**
94-119 FARRINGTON HWY — **UST** — **N/A**
WAIPAHU, HI 96797

Click here for full text details

LUST
Facility Id: 9-201672
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-201672
Tank Status: Permanently Out of Use

V67
West
1/4-1/2
0.464 mi.
2449 ft.

Relative: Lower

SHELLY MOTORS INC. — **LUST** — **U001236413**
94-212 LEOKU ST — **UST** — **N/A**
WAIPAHU, HI 96797

Click here for full text details

LUST
Facility Id: 9-201827
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-201827
Tank Status: Permanently Out of Use

68
WSW
1/4-1/2
0.474 mi.
2505 ft.

Relative: Lower

PFLUEGER CAR AND TRUCK CENTER — **LUST** — **U003222104**
94-097 FARRINGTON HWY — **UST** — **N/A**
WAIPAHU, HI 96797 — **Financial Assurance**

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LUST
Facility Id: 9-202518

PFLUEGER CAR AND TRUCK CENTER (Continued) — **U003222104**

Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-202518
Tank Status: Permanently Out of Use

V69 West 1/4-1/2 0.475 mi. 2510 ft. Relative: Lower

TANDAL'S WAIPAHU 76
94-206 LEOKU ST
WAIPAHU, HI 96797

Click here for full text details

Database(s)	EDR ID Number / EPA ID Number
LUST	U001236031
UST	N/A
Financial Assurance	

LUST
Facility Id: 9-200025
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-200025
Tank Status: Currently in Use
Tank Status: Permanently Out of Use
Tank Status: Permanently out of Use

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70 WSW 1/2-1 0.547 mi. 2887 ft. Relative: Lower

PACIFIC MACHINERY
94-025 FARRINGTON HWY
WAIPAHU, HI 96797

Click here for full text details

Database(s)	EDR ID Number / EPA ID Number
RCRA-CESQG	1000252022
SHWS	HID981651698
LUST	
UST	
SPILLS	
Financial Assurance	

RCRA-CESQG
EPA Id: HID981651698

LUST
Facility Id: 9-200846
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-200846
Tank Status: Permanently Out of Use

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71 ENE 1/2-1 0.728 mi. 3843 ft. Relative: Lower

WAIPAHU AUTO COMPANY
HONOLULU, HI 96797

Click here for full text details

Database(s)	EDR ID Number / EPA ID Number
SHWS	S108009297
SPILLS	N/A
INST CONTROL	

72 East 1/2-1 0.752 mi. 3972 ft. Relative: Lower

ABC CORPORATION DEPOT ROAD
94-049 DEPOT RD
WAIPAHU, HI 96797

Click here for full text details

Database(s)	EDR ID Number / EPA ID Number
SHWS	S108008474
	N/A

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73 NE 1/2-1 0.783 mi. 4136 ft. Relative: Higher

AMFAC/OAHU SUGAR COMPANY, LTD (WAIPAHU SUGAR MILL)
94-833 MAKAALOHA ST
WAIPAHU, HI 96797

Click here for full text details

Database(s)	EDR ID Number / EPA ID Number
SHWS	U001236230
SPILLS	N/A
INST CONTROL	
VCP	

---

74 East 1/2-1 0.793 mi. 4187 ft. Relative: Lower

WAIPAHU INCINERATOR/ASH DUMP
93-071 WAIPAHU DEPOT RD
WAIPAHU, HI 96797

Click here for full text details

Database(s)	EDR ID Number / EPA ID Number
SHWS	S106821081
SPILLS	N/A

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
HI	AIRS	List of Permitted Facilities	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	BROWNFIELDS	Brownfields Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	CDL	Clandestine Drug Lab Listing	Department of Health	08/04/2010	09/10/2010	10/22/2010
HI	DRYCLEANERS	Permitted Drycleaner Facility Listing	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	ENG CONTROLS	Engineering Control Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	Financial Assurance	Financial Assurance Information Listing	Department of Health	12/01/2014	12/19/2014	01/28/2015
HI	INST CONTROL	Sites with Institutional Controls	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	LUST	Leaking Underground Storage Tank Database	Department of Health	12/16/2014	12/19/2014	01/28/2015
HI	RGA HWS	Recovered Government Archive State Hazardous Waste Facilitie	Department of Health		07/01/2013	01/08/2014
HI	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Health		07/01/2013	01/17/2014
HI	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	Department of Health		07/01/2013	01/03/2014
HI	SHWS	Sites List	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	SPILLS	Release Notifications	Department of Health	12/02/2014	12/22/2014	01/28/2015
HI	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	03/10/2012	01/03/2013	02/11/2013
HI	SWF/LF	Permitted Landfills in the State of Hawaii	Department of Health	09/17/2012	04/03/2013	05/10/2013
HI	UIC	Underground Injection Wells Listing	Department of Health	02/07/2013	02/12/2013	04/09/2013
HI	UST	Underground Storage Tank Database	Department of Health	12/18/2014	12/19/2014	01/28/2015
HI	VCP	Voluntary Response Program Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	04/22/2013	03/03/2015	03/09/2015
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2011	02/26/2013	04/19/2013
US	CERCLIS	Comprehensive Environmental Response, Compensation, and Liab	EPA	10/25/2013	11/11/2013	02/13/2014
US	CERCLIS-NFRAP	CERCLIS No Further Remedial Action Planned	EPA	10/25/2013	11/11/2013	02/13/2014
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	07/01/2014	09/10/2014	10/20/2014
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	01/23/2015	02/13/2015	03/09/2015
US	CORRACTS	Corrective Action Report	EPA	12/09/2014	12/29/2014	01/29/2015
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DELISTED NPL	National Priority List Deletions	EPA	12/16/2014	01/08/2015	02/09/2015
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	07/31/2012	08/07/2012	09/18/2012
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EDR US Hist Auto Stat	EDR Exclusive Historic Gas Stations	EDR, Inc.			
US	EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	09/29/2014	09/30/2014	11/06/2014
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	07/21/2014	10/07/2014	10/20/2014
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
US	FEMA UST	Underground Storage Tank Listing	FEMA	01/01/2010	02/16/2010	04/12/2010
US	FINDS	Facility Index System/Facility Registry System	EPA	08/16/2014	09/10/2014	10/20/2014
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	06/06/2014	09/10/2014	09/18/2014
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	12/29/2014	12/30/2014	03/09/2015
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	01/23/2015	02/06/2015	03/09/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	02/01/2013	05/01/2013	11/01/2013

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	01/30/2015	02/05/2015	03/09/2015
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/10/2015	03/13/2015
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	01/28/2015	01/30/2015	03/13/2015
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	01/08/2015	01/08/2015	02/09/2015
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2005	12/08/2006	01/11/2007
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	02/01/2013	05/01/2013	01/27/2014
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	01/30/2015	02/05/2015	03/13/2015
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/13/2015	03/13/2015
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	01/29/2015	01/30/2015	03/13/2015
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	12/14/2014	02/13/2015	03/13/2015
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	09/29/2014	10/01/2014	11/06/2014
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	11/25/2014	11/26/2014	01/29/2015
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	02/18/2014	03/18/2014	04/24/2014
US	LUCIS	Land Use Control Information System	Department of the Navy	12/03/2014	12/12/2014	01/29/2015
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	12/29/2014	01/08/2015	01/29/2015
US	NPL	National Priority List	EPA	12/16/2014	01/08/2015	02/09/2015
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	07/01/2014	10/15/2014	11/17/2014
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	02/01/2011	10/19/2011	01/10/2012
US	PRP	Potentially Responsible Parties	EPA	10/25/2013	10/17/2014	10/20/2014
US	Proposed NPL	Proposed National Priority List Sites	EPA	12/16/2014	01/08/2015	02/09/2015
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	10/07/2014	10/08/2014	10/20/2014
US	RCRA NonGen / NLR	RCRA - Non Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RMP	Risk Management Plans	Environmental Protection Agency	08/01/2014	08/12/2014	11/06/2014
US	ROD	Records Of Decision	EPA	11/25/2013	12/12/2013	02/24/2014
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	03/07/2011	03/09/2011	05/02/2011
US	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2011	07/31/2013	09/13/2013
US	TSCA	Toxic Substances Control Act	EPA	12/31/2012	01/15/2015	01/29/2015
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	09/14/2010	10/07/2011	03/01/2012
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/16/2014	10/31/2014	11/17/2014
US	US AIRS MINOR	Air Facility System Data	EPA	10/16/2014	10/31/2014	11/17/2014

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	12/22/2014	12/22/2014	01/29/2015
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	11/19/2014	11/21/2014	01/29/2015
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	12/30/2014	12/31/2014	01/29/2015
US	Oil/Gas Pipelines	GeoData Digital Line Graphs from 1:100,000-Scale Maps	USGS			
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
US	USGS 7.5' Topographic Map	Scanned Digital USGS 7.5' Topographic Map (DRG)	USGS			

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

WAIPAHU I
94-111 PUPUPOLE ST.
WAIPAHU, HI 96797

TARGET PROPERTY COORDINATES

Latitude (North):	21.3792 - 21˚ 22' 45.12''
Longitude (West):	158.0165 - 158˚ 0' 59.40''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	601958.9
UTM Y (Meters):	2364295.5
Elevation:	41 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	21158-D1 SCHOFIELD BARRACKS, HI
Most Recent Revision:	Not reported
South Map:	21158-C1 EWA, HI
Most Recent Revision:	Not reported

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

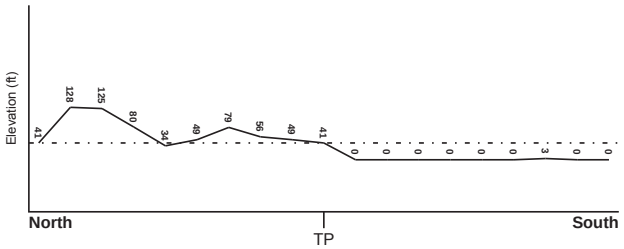
TOPOGRAPHIC INFORMATION

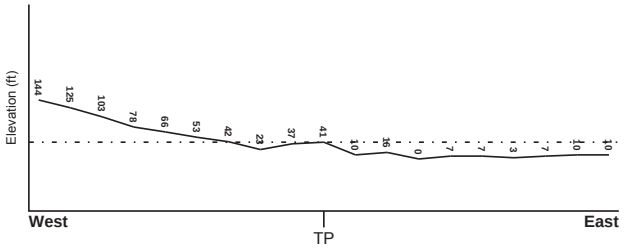
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General South

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 41 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
HONOLULU, HI	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 15003C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
SCHOFIELD BARRACKS	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

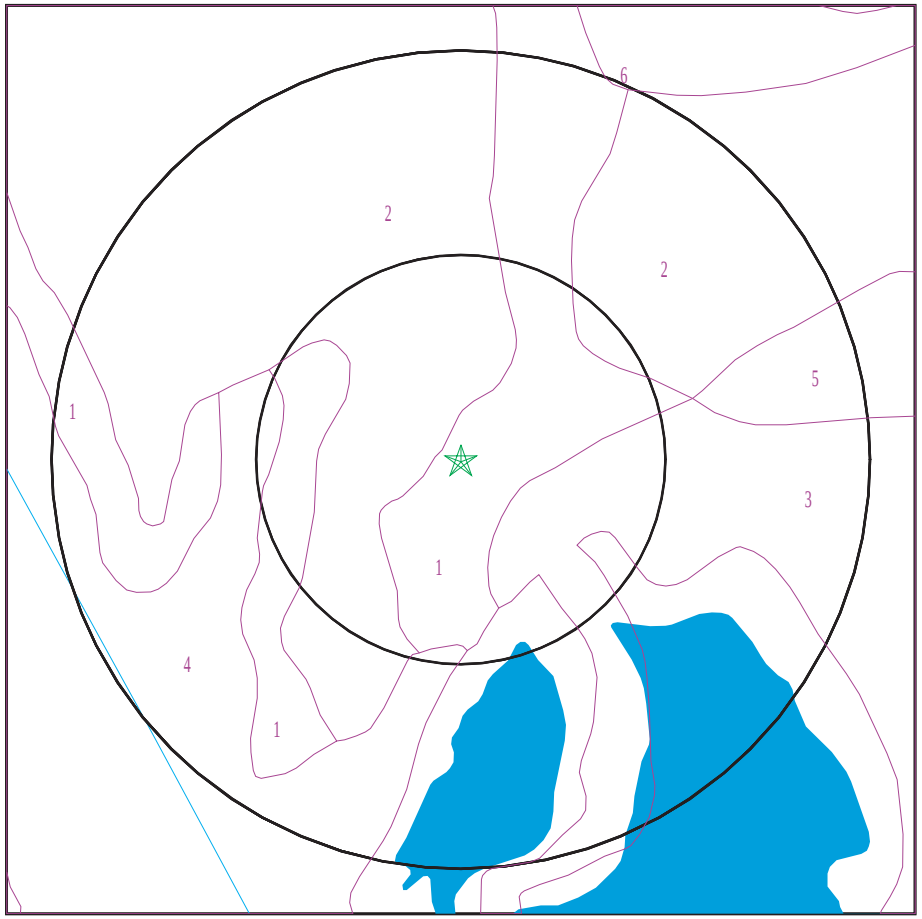
Era: -
System: -
Series: -
Code: N/A *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: -

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4237094.14s



★ Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME: Waipahu I ADDRESS: 94-111 Pupupole St. Walpahu HI 96797 LAT/LONG: 21.3792 / 158.0165	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.14s DATE: March 17, 2015 5:34 pm

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DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Waipahu

Soil Surface Texture: silty clay

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14.11 Min: 4.23	Max: 6.5 Min: 6.1
2	11 inches	70 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4.23 Min: 0.42	Max: 6.5 Min: 6.1

Soil Map ID: 2

Soil Component Name: Waipahu

Soil Surface Texture: silty clay

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14.11 Min: 4.23	Max: 6.5 Min: 6.1
2	11 inches	70 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4.23 Min: 0.42	Max: 6.5 Min: 6.1

Soil Map ID: 3

Soil Component Name: Tropaquepts

Soil Surface Texture: mucky silt loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 31 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	mucky silt loam	Not reported	Highly organic soils, Peat.	Max: 42 Min: 14.11	Max: 6.5 Min: 5.6
2	9 inches	18 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 4 Min: 1.41	Max: 6.5 Min: 5.6
3	18 inches	59 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4.23	Max: 6.5 Min: 5.6

Soil Map ID: 4

Soil Component Name: Pearl Harbor

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 30 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4.23 Min: 0.42	Max: 7.3 Min: 6.6

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	11 inches	31 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 8.4 Min: 6.6
3	31 inches	48 inches	muck	A-8	Highly organic soils, Peat.	Max: 0.42 Min: 0.01	Max: 7.8 Min: 7.4

Soil Map ID: 5

Soil Component Name: Honouliuli

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	14 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4 Min: 0.42	Max: 7.3 Min: 6.6
2	14 inches	68 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 7.8 Min: 6.6

Soil Map ID: 6

Soil Component Name: Helemano

Soil Surface Texture: silty clay

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 42 Min: 14.11	Max: 7.3 Min: 5.6
2	9 inches	40 inches	paragravelly silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 42.34 Min: 4.23	Max: 7.3 Min: 5.6
3	40 inches	59 inches	very paragravelly silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14 Min: 4.23	Max: 7.3 Min: 5.6

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	USGS40000270254	0 - 1/8 Mile ENE
A4	USGS40000270253	1/8 - 1/4 Mile ENE
B6	USGS40000270226	1/8 - 1/4 Mile SSW
B8	USGS40000270223	1/4 - 1/2 Mile SSW
C10	USGS40000270255	1/4 - 1/2 Mile West
D11	USGS40000270260	1/4 - 1/2 Mile East
E13	USGS40000270304	1/4 - 1/2 Mile NNE
15	USGS40000270316	1/4 - 1/2 Mile NNW
F17	USGS40000270227	1/2 - 1 Mile WSW
G18	USGS40000270284	1/2 - 1 Mile ENE
I23	USGS40000270175	1/2 - 1 Mile SSW
I27	USGS40000270172	1/2 - 1 Mile SSW
H30	USGS40000270319	1/2 - 1 Mile NW
H31	USGS40000270318	1/2 - 1 Mile NW
H32	USGS40000270317	1/2 - 1 Mile NW
H33	USGS40000270320	1/2 - 1 Mile NW
H34	USGS40000270323	1/2 - 1 Mile NW
H35	USGS40000270322	1/2 - 1 Mile NW
H36	USGS40000270321	1/2 - 1 Mile NW
J39	USGS40000270336	1/2 - 1 Mile NE
J40	USGS40000270337	1/2 - 1 Mile NE
J41	USGS40000270335	1/2 - 1 Mile NE
J42	USGS40000270333	1/2 - 1 Mile NE
J43	USGS40000270334	1/2 - 1 Mile NE
J44	USGS40000270341	1/2 - 1 Mile NE
J45	USGS40000270342	1/2 - 1 Mile NE
J46	USGS40000270340	1/2 - 1 Mile NE
J47	USGS40000270338	1/2 - 1 Mile NE
J48	USGS40000270339	1/2 - 1 Mile NE
K57	USGS40000270303	1/2 - 1 Mile ENE
K59	USGS40000270301	1/2 - 1 Mile ENE
J61	USGS40000270348	1/2 - 1 Mile NE
J62	USGS40000270347	1/2 - 1 Mile NE
J63	USGS40000270350	1/2 - 1 Mile NE
J64	USGS40000270349	1/2 - 1 Mile NE
L69	USGS40000270229	1/2 - 1 Mile West
M73	USGS40000270196	1/2 - 1 Mile WSW
M74	USGS40000270195	1/2 - 1 Mile WSW
M75	USGS40000270198	1/2 - 1 Mile WSW
M76	USGS40000270197	1/2 - 1 Mile WSW
N79	USGS40000270224	1/2 - 1 Mile WSW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
P83	USGS40000270210	1/2 - 1 Mile ESE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
H29	HI0000335	1/2 - 1 Mile NW

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A2	HI8000000002867	0 - 1/8 Mile ENE
A3	HI8000000002866	0 - 1/8 Mile ENE
B5	HI8000000002841	1/8 - 1/4 Mile SW
B7	HI8000000002837	1/4 - 1/2 Mile SSW
C9	HI8000000002865	1/4 - 1/2 Mile West
D12	HI8000000002872	1/4 - 1/2 Mile East
E14	HI8000000002922	1/4 - 1/2 Mile NNE
F16	HI8000000002840	1/2 - 1 Mile WSW
G19	HI8000000002896	1/2 - 1 Mile ENE
H20	HI8000000002936	1/2 - 1 Mile NW
I21	HI8000000002792	1/2 - 1 Mile SSW
H22	HI8000000002941	1/2 - 1 Mile NW
I24	HI8000000002791	1/2 - 1 Mile SSW
H25	HI8000000002935	1/2 - 1 Mile NW
H26	HI8000000002940	1/2 - 1 Mile NW
28	HI8000000002981	1/2 - 1 Mile North
H37	HI8000000002939	1/2 - 1 Mile NW
H38	HI8000000002953	1/2 - 1 Mile NW
J49	HI8000000002944	1/2 - 1 Mile NE
J50	HI8000000002945	1/2 - 1 Mile NE
J51	HI8000000002942	1/2 - 1 Mile NE
J52	HI8000000002943	1/2 - 1 Mile NE
J53	HI8000000002948	1/2 - 1 Mile NE
J54	HI8000000002949	1/2 - 1 Mile NE
J55	HI8000000002946	1/2 - 1 Mile NE
J56	HI8000000002947	1/2 - 1 Mile NE
K58	HI8000000002924	1/2 - 1 Mile ENE
K60	HI8000000002919	1/2 - 1 Mile ENE
J65	HI8000000002961	1/2 - 1 Mile NE
J66	HI8000000002962	1/2 - 1 Mile NE
J67	HI8000000002963	1/2 - 1 Mile NE
L68	HI8000000002844	1/2 - 1 Mile West
M70	HI8000000002817	1/2 - 1 Mile WSW
M71	HI8000000002818	1/2 - 1 Mile WSW
M72	HI8000000002819	1/2 - 1 Mile WSW
N77	HI8000000002836	1/2 - 1 Mile WSW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
O78	HI8000000003058	1/2 - 1 Mile NNE
O80	HI8000000003067	1/2 - 1 Mile North
O81	HI8000000003068	1/2 - 1 Mile NNE
O82	HI8000000003073	1/2 - 1 Mile NNE
P84	HI8000000002823	1/2 - 1 Mile ESE

PHYSICAL SETTING SOURCE MAP - 4237094.14s

County Boundary
Major Roads
Contour Lines
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons

Groundwater Flow Direction
Indeterminate Groundwater Flow at Location
Groundwater Flow Varies at Location

0 1/4 1/2 1 Miles

SITE NAME: Waipahu I ADDRESS: 94-111 Pupupole St. Waipahu HI 96797 LAT/LONG: 21.3792 / 158.0165	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.14s DATE: March 17, 2015 5:34 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
A1 **ENE** **0 - 1/8 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270254**
A2 **ENE** **0 - 1/8 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002867**
A3 **ENE** **0 - 1/8 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002866**
A4 **ENE** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270253**
B5 **SW** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002841**
B6 **SSW** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270226**
B7 **SSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002837**
B8 **SSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270223**
C9 **West** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002865**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
C10 **West** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270255**
D11 **East** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270260**
D12 **East** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002872**
E13 **NNE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270304**
E14 **NNE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002922**
15 **NNW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270316**
F16 **WSW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002840**
F17 **WSW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270227**
G18 **ENE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270284**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
G19 **ENE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002896**
H20 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002936**
I21 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002792**
H22 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002941**
I23 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270175**
I24 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002791**
H25 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002935**
H26 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002940**
I27 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270172**

Map ID Direction Distance Elevation		Database	EDR ID Number
28 **North** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002981**
H29 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FRDS PWS**	**HI0000335**
H30 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270319**
H31 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270318**
H32 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270317**
H33 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270320**
H34 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270323**
H35 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270322**
H36 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270321**

Map ID Direction Distance Elevation		Database	EDR ID Number
H37 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002939**
H38 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002953**
J39 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270336**
J40 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270337**
J41 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270335**
J42 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270333**
J43 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270334**
J44 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270341**
J45 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270342**

Map ID Direction Distance Elevation		Database	EDR ID Number
J46 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270340**
J47 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270338**
J48 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270339**
J49 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002944**
J50 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002945**
J51 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002942**
J52 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002943**
J53 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002948**
J54 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002949**

Map ID Direction Distance Elevation		Database	EDR ID Number
J55 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002946**
J56 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002947**
K57 **ENE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270303**
K58 **ENE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002924**
K59 **ENE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270301**
K60 **ENE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002919**
J61 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270348**
J62 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270347**
J63 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270350**

Map ID Direction Distance Elevation		Database	EDR ID Number
J64 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270349**
J65 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002961**
J66 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002962**
J67 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002963**
L68 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002844**
L69 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270229**
M70 **WSW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002817**
M71 **WSW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002818**
M72 **WSW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002819**

Map ID Direction Distance Elevation		Database	EDR ID Number
M73 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270196**
M74 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270195**
M75 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270198**
M76 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270197**
N77 **WSW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002836**
O78 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003058**
N79 **WSW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270224**
O80 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003067**
O81 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003068**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
O82 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003073**
P83 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270210**
P84 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002823**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for HONOLULU County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 96797

Number of sites tested: 12

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.200 pCi/L	100%	0%	0%
Living Area - 2nd Floor	0.000 pCi/L	100%	0%	0%
Basement	0.100 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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HAWAII PUBLIC HOUSING AUTHORITY

ENVIRONMENTAL REVIEW

WAIPAHU II

Waipahu, O`ahu

AMP 30
HPHA No. 1039

Prepared for:

State of Hawaii
Hawaii Public Housing Authority

Prepared by:

HHF PLANNERS
places for people

U.S. Department of Housing and Urban Development
451 Seventh Street, SW
Washington, DC 20410
www.hud.gov

espanol.hud.gov

Environmental Review for Activity/Project that is Categorically Excluded Subject to Section 58.5

Pursuant to 24 CFR 58.35(a)

Project Information

Project Name: Waipahu II (AMP 30)

Responsible Entity: Hawaii Public Housing Authority
1002 North School Street
Honolulu, HI 96817

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

State/Local Identifier: State of Hawai‘i

Preparer: Mr. Scott Ezer, Vice President
HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawai‘i 96813

Certifying Officer Name and Title: Mr. David Y. Ige
Governor, State of Hawai‘i

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

Consultant (if applicable): HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawai‘i 96813

Direct Comments to: Mr. Hakim Ouansafi, Executive Director
Hawaii Public Housing Authority
1002 North School Street
Honolulu, Hawai‘i 96817

Project Location: 94-132 Pupupuhi Street
Waipahu, Hawai‘i 96797

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]**:**

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a "major construction activity" and would involve one or a combination of several HUD designated categories of actions.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent;
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons;
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland;
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation;
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls);
7. Interior and exterior renovations and rehabilitation;
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site;
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Level of Environmental Review Determination:

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.5. Compliance with and completion of conformance determinations for other statute, executive order, or regulation has been completed and support the Categorical Exclusion.

Funding Information

Grant Number	HUD Program	Funding Amount
To be determined	Capital Fund Grants	To be determined
To be determined	Economic Development Initiative Special Project Grant	To be determined
To be determined	Other Grants	To be determined

Estimated Total HUD Funded Amount:

To be determined by HUD using a formula and based upon Federal budget.

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]**:**

Depends on funds available.

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	*The project is not within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.*
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☒	*The State of Hawai'i does not have any designated coastal barrier resource units. (http://www.fws.gov/CBRA/Maps/Mapper.html)*
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes ☐ No ☒	*As indicated in the Flood Insurance Rate Panel 15003C0238G, Revised January 19, 2011, this project is located in Zone X (an area of minimal flood hazard). Based on its description, this project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.*

STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5		
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes ☐ No ☒	*The State of Hawai'i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. EPA's Green Book for currently designated "nonattainment areas" as of June 2015. Planned repair and rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.*
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes ☐ No ☒	*Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai'i's Coastal Zone Management (CZM) program.*
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☐ No ☒	*There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.*
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes ☒ No ☐	*The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (USFWS) in their letter dated September 28, 2015 which is included in the Appendices, while project-specific mitigation measures are identified in the following section.*
Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes ☐ No ☒	*There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.*

Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes ☐ No ☒	*The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.*
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes ☐ No ☒	*The project site is located in Zone X, an area of minimal flooding (i.e., 0.2% annual chance flood), and is located outside the 500-year flood zone. A field inspection and information obtained from AMP Manager confirmed no major flooding issues within the project site.*
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes ☐ No ☒	*Waipahu II was first occupied in 1970 and is 45 years old. To be eligible for listing in the National Register of Historic Places (NRHP), a property must meet the National Register criteria for evaluation which involves examining its integrity, significance, and age (generally at least 50 years old). Due to its age, this housing project does not meet the eligibility criteria to be evaluated for the NRHP. In a letter to the State Historic Preservation Officer dated July 23, 2015, the HPHA determined that no historic properties would be affected by repair and rehabilitation improvements for this housing project. No comments or objections about this no effect determination were received.*
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes ☐ No ☒	*The project site is not situated along a highway or major arterial roadway that has a high volume of vehicular traffic that may generate significant noise. The HUD noise calculator estimated noise levels at the project site to be 49.5 dBA (road only), 53.9 dBA (rail only) and 55.3 dBA (combined road and rail sources). Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.*

Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes ☐ No ☒	*The housing project is located within the O'ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation.*
Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☐ No ☒	*There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.* *(http://www.fws.gov/wetlands/data/mapper.HTML)*
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes ☐ No ☒	*There are no Wild and Scenic Rivers in Hawai'i, which excludes this project from mitigation or formal consultation requirements (http://www.rivers.gov/map.php)*
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes ☐ No ☒	*Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, these improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects on minority populations and low-income populations. Improvements should benefit low-income and minority populations living within this housing project.*

Field Inspection (Date and completed by)**:** June 18, 2015
Questor Lau, Planner
HHF Planners

Summary of Findings and Conclusions:

Repair and rehabilitation improvements implemented for this existing housing project by HPHA should not result in significant environmental impacts based upon research data collected, a field inspection, consultation with the site manager and maintenance staff, consultation with pertinent resource agencies, and prior HPHA experience implementing repair and rehabilitation improvements. Therefore, repair and rehabilitation improvements would comply and be consistent with the statutes, executive orders, and regulations addressed. Furthermore, HPHA would evaluate improvements planned to ensure the work is consistent with the designated categories of actions described under the project description section. Compliance with these factors evaluated are

further addressed in the attached Source Documentation Statutory Worksheet along with relevant technical reports/assessments.

Law, Authority, or Factor	Mitigation Measure
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	*Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.* *Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.* *Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.* *Newell's shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.* *Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.* *Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo'i, impoundments or other vegetated water bodies.*

	1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols. *2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.* *3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.* *In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.* *<u>Additional Measures</u>: The following additional measures would be implemented:* *1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.*

	State housing projects after the current Section 106 review process is completed and prior to the next environmental review process in approximately five years. Furthermore, should subsurface human remains or other traces of human activity greater than 50 years old be encountered during construction, all work in the vicinity of the find would immediately stop and the SHPD would be promptly notified. The treatment of any human remains that are encountered would be conducted in accordance with applicable requirements of Chapter 6E, Hawai'i Revised Statutes (Historic Preservation) and Chapter 13-300, Hawai'i Administrative Rules (Rules of Practice and Procedure Relating to Burial Sites and Human Remains).

Determination:

☐ This categorically excluded activity/project converts to **EXEMPT** per Section 58. 34(a)(12), because it does not require any mitigation for compliance with any listed statutes or authorities, nor requires any form al permit or license; **Funds may be committed and drawn down after certification of this part** for this (now) EXEMPT project; OR

☒ This categorically excluded activity/project cannot convert to Exempt status because one or more statutes or authorities listed at Section 58.5 requir es formal consultation or m itigation. Complete consultation/mitigation protocol requirements, **publish NOI/RROF and obt ain "Authority to Use Grant Funds"** (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR

☐ This project is not categorically excluded OR, if originally categorically excluded, is now subject to a full Environm ental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

Preparer Signature: Scott Ezer Date: 12-7-15

Name/Title/Organization: Mr. Scott Ezer, Vice President
HHF Planners

Responsible Entity Agency Official Signature:

David Y Ige Date: APR 28 2016

Name/Title: Mr. David Y. Ige, Governor

This original, signed docum ent and related supporting m aterial must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activ ity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

Waipahu II (HA # 1039)

TMK: (1) 9-4-039:076

Hawai‘i Public Housing Authority (HPHA) Environmental Review

SOURCE DOCUMENTATION (SD) STATUTORY WORKSHEET

Site Visit Date: June 18, 2015
Prepared By: Questor Lau

The Waipahu II housing project is located in the Waipahu district on the island of O‘ahu. The Waipahu community is generally located east of Pearl City, and bounded by the H-1 Freeway to the north and Pearl Harbor’s West Loch to the south.

The housing project site is situated on the western corner of Pupupuhi and Pupumomi Streets. The property is bordered by other low-rise apartment buildings and Waipahu Intermediate School to the east. Farrington Highway is located one block away to the north (mauka). This housing project is within HPHA’s Asset Management Project (AMP) 30 which includes four other housing projects.

Waipahu II was first occupied in 1969 with occupancy starting in January 1970. This project’s street address is 94-132 Pupupuhi Street, and consists of 0.37 acres that is identified as Tax Map Key (TMK) No. (1) 9-4-039:076. The housing project is comprised of one three-story apartment building providing a total of 20 housing units having a range of 2- and 3-bedrooms per unit. The State’s land use designation for the property is the “Urban District,” and the City’s zoning for the site is A-2 Medium-Density Apartment.

The project site is not located within a tsunami evacuation zone, and the entire site is located in Flood Zone X, an area of minimal flood hazard (Community Panel Numbers 15003C0238G, Revised January 19, 2011).

The following figures in Exhibit A provide supporting information on this housing project:

Figure 1: Location Map
Figure 2: TMK Map
Figure 3: Site Map

COMPLIANCE FACTORS

I. AIRPORT CLEAR ZONES AND ACCIDENT POTENTIAL ZONES (24 CFR PART 51D)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The housing project does not lie within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: 24 CFR 51 (D).

Honolulu International Airport Master Plan - 2010 (August 1994), State Department of Transportation, Airports Division;

*Hawai`i Airports and Flying Safety Guide (2012-13, Fifth Edition, Revision 1)* Hawai`i Department of Transportation, Airports Division; and

http://hidot.hawaii.gov/airports/files/2013/01/Airport-Safety-Guide-2012-2013-5rev1.pdf

II. COASTAL BARRIER RESOURCES (COASTAL BARRIER IMPROVEMENT ACT OF 1990 [16 USC 3501])

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i does not have any designated coastal barrier resource units.

SUPPORTING DOCUMENTATION:

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/cbra/maps/mapper.html (Date accessed: 6/30/15).

III. FLOOD INSURANCE (FLOOD DISASTER PROTECTION ACT OF 1973 AND NATIONAL FLOOD INSURANCE REFORM ACT OF 1994 [42 USC 4001-4128 AND 42 USC 5154a])

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program.

As indicated in the Flood Insurance Rate Panel 15003C0238G, Revised January 19, 2011, this project is located in Zone X (an area of minimal flood hazard). Based on its description, this project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal signs of previous flooding problems. An interview with the Maintenance Supervisor also determined that major ponding or flooding issues are currently not an issue for the project site.

Printed: Flood Insurance Rate Map Panel 15003C0238G, Revised January 19, 2011.

Hawai`i Department of Land and Natural Resources website at:
http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 7/27/15)

IV. CLEAN AIR ACT (40 CFR PARTS 6, 51, 93)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. Environmental Protection Agency’s Green Book for currently designated

"nonattainment areas" as of June 2015. Planned rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.

SUPPORTING DOCUMENTATION:

Printed: *State of Hawai'i Annual Summary 2013 Air Quality Data*. State of Hawai'i, Department of Health, July 2014.

U.S. Environmental Protection Agency website at: http://epa.gov/airquality/greenbk/

V. COASTAL ZONE MANAGEMENT ACT (16 USC 1451, SECTIONS 307 (C), (D)

CONTACT:

Mr. John Nakagawa
Office of Planning
Department of Business, Economic Development & Tourism
State of Hawai'i
P.O. Box 2359
Honolulu, Hawai'i, 96804-2359

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai'i's Coastal Zone Management (CZM) program.

SUPPORTING DOCUMENTATION:

Contact: In an email to the Office of Planning (OP) dated July 27, 2015, the HPHA determined that the use of HUD funds for the implementation of repair and rehabilitation improvements does not require review for consistency with Hawai'i's CZM program. The OP confirmed this determination in an email dated July 28, 2015 and it is included in the Appendices.

Experience: Previous reviews conducted by OP in 2003, 2005, and 2010 determined that projects receiving federal funds from HUD do not require CZM federal consistency review. OP's current determination confirms this condition is still applicable. Copies of these prior documentations are included in the Appendices.

VI. CONTAMINATION AND TOXIC SUBSTANCES (24 CFR PART 50.3 & 58.5(I)(2))

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Project Not Affected.

There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.

SUPPORTING DOCUMENTATION:

Field: A site inspection and interview with the Asset Management Project (AMP) Manager and Maintenance Supervisor revealed no presence of any toxic or radioactive materials on the project site that warrant concern. The AMP Manager and Maintenance Supervisor stated that no hazardous or toxic materials are stored on site.

Study: Environmental Data Resources, Inc. (EDR), conducted a search of available environmental records and prepared a Radius Map Report (Inquiry Number 4237094.18s, March 17, 2015). EDR reviewed more than 25 federal and statewide regulatory databases for information regarding the treatment, storage, disposal and release of toxic chemicals at the project site and within specific radii (generally 1 mile) of the site. A Detail Map within the EDR report documents those sites identified within a 0.25 mile radius of the project site. The EDR report in Exhibit B includes the results of their research findings.

The EDR report notes the following activities within a 0.125 mile radius of the project site: Eddies Car Assist Center is a Conditionally Exempt Small Quantity Generator (Handler); no violations were found for this site. New City Shell is a Conditionally Exempt Small Quantity Generator (Handler). A LUST status was noted to be Monitored Natural Attenuation. UST Currently in Use (42,550 gallons) at this site store used oil, gasoline and diesel.

The project site was not identified as a Formerly Used Defense Site (FUDS) by the U.S. Army Corps of Engineers and is not subject to any cleanup actions for Department of Defense-generated contamination.

VII. ENDANGERED SPECIES (50 CFR PART 402)

CONTACT:
Mr. Loyal Mehrhoff, Field Supervisor
Pacific Islands Administrator
Fish and Wildlife Services
U.S. Department of the Interior
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawai‘i 96813
Tel. #: 792-9400

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Adverse Effect Subject to Mitigation

The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination

was received from the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices.

SUPPORTING DOCUMENTATION:

Contact: A letter from the HPHA dated July 24, 2015 was submitted to the Pacific Island Administrator for the FWS determining that repair and rehabilitation improvements that may be implemented using HUD funds for this housing project would have no likelihood of effect on any listed species or proposed species, or existing or proposed designated critical habitat subject to certain measures. Concurrence with this determination along with proposed minimization and avoidance measures was received from the FWS in a letter dated September 28, 2015 which is included in the Appendices. This housing project is subject to the following minimization and avoidance measures.

Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.

Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.

Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.

Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.

Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo'i, impoundments or other vegetated water bodies.

1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols.
2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.
3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities

(including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.

In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.

Additional Measures: The following additional measures would be implemented:

1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.

Experience: The FWS was previously consulted as part of environmental reviews that were completed in 2005 (39 housing projects) and 2010 (70 housing projects) which supported the determination that repair and rehabilitation improvements would either: 1) have no likelihood of effect for certain housing projects; or 2) not likely adversely affect federally listed species or critical habitat for certain housing projects subject to mitigative measures. A summary of these consultation efforts follows.

2005 Consultation: In a letter dated July 15, 2005, the Housing and Community Development Corporation of Hawai'i (predecessor to the HPHA), determined that the implementation of minor repair and rehabilitation improvements for 39 housing projects would not have an adverse effect on federally-listed species or critical habitat. In a letter dated August 11, 2005, the FWS concurred with the HCDCH determination.

2010 Consultation: In a letter dated May 17, 2010, the HPHA informed the FWS that HUD funds would be used to immediately implement repair and rehabilitation improvements for six housing projects on O'ahu and the island of Hawai`i. In a subsequent letter dated May 21, 2010, the FWS was informed that HPHA would be using HUD funds to implement minor repair and rehabilitation improvements for 64 projects throughout the State. In both letters, the HPHA determined that the repair and rehabilitation improvements were not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat. Based on further consultation and a meeting with FWS staff on June 24, 2010, the HPHA determined that repair and rehabilitation improvements for most of their housing projects would not likely adversely affect any listed or proposed species, or existing or proposed designated habitat, subject to various mitigative measures for certain housing projects.

VIII. EXPLOSIVE AND FLAMMABLE OPERATIONS (24 CFR PART 51C)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

SUPPORTING DOCUMENTATION:

Field: Field inspection was limited to the exterior of residential buildings and associated structures for this housing project. No above-ground explosive or flammable material storage containers in excess of 100 gallons were observed at the site.

Printed: 24 CFR Part 51, Subpart C addresses acceptable separation distance from above-ground explosive or flammable fuels or chemical containers. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

IX. FARMLANDS PROTECTION (7 CFR PART 658)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. Since the property consists of an existing housing development within an urbanized area, no farmlands would be impacted by the implementation of repair and rehabilitation improvements.

Printed: The property is designated for “Urban” use by the State Land Use Commission and the County’s zoning for the parcel is RD-3.75 Double-Family Residential District.

Hawai`i Office of Planning website at: http://planning.hawaii.gov/gis/
(Date accessed: 6/30/2015)

X. FLOODPLAIN MANAGEMENT (EXECUTIVE ORDER 11988, 24 CFR PART 55)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program

The project site is located in Zone X, an area of minimal flooding (i.e., 0.2% annual chance flood), and is located outside the 500-year flood zone. A field inspection and information obtained from AMP Manager confirmed no major flooding issues within the project site.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal signs of previous flooding problems. An interview with the Maintenance Supervisor also determined that no major ponding or flooding issues have occurred on the project site.

Printed: Flood Insurance Rate Map Panel 15003C0238G, Revised January 19, 2011.

Hawai`i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/ (Date accessed7/21/15)

XI. HISTORIC PRESERVATION (NATIONAL HISTORIC PRESERVATION ACT OF 1966; SECTIONS 106 AND 110; 36 CFR, PART 800)

CONTACT:

Ms. Suzanne Case, Chairperson
Department of Land and Natural Resources (DLNR)
State of Hawai‘i
1151 Punchbowl Street
Honolulu, Hawai‘i 96813
Tel. #: 587-0400

SUPPORTING DOCUMENTS	
X	Field
X	Contact
X	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Effect on Historic Properties

The Waipahu II housing project was first occupied in 1970 and is 45 years old. To be eligible for listing in the National Register of Historic Places (NRHP), a property must meet the National Register criteria for evaluation which involves examining its integrity, significance, and age (generally at least 50 years old). Due to its age, this housing project does not meet the eligibility criteria to be evaluated for the NRHP. In a letter to the State Historic Preservation Officer (SHPO) dated July 23, 2015, the HPHA determined that

no historic properties would be affected (no effect) by repair and rehabilitation improvements for this housing project. No comments or objections about this no effect determination were received.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not locate any existing or potential archaeological sites (e.g., heiau) or cultural features on the property. An interview with the property manager and maintenance supervisor indicates that no known sites or features are present on the property.

Contact: A letter from the HPHA dated July 23, 2015, which is included in the Appendix, was submitted to the State Historic Preservation Officer [SHPO] (Chair of State Board of Land and Natural Resources) as part of Section 106 consultation determining that no historic properties would be affected (no effect) by repair and rehabilitation improvements that may be implemented using HUD funds for this housing project. The SHPO did not submit any comments or objections on the "no effect" determination for this housing project, which included follow-up e-mails with the State Historic Preservation Division regarding a response. On September 28, 2015, notice of HPHA's determination was also distributed to several native Hawaiian organizations and the various County Planning Departments. No concerns or opposition to this determination was received.

Printed: A review of the U.S. National Parks Service website for the National Register of Historic Places did not identify any historic properties within the limits of this housing project. A similar review of the State DLNR website for the State Register of Historic Places revealed that there are no historic properties within the project site.

National Register: U.S. National Park Service website at:
http://www.nps.gov/nr/research/ (Date accessed: 7/2/15).

State Register: Hawai`i Department of Land and Natural Resources website at:
http://dlnr.hawaii.gov/shpd/state-register/ (Date accessed: 7/2/15).

Experience: In letter to the State Historic Preservation Officer (SHPO) dated April 19, 2011, the HPHA determined that minor repair and rehabilitation improvement at 57 public housing projects throughout Hawai'i (including this housing site) would have "no effect" on historic properties. The SHPO had no comments or objections on the "no effect" determination.

XII. NOISE ABATEMENT CONTROL (24 CFR PART 51B)

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Within HUD Noise Standards

The project site is not situated along a highway or major arterial roadway that has a high volume of vehicular traffic that may generate significant noise. The HUD noise calculator estimated noise levels at

the project site to be 49.5 dBA (road only), 53.9 dBA (rail only) and 55.3 dBA (combined road and rail sources). Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

SUPPORTING DOCUMENTATION:

Field: There were no significant noise generating sources identified within the project site during the site inspection. An interview with the AMP Manager and Maintenance Supervisor did not identify any loud noise producing sources in the area. As a result, notable noise sources are predominantly associated with vehicular traffic along adjacent roadways. Traffic noise did not appear significant during the site visit.

Study: The HUD day/night noise level calculator was used to estimate approximate traffic noise levels at the project site. Given the distance of the center line of Farrington Highway to the project site (about 250 feet), the estimated noise levels at the project site using this HUD calculator was 49.5 dBA (road), 53.9 dBA (rail) and 55.3 dBA (combined). Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards.

The Honolulu Rail Transit Project corridor along Kamehameha Highway (under construction) will have elevated rail located approx. 250 from this subject housing project. Also, Farrington Highway is a primary State roadway serving vehicular traffic commuting to and from downtown Honolulu along with providing access to other surrounding urban areas. State Department of Transportation 2013 traffic count data available for Farrington Highway was used for the HUD noise calculation. Access to the subject housing site is from Farrington Highway through Pupupuhi Street, a minor County road. Therefore, the subject housing site is expected to have significantly lower vehicle trips than Farrington Hwy.

Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

XIII. SOLE SOURCE AQUIFER (40 CFR PART 149)

	SUPPORTING DOCUMENTS
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact on Sole Source Aquifer

The housing project is located within the O‘ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to

EPA for evaluation. However, if exceptional circumstances require compliance steps with any of these authorities, such compliance must be established and documented prior to approving the site-specific loan or grant.

SUPPORTING DOCUMENTATION:

Printed: This determination was based upon review of the Sole Source Aquifer Memorandum of 4/30/90 (Sections II.B.1 and II.B.2) and consideration of the type of rehabilitation related improvements that would be conducted for this project.

XIV. WETLANDS PROTECTION (EXECUTIVE ORDER 11990)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the property did not identify the presence of any wetlands.

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/wetlands/data/mapper.html (Date accessed 7/23/2015).

XV. WILD AND SCENIC RIVERS ACT (16 USC 1271, SECTION 7 (B), (C))

SUPPORTING DOCUMENTS	
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no Wild and Scenic Rivers in Hawai‘i, which excludes this project from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: National Wild and Scenic Rivers System website at: http://www.rivers.gov/index.php (Date accessed: 6/30/2015).

XVI. ENVIRONMENTAL JUSTICE (EXECUTIVE ORDER NO. 12898)

	SUPPORTING DOCUMENTS
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Conflict with Requirements

Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, repair and rehabilitation improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations. Repair and rehabilitation improvements should benefit low-income and minority populations living within this housing project.

SUPPORTING DOCUMENTATION:

Printed: Executive Order 12898.

U.S. Department of Housing and Urban Development website at: https://www.hudexchange.info/environmental-review/environmental-justice/

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EXHIBIT A

Location Map, TMK Map, Site Map, Flood Map, and Site Photos

Source: State of Hawaiʻi GIS Data and Google Earth Pro - 1/12/13

HONOLULU RAIL TRANSIT

Transit Corridor

Transit Station

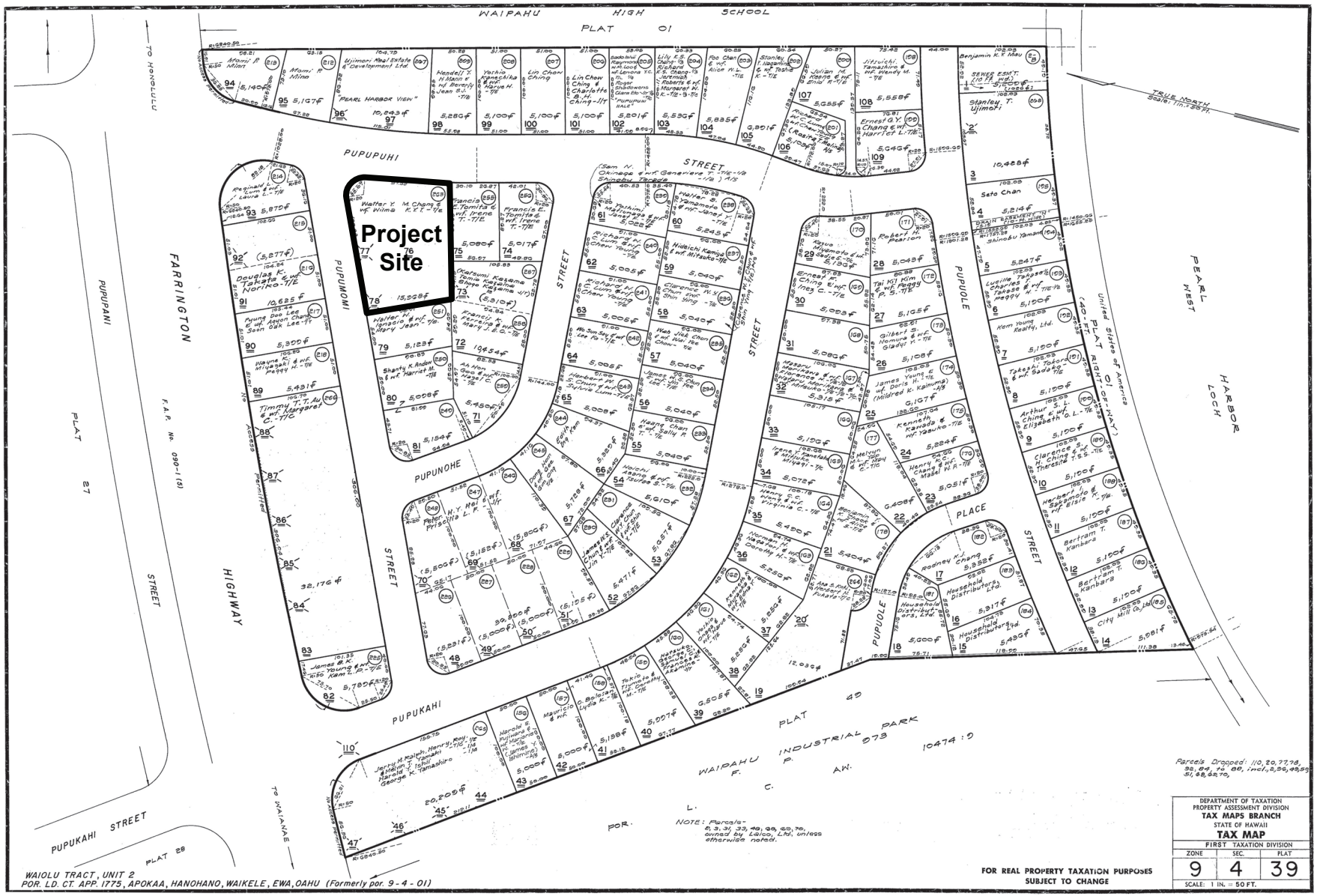
HPHA No. 1039 - Waipahu II (AMP 30)

Figure 1 - Project Location Map

Waipahu, Oʻahu

1,000 FT

HHF PLANNERS
places for people

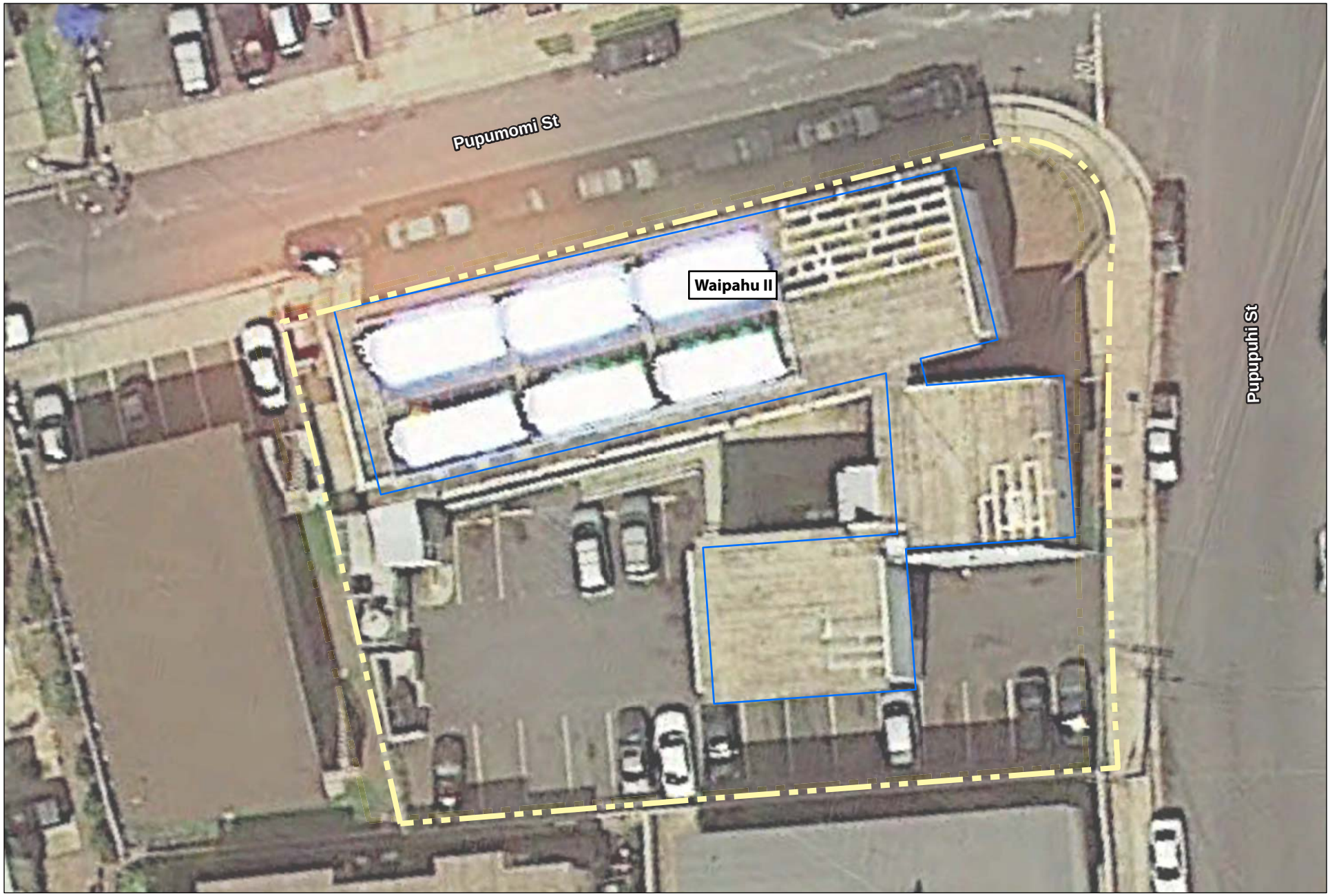


HPHA No. 1039 - Waipahu II (AMP 30)

Figure 2 - TMK Map

Waipahu, O'ahu

HHF PLANNERS
places for people



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1039 - Waipahu II (AMP 30)

Figure 3 - Site Map

Waipahu, O'ahu

20 FEET

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

LEGEND

- Zone D - Unstudied Area
- Zone X - Outside the 0.2% Annual Chance of Flood

HPHA No. 1039 - Waipahu II (AMP 30)

Figure 4 - Flood Map

Waipahu, O'ahu

20 FEET

HHF PLANNERS
places for people

WAIPAHU II
SITE PHOTOS

Housing site frontage along Pupupuhi Street

Housing site frontage (on right) along Pupumomi Street

Housing site at intersection of Pupupuhi and Pupumomi Streets

Housing site frontage (on left) along Pupumomi Street

Housing site frontage along Pupumomi Street

Traffic calming measures installed along adjacent streets to reduce speeding

WAIPAHU II
SITE PHOTOS

Side yard condition facing Pupupuhi Street (housing site to the left)

Secure laundry area

Secure laundry area

View of adjacent buildings that will buffer noise impacts when rail is installed along Farrington Highway (further right, not shown)

CMU wall screens trash pickup area from neighboring apartments. Housing site is blue builiding in background.

Hot water tank and trash pickup area in parking lot.

EXHIBIT B

EDR Radius Map Report

Waipahu II
94-132 Pupupuhi St.
Waipahu, HI 96797

Inquiry Number: 4237094.18s
March 17, 2015

EDR Summary Radius Map Report

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

FORM-NULL-PVC

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

94-132 PUPUPUHI ST.
HONOLULU County, HI 96797

COORDINATES

Latitude (North):	21.3809000 - 21˙ 22' 51.24''
Longitude (West):	158.0156000 - 158˙ 0' 56.16''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	602051.1
UTM Y (Meters):	2364484.2
Elevation:	46 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	USGS 7.5 min quad index

Target Property:	S
Source:	USGS 7.5 min quad index

MAPPED SITES SUMMARY

Target Property Address:
94-132 PUPUPUHI ST.
, HI 96797

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
Reg	PEARL HARBOR NAVAL C	US NAVAL COMMAND	NPL, CERCLIS, US ENG CONTROLS, US INST CONTROL,...	Same	4146, SE
A1	EDDIE S CAR ASSIST C	94 380 PUPUPANI ST	RCRA-CESQG, FINDS	Higher	322, North
B2	NEW CITY SHELL	94-380 PUPUPANI ST	RCRA-CESQG	Higher	369, NW
B3	NEW CITY SHELL	94-380 PUPUPANI ST.	LUST, UST, Financial Assurance	Higher	369, NW
A4		94380 PUPUPANI ST	EDR US Hist Auto Stat	Higher	418, North
5		94117 PUPUKAHI ST	EDR US Hist Auto Stat	Lower	428, SSW
B6		94366 PUPUPANI ST	EDR US Hist Cleaners	Higher	505, WNW
C7	EDWARDS & SANDS CONS	94-116 PUPUOLE PLACE	RCRA-SQG, FINDS	Lower	685, SSW
C8	EDWARDS & SANDS CONS	94-116 PUPUOLE PL	UST, Financial Assurance	Lower	685, SSW
D9		94321 LEONUI ST	EDR US Hist Cleaners	Higher	749, SW
D10		94321 LEONUI ST	EDR US Hist Auto Stat	Higher	749, SW
D11	C. KEN'S CLEANERS HA	94-321 A LEONUI	DRYCLEANERS	Higher	750, SW
12		94296 PUPUOLE ST	EDR US Hist Auto Stat	Lower	921, SSW
13		94485 FARRINGTON HW	EDR US Hist Auto Stat	Higher	995, ENE
E14		94295 PUPUOLE ST	EDR US Hist Auto Stat	Lower	1049, SSW
F15	CHEVRON 98584	94 485 FARRINGTON HW	RCRA-CESQG	Higher	1087, ENE
F16	BIONIC SELF-SERVE	94-485 FARRINGTON HW	LUST, UST, Financial Assurance	Higher	1087, ENE
G17	DEPT OF EDUCATION ST	94299 FARRINGTON HWY	RCRA NonGen / NLR, FINDS	Lower	1090, WSW
F18		94500 FARRINGTON HW	EDR US Hist Cleaners	Higher	1101, NE
G19	7 ELEVEN WAIPAHU	94-264 FARRINGTON HW	RCRA-CESQG	Lower	1105, WSW
H20	ON SITE ENTERPRISES	94 321 LEONUI ST	RCRA NonGen / NLR, FINDS	Lower	1121, SW
E21	WESTERN ENGINEERING	94 285 PUPUOLE ST	RCRA-CESQG, FINDS	Lower	1131, SSW
E22		94285 PUPUOLE ST	EDR US Hist Auto Stat	Lower	1137, SSW
23		94300 FARRINGTON HW	EDR US Hist Cleaners	Higher	1161, West
H24		94279 LEONUI ST	EDR US Hist Auto Stat	Lower	1189, SW
25		94252 PUPUOLE ST	EDR US Hist Auto Stat	Higher	1216, SW
26		94173 LEOKANE ST	EDR US Hist Auto Stat	Lower	1258, SW
I27	OKA AUTO PAINT & REP	94-279 LEONUI ST	UST	Lower	1285, WSW
I28	OKA AUTO PAINT & REP	94-279 LEONUI ST	RCRA-SQG	Lower	1285, WSW
29		94275 PUPUOLE ST	EDR US Hist Auto Stat	Lower	1292, SSW
30		94264 FARRINGTON HW	EDR US Hist Auto Stat	Lower	1292, WSW
J31		94267 FARRINGTON HW	EDR US Hist Auto Stat	Lower	1296, WSW
J32	EAST BAY TIRE COMPAN	94-299 FARRINGTON HW	LUST, UST	Lower	1428, WSW
33	YELLOW FREIGHT SYSTE	94-164 LEOKANE ST	LUST, UST, Financial Assurance	Lower	1439, SW
34	KAMA'AINA KONCRETE (	94-233 LEONUI ST	LUST	Lower	1525, WSW
35	WILSON FOOD SERVICE	94-150 LEOKANE ST	LUST, UST	Lower	1696, SW
36	SHELLY MAZDA/HYUNDAI	94-223 FARRINGTON HW	SHWS, LUST, UST, SPILLS, ENG CONTROLS, INST...	Lower	1710, WSW
37	REDONDO'S INC.	94-140 LEOKANE ST	LUST, UST	Lower	1727, SSW
38	7-ELEVEN WAIPAHU	94-264 FARRINGTON HW	LUST, UST, Financial Assurance	Lower	1731, WSW

MAPPED SITES SUMMARY

Target Property Address:
94-132 PUPUPUHI ST.
, HI 96797

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
39	EWA REPAIR SHOP INC.	94-303 WAIPAHU ST	SHWS, LUST, UST, INST CONTROL, Financial Assurance	Higher	1994, WNW
40	CITY MILL WAIPAHU	94-157 LEOLEO ST	LUST	Lower	2209, SW
41	FINOVA HAWAIIAN HOLD	94-169 FARRINGTON HW	LUST, UST, Financial Assurance	Lower	2253, WSW
42	HT&T CO.,INC.	94-099 LEOKANE ST	LUST, UST	Lower	2410, SSW
43	NISSAN OF WAIPAHU -	94-133 LEONUI ST	LUST, UST	Lower	2540, WSW
44	CUTTER MITSUBISHI DO	94 149 FARRINGTON HW	RCRA-CESQG, FINDS, LUST, UST	Lower	2557, WSW
45	A&B PROPERTIES, INC	MOKUOLA STREET EXTEN	LUST, UST	Lower	2607, NNE
46	TESORO GAS EXPRESS #	94-120 FARRINGTON HW	LUST, UST, Financial Assurance	Lower	2630, WSW
47	WAIPAHU AUTO COMPANY		SHWS, SPILLS, INST CONTROL	Lower	3337, ENE
48	PACIFIC MACHINERY	94-025 FARRINGTON HW	RCRA-CESQG, SHWS, LUST, UST, SPILLS, Financial...	Lower	3389, WSW
49	AMFAC/OAHU SUGAR COM	94-833 MAKAALOHA ST	SHWS, SPILLS, INST CONTROL, VCP	Higher	3524, NE
50	ABC CORPORATION DEPO	94-049 DEPOT RD	SHWS	Lower	3609, East
51	WAIPAHU INCINERATOR/	93-071 WAIPAHU DEPOT	SHWS, SPILLS	Lower	3979, ESE
52	COMPLETE AUTO REPAIR	94-875 FARRINGTON HW	SHWS, SPILLS, INST CONTROL	Lower	5001, ENE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: A review of the NPL list, as provided by EDR, and dated 12/16/2014 has revealed that there is 1 NPL site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PEARL HARBOR NAVAL C	***US NAVAL COMMAND***	***SE 1/2 - 1 (0.785 mi.)***	***0***	***7***

Federal RCRA generators list

RCRA-SQG: A review of the RCRA-SQG list, as provided by EDR, and dated 12/09/2014 has revealed that there are 2 RCRA-SQG sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
EDWARDS & SANDS CONS	***94-116 PUPUOLE PLACE***	***SSW 1/8 - 1/4 (0.130 mi.)***	***C7***	***8***
OKA AUTO PAINT & REP	94-279 LEONUI ST	WSW 1/8 - 1/4 (0.243 mi.)	I28	12

RCRA-CESQG: A review of the RCRA-CESQG list, as provided by EDR, and dated 12/09/2014 has revealed that there are 5 RCRA-CESQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EDDIE S CAR ASSIST C	***94 380 PUPUPANI ST***	***N 0 - 1/8 (0.061 mi.)***	***A1***	***7***
NEW CITY SHELL	94-380 PUPUPANI ST	NW 0 - 1/8 (0.070 mi.)	B2	7
CHEVRON 98584	94 485 FARRINGTON HW	ENE 1/8 - 1/4 (0.206 mi.)	F15	10

Lower Elevation	Address	Direction / Distance	Map ID	Page
7 ELEVEN WAIPAHU	94-264 FARRINGTON HW	WSW 1/8 - 1/4 (0.209 mi.)	G19	10

Lower Elevation	Address	Direction / Distance	Map ID	Page
WESTERN ENGINEERING	***94 285 PUPUOLE ST***	***SSW 1/8 - 1/4 (0.214 mi.)***	***E21***	***11***

State- and tribal - equivalent CERCLIS

SHWS: A review of the SHWS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 8 SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EWA REPAIR SHOP INC.	***94-303 WAIPAHU ST***	***WNW 1/4 - 1/2 (0.378 mi.)***	***39***	***15***
AMFAC/OAHU SUGAR COM	***94-833 MAKAALOHA ST***	***NE 1/2 - 1 (0.667 mi.)***	***49***	***18***

Lower Elevation	Address	Direction / Distance	Map ID	Page
SHELLY MAZDA/HYUNDAI	***94-223 FARRINGTON HW***	***WSW 1/4 - 1/2 (0.324 mi.)***	***36***	***14***
WAIPAHU AUTO COMPANY		***ENE 1/2 - 1 (0.632 mi.)***	***47***	***18***
PACIFIC MACHINERY	***94-025 FARRINGTON HW***	***WSW 1/2 - 1 (0.642 mi.)***	***48***	***18***
ABC CORPORATION DEPO	94-049 DEPOT RD	E 1/2 - 1 (0.684 mi.)	50	18
WAIPAHU INCINERATOR/	***93-071 WAIPAHU DEPOT***	***ESE 1/2 - 1 (0.754 mi.)***	***51***	***19***
COMPLETE AUTO REPAIR	***94-875 FARRINGTON HW***	***ENE 1/2 - 1 (0.947 mi.)***	***52***	***19***

State and tribal leaking storage tank lists

LUST: A review of the LUST list, as provided by EDR, and dated 12/16/2014 has revealed that there are 17 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NEW CITY SHELL	***94-380 PUPUPANI ST.***	***NW 0 - 1/8 (0.070 mi.)***	***B3***	***7***
Facility Status: Monitored Natural Attenuation				
BIONIC SELF-SERVE	***94-485 FARRINGTON HW***	***ENE 1/8 - 1/4 (0.206 mi.)***	***F16***	***10***
Facility Status: Site Cleanup Completed (NFA)				
EWA REPAIR SHOP INC.	***94-303 WAIPAHU ST***	***WNW 1/4 - 1/2 (0.378 mi.)***	***39***	***15***
Facility Status: Site Cleanup Completed (NFA)				

Lower Elevation	Address	Direction / Distance	Map ID	Page
EAST BAY TIRE COMPAN	***94-299 FARRINGTON HW***	***WSW 1/4 - 1/2 (0.270 mi.)***	***J32***	***13***
Facility Status: Site Cleanup Completed (NFA)				
YELLOW FREIGHT SYSTE	***94-164 LEOKANE ST***	***SW 1/4 - 1/2 (0.273 mi.)***	***33***	***13***
Facility Status: Site Cleanup Completed (NFA)				
KAMA'AINA KONCRETE (	94-233 LEONUI ST	WSW 1/4 - 1/2 (0.289 mi.)	34	14
Facility Status: Site Cleanup Completed (NFA)				
WILSON FOOD SERVICE	***94-150 LEOKANE ST***	***SW 1/4 - 1/2 (0.321 mi.)***	***35***	***14***
Facility Status: Site Cleanup Completed (NFA)				
SHELLY MAZDA/HYUNDAI	***94-223 FARRINGTON HW***	***WSW 1/4 - 1/2 (0.324 mi.)***	***36***	***14***
Facility Status: Site Cleanup Completed (NFA)				

Lower Elevation	Address	Direction / Distance	Map ID	Page
REDONDO'S INC.	***94-140 LEOKANE ST***	***SSW 1/4 - 1/2 (0.327 mi.)***	***37***	***14***
Facility Status: Site Cleanup Completed (NFA)				
7-ELEVEN WAIPAHU	***94-264 FARRINGTON HW***	***WSW 1/4 - 1/2 (0.328 mi.)***	***38***	***15***
Facility Status: Site Cleanup Completed (NFA)				
CITY MILL WAIPAHU	94-157 LEOLEO ST	SW 1/4 - 1/2 (0.418 mi.)	40	15
Facility Status: Site Cleanup Completed (NFA)				
FINOVA HAWAIIAN HOLD	***94-169 FARRINGTON HW***	***WSW 1/4 - 1/2 (0.427 mi.)***	***41***	***16***
Facility Status: Site Cleanup Completed (NFA)				
HT&T CO.,INC.	***94-099 LEOKANE ST***	***SSW 1/4 - 1/2 (0.456 mi.)***	***42***	***16***
Facility Status: Site Cleanup Completed (NFA)				
NISSAN OF WAIPAHU -	***94-133 LEONUI ST***	***WSW 1/4 - 1/2 (0.481 mi.)***	***43***	***16***
Facility Status: Site Cleanup Completed (NFA)				
CUTTER MITSUBISHI DO	***94 149 FARRINGTON HW***	***WSW 1/4 - 1/2 (0.484 mi.)***	***44***	***17***
Facility Status: Site Cleanup Completed (NFA)				
A&B PROPERTIES, INC	***MOKUOLA STREET EXTEN***	***NNE 1/4 - 1/2 (0.494 mi.)***	***45***	***17***
Facility Status: Site Cleanup Completed (NFA)				
TESORO GAS EXPRESS #	***94-120 FARRINGTON HW***	***WSW 1/4 - 1/2 (0.498 mi.)***	***46***	***17***
Facility Status: Site Cleanup Completed (NFA)				

State and tribal registered storage tank lists

UST: A review of the UST list, as provided by EDR, and dated 12/18/2014 has revealed that there are 4 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NEW CITY SHELL	***94-380 PUPUPANI ST.***	***NW 0 - 1/8 (0.070 mi.)***	***B3***	***7***
BIONIC SELF-SERVE	***94-485 FARRINGTON HW***	***ENE 1/8 - 1/4 (0.206 mi.)***	***F16***	***10***

Lower Elevation	Address	Direction / Distance	Map ID	Page
EDWARDS & SANDS CONS	***94-116 PUPUOLE PL***	***SSW 1/8 - 1/4 (0.130 mi.)***	***C8***	***8***
OKA AUTO PAINT & REP	94-279 LEONUI ST	WSW 1/8 - 1/4 (0.243 mi.)	I27	12

State and tribal institutional control / engineering control registries

ENG CONTROLS: A review of the ENG CONTROLS list, as provided by EDR, and dated 12/02/2014 has revealed that there is 1 ENG CONTROLS site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SHELLY MAZDA/HYUNDAI	***94-223 FARRINGTON HW***	***WSW 1/4 - 1/2 (0.324 mi.)***	***36***	***14***

INST CONTROL: A review of the INST CONTROL list, as provided by EDR, and dated 12/02/2014 has revealed that there are 2 INST CONTROL sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EWA REPAIR SHOP INC.	***94-303 WAIPAHU ST***	***WNW 1/4 - 1/2 (0.378 mi.)***	***39***	***15***

Lower Elevation	Address	Direction / Distance	Map ID	Page
SHELLY MAZDA/HYUNDAI	***94-223 FARRINGTON HW***	***WSW 1/4 - 1/2 (0.324 mi.)***	***36***	***14***

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

RCRA NonGen / NLR: A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 12/09/2014 has revealed that there are 2 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
DEPT OF EDUCATION ST	***94299 FARRINGTON HWY***	***WSW 1/8 - 1/4 (0.206 mi.)***	***G17***	***10***
ON SITE ENTERPRISES	***94 321 LEONUI ST***	***SW 1/8 - 1/4 (0.212 mi.)***	***H20***	***11***

ROD: A review of the ROD list, as provided by EDR, and dated 11/25/2013 has revealed that there is 1 ROD site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PEARL HARBOR NAVAL C	***US NAVAL COMMAND***	***SE 1/2 - 1 (0.785 mi.)***	***0***	***7***

DRYCLEANERS: A review of the DRYCLEANERS list, as provided by EDR, and dated 12/31/2014 has revealed that there is 1 DRYCLEANERS site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
C. KEN'S CLEANERS HA	94-321 A LEONUI	SW 1/8 - 1/4 (0.142 mi.)	D11	9

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Auto Stat: A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed

that there are 13 EDR US Hist Auto Stat sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	94380 PUPUPANI ST	N 0 - 1/8 (0.079 mi.)	A4	8
Not reported	94321 LEONUI ST	SW 1/8 - 1/4 (0.142 mi.)	D10	9
Not reported	94485 FARRINGTON HW	ENE 1/8 - 1/4 (0.188 mi.)	13	9
Not reported	94252 PUPUOLE ST	SW 1/8 - 1/4 (0.230 mi.)	25	12

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	94117 PUPUKAHI ST	SSW 0 - 1/8 (0.081 mi.)	5	8
Not reported	94296 PUPUOLE ST	SSW 1/8 - 1/4 (0.174 mi.)	12	9
Not reported	94295 PUPUOLE ST	SSW 1/8 - 1/4 (0.199 mi.)	E14	9
Not reported	94285 PUPUOLE ST	SSW 1/8 - 1/4 (0.215 mi.)	E22	11
Not reported	94279 LEONUI ST	SW 1/8 - 1/4 (0.225 mi.)	H24	11
Not reported	94173 LEOKANE ST	SW 1/8 - 1/4 (0.238 mi.)	26	12
Not reported	94275 PUPUOLE ST	SSW 1/8 - 1/4 (0.245 mi.)	29	12
Not reported	94264 FARRINGTON HW	WSW 1/8 - 1/4 (0.245 mi.)	30	13
Not reported	94267 FARRINGTON HW	WSW 1/8 - 1/4 (0.245 mi.)	J31	13

EDR US Hist Cleaners: A review of the EDR US Hist Cleaners list, as provided by EDR, has revealed that there are 4 EDR US Hist Cleaners sites within approximately 0.25 miles of the target property.

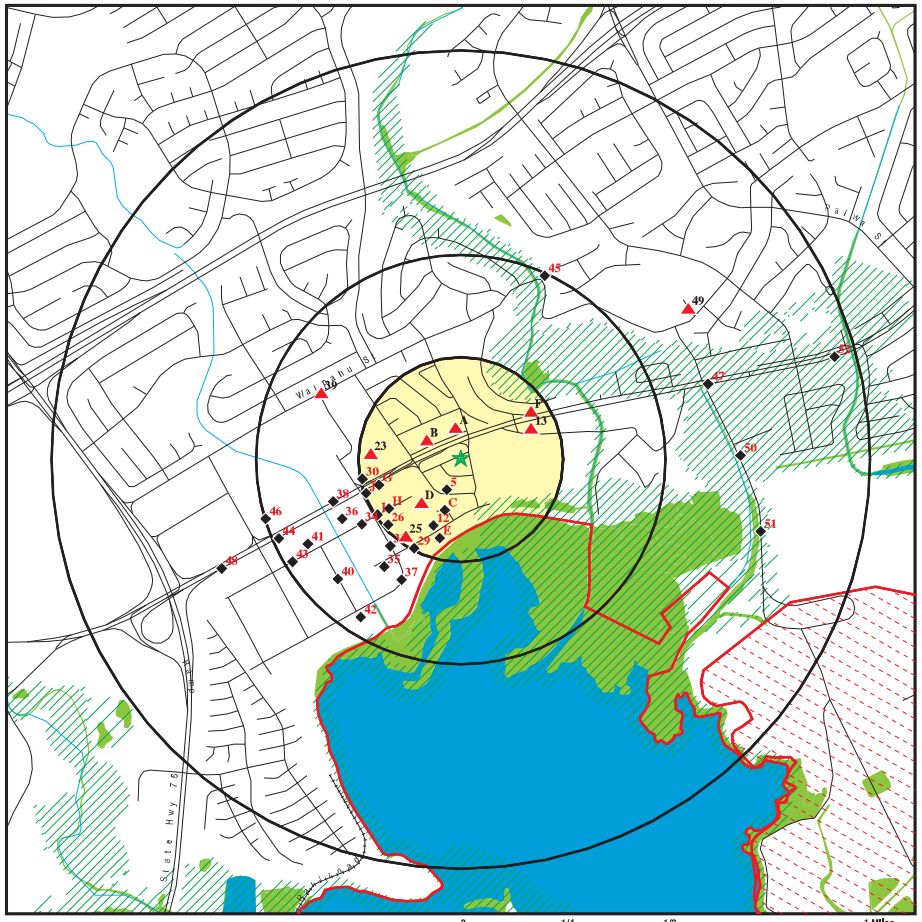
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	94366 PUPUPANI ST	WNW 0 - 1/8 (0.096 mi.)	B6	8
Not reported	94321 LEONUI ST	SW 1/8 - 1/4 (0.142 mi.)	D9	9
Not reported	94500 FARRINGTON HW	NE 1/8 - 1/4 (0.209 mi.)	F18	10
Not reported	94300 FARRINGTON HW	W 1/8 - 1/4 (0.220 mi.)	23	11

Count: 11 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
EWA	S110061853	WAIPAHU GARDEN CENTER	ANIANI PL	96797	SHWS, BROWNFIELDS
EWA BEACH	S110061396	EAST KAPOLEI PESTICIDE MIXING/LOAD	FARRINGTON HWY	96706	SHWS, ENG CONTROLS, INST CONT
EWA BEACH	1001491879	EWA SUGAR/OAHU SUGAR CO. - PESTICI	.8 MILES SOUTH OF FARRINGTON H	96706	CERCLIS
EWA BEACH	1003880090	EWA SUGAR/OAHU SUGAR CO. - FUMIGAN	.8 MILES WEST OF FARRINGTON HY	96706	CERC-NFRAP
KAPOLEI	S106820144	PUMP 15 STATION, FORMER OAHU SUGAR	OLD FARRINGTON HWY	96707	SHWS
OAHU	1003879142	WAIPAHU WELLS	ON CANE ROAD OFF WAIPAHU STREE	96797	CERCLIS
WAIPAHU	S108008476	ALEXANDER AND BALDWIN MILLTOWN LEA	KOAKI ST	96797	SHWS, INST CONTROL, VCP
WAIPAHU	S115488671	94-143 LEOKANE STREET	94-143 LEOKANE ST	96797	SHWS, ENG CONTROLS, INST CONT
WAIPAHU	1006820121	CASTLE AND COOKE MANAGERS DRIVE	MANAGERS DR	96797	SHWS, SPILLS, INST CONTROL, VCP
WAIPAHU	S110061633	LOT 32 FORMER WAIPAHU SUGAR MILL D	WAIPAHU ST	96797	SHWS, INST CONTROL, VCP
WAIPAHU	S108008575	LOT 32 FORMER WAIPAHU SUGAR MILL A	WAIPAHU ST	96797	SHWS, INST CONTROL, VCP

OVERVIEW MAP - 4237094.18S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Waipahu II ADDRESS: 94-132 Pupupuhi St. Walpahu HI 96797 LAT/LONG: 21.3809 / 158.0156	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.18s DATE: March 17, 2015 5:34 pm

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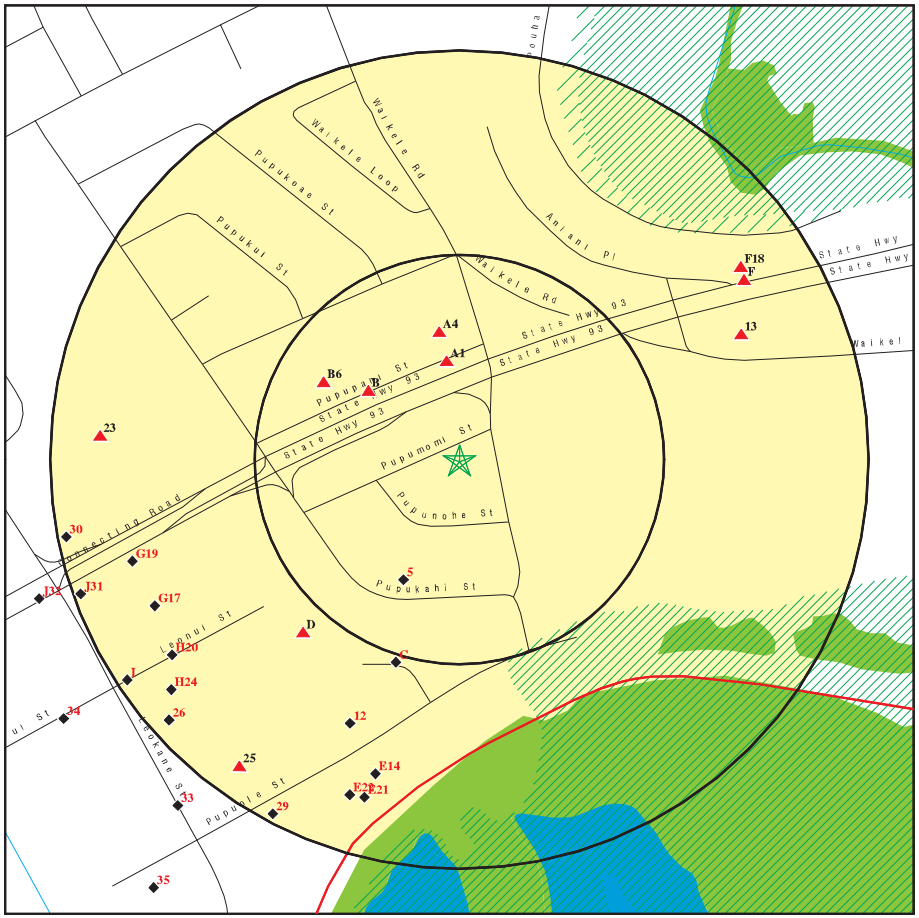
DETAIL MAP - 4237094.18S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites

0 1/16 1/8 1/4 Miles

- Indian Reservations BIA
- County Boundary
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Waipahu II ADDRESS: 94-132 Pupupuhi St. Waipahu HI 96797 LAT/LONG: 21.3809 / 158.0156	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.18s DATE: March 17, 2015 5:34 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	1	NR	1
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	2	NR	NR	NR	2
RCRA-CESQG	0.250		2	3	NR	NR	NR	5
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
SHWS	1.000		0	0	2	6	NR	8
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		1	1	15	NR	NR	17
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250		1	3	NR	NR	NR	4

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		0	0	1	NR	NR	1
INST CONTROL	0.500		0	0	2	NR	NR	2
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	2	NR	NR	NR	2
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	1	NR	1
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	1	NR	NR	NR	1
AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		2	11	NR	NR	NR	13
EDR US Hist Cleaners	0.250		1	3	NR	NR	NR	4
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
RGA HWS	TP		NR	NR	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

NPL
Region SE
1/2-1
4146 ft.

PEARL HARBOR NAVAL COMPLEX — **NPL** — **1000707626**
US NAVAL COMMAND — **CERCLIS** — **HI4170090076**
PEARL HARBOR, HI 96860 — **US ENG CONTROLS**
US INST CONTROL
ROD
PRP

Click here for full text details

NPL
EPA Id: HI4170090076

CERCLIS
EPA Id: HI4170090076

A1
North
< 1/8
0.061 mi.
322 ft.

Relative: Higher

EDDIE S CAR ASSIST CENTER INC — **RCRA-CESQG** — **1004688769**
94 380 PUPUPANI ST — **FINDS** — **HID033234287**
WAIPAHU, HI 96797

Click here for full text details

RCRA-CESQG
EPA Id: HID033234287

B2
NW
< 1/8
0.070 mi.
369 ft.

Relative: Higher

NEW CITY SHELL — **RCRA-CESQG** — **1004689064**
94-380 PUPUPANI ST — **HIR000107805**
WAIPAHU, HI 96797

Click here for full text details

RCRA-CESQG
EPA Id: HIR000107805

B3
NW
< 1/8
0.070 mi.
369 ft.

Relative: Higher

NEW CITY SHELL — **LUST** — **U003541831**
94-380 PUPUPANI ST. — **UST** — **N/A**
WAIPAHU, HI 96797 — **Financial Assurance**

Click here for full text details

LUST
Facility Id: 9-201029
Facility Status: Monitored Natural Attenuation

UST
Facility Id: 9-201029
Tank Status: Permanently Out of Use
Tank Status: Currently in Use

A4
North
< 1/8
0.079 mi.
418 ft.

Relative: Higher

94380 PUPUPANI ST — **EDR US Hist Auto Stat** — **1015681346**
WAIPAHU, HI 96797 — **N/A**

Click here for full text details

5
SSW
< 1/8
0.081 mi.
428 ft.

Relative: Lower

94117 PUPUKAHI ST — **EDR US Hist Auto Stat** — **1015680817**
WAIPAHU, HI 96797 — **N/A**

Click here for full text details

B6
WNW
< 1/8
0.096 mi.
505 ft.

Relative: Higher

94366 PUPUPANI ST — **EDR US Hist Cleaners** — **1015107772**
WAIPAHU, HI 96797 — **N/A**

Click here for full text details

C7
SSW
1/8-1/4
0.130 mi.
685 ft.

Relative: Lower

EDWARDS & SANDS CONST. CO, INC. — **RCRA-SQG** — **1012178271**
94-116 PUPUOLE PLACE — **FINDS** — **HIR000139360**
WAIPAHU, HI 96797

Click here for full text details

RCRA-SQG
EPA Id: HIR000139360

C8
SSW
1/8-1/4
0.130 mi.
685 ft.

Relative: Lower

EDWARDS & SANDS CONST. CO, INC. — **UST** — **U001236092**
94-116 PUPUOLE PL — **Financial Assurance** — **N/A**
WAIPAHU, HI 96797

Click here for full text details

UST
Facility Id: 9-200193
Tank Status: Permanently Out of Use

D9
SW
1/8-1/4
0.142 mi.
749 ft.
Relative: Higher

94321 LEONUI ST
WAIPAHU, HI 96797

EDR US Hist Cleaners — **1015107761** / **N/A**

Click here for full text details

D10
SW
1/8-1/4
0.142 mi.
749 ft.
Relative: Higher

94321 LEONUI ST
WAIPAHU, HI 96797

EDR US Hist Auto Stat — **1015681273** / **N/A**

Click here for full text details

D11
SW
1/8-1/4
0.142 mi.
750 ft.
Relative: Higher

C. KEN'S CLEANERS HAWAII, INC.
94-321 A LEONUI
WAIPAHU, HI 96797

DRYCLEANERS — **S107769082** / **N/A**

Click here for full text details

12
SSW
1/8-1/4
0.174 mi.
921 ft.
Relative: Lower

94296 PUPUOLE ST
WAIPAHU, HI 96797

EDR US Hist Auto Stat — **1015681167** / **N/A**

Click here for full text details

13
ENE
1/8-1/4
0.188 mi.
995 ft.
Relative: Higher

94485 FARRINGTON HWY
WAIPAHU, HI 96797

EDR US Hist Auto Stat — **1015681532** / **N/A**

Click here for full text details

E14
SSW
1/8-1/4
0.199 mi.
1049 ft.
Relative: Lower

94295 PUPUOLE ST
WAIPAHU, HI 96797

EDR US Hist Auto Stat — **1015681166** / **N/A**

Click here for full text details

F15
ENE
1/8-1/4
0.206 mi.
1087 ft.
Relative: Higher

CHEVRON 98584
94 485 FARRINGTON HWY
WAIPAHU, HI 96797

RCRA-CESQG — **1008880424** / **HIR000137018**

Click here for full text details

RCRA-CESQG
EPA Id: HIR000137018

F16
ENE
1/8-1/4
0.206 mi.
1087 ft.
Relative: Higher

BIONIC SELF-SERVE
94-485 FARRINGTON HWY
WAIPAHU, HI 96797

LUST — **U003222011**
UST — **N/A**
Financial Assurance

Click here for full text details

LUST
Facility Id: 9-201097
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-201097
Tank Status: Currently In Use

G17
WSW
1/8-1/4
0.206 mi.
1090 ft.
Relative: Lower

DEPT OF EDUCATION STATE OF HAWAII
94299 FARRINGTON HWY
WAIPAHU, HI 96797

RCRA NonGen / NLR — **1000393278**
FINDS — **HID982486797**

Click here for full text details

RCRA NonGen / NLR
EPA Id: HID982486797

F18
NE
1/8-1/4
0.209 mi.
1101 ft.
Relative: Higher

94500 FARRINGTON HWY
WAIPAHU, HI 96797

EDR US Hist Cleaners — **1015107880** / **N/A**

Click here for full text details

G19
WSW
1/8-1/4
0.209 mi.
1105 ft.
Relative: Lower

7 ELEVEN WAIPAHU
94-264 FARRINGTON HWY
WAIPAHU, HI 96797

RCRA-CESQG — **1004689057** / **HIR000105833**

Click here for full text details

RCRA-CESQG
EPA Id: HIR000105833

H20
SW
1/8-1/4
0.212 mi.
1121 ft.
Relative: Lower

ON SITE ENTERPRISES
94 321 LEONUI ST
WAIPAHU, HI 96797

RCRA NonGen / NLR **1000823277**
FINDS **HID984469163**

Click here for full text details

RCRA NonGen / NLR
EPA Id: HID984469163

E21
SSW
1/8-1/4
0.214 mi.
1131 ft.
Relative: Lower

WESTERN ENGINEERING LTD
94 285 PUPUOLE ST
WAIPAHU, HI 96797

RCRA-CESQG **1004688978**
FINDS **HIR000050138**

Click here for full text details

RCRA-CESQG
EPA Id: HIR000050138

E22
SSW
1/8-1/4
0.215 mi.
1137 ft.
Relative: Lower

94285 PUPUOLE ST
WAIPAHU, HI 96797

EDR US Hist Auto Stat **1015681156**
N/A

Click here for full text details

23
West
1/8-1/4
0.220 mi.
1161 ft.
Relative: Higher

94300 FARRINGTON HWY
WAIPAHU, HI 96797

EDR US Hist Cleaners **1015107753**
N/A

Click here for full text details

H24
SW
1/8-1/4
0.225 mi.
1189 ft.
Relative: Lower

94279 LEONUI ST
WAIPAHU, HI 96797

EDR US Hist Auto Stat **1015681146**
N/A

Click here for full text details

25
SW
1/8-1/4
0.230 mi.
1216 ft.
Relative: Higher

94252 PUPUOLE ST
WAIPAHU, HI 96797

EDR US Hist Auto Stat **1015681133**
N/A

Click here for full text details

26
SW
1/8-1/4
0.238 mi.
1258 ft.
Relative: Lower

94173 LEOKANE ST
WAIPAHU, HI 96797

EDR US Hist Auto Stat **1015680935**
N/A

Click here for full text details

I27
WSW
1/8-1/4
0.243 mi.
1285 ft.
Relative: Lower

OKA AUTO PAINT & REPAIR, INC.
94-279 LEONUI ST
WAIPAHU, HI 96797

UST **U001236181**
N/A

Click here for full text details

UST
Facility Id: 9-200756
Tank Status: Permanently Out of Use

I28
WSW
1/8-1/4
0.243 mi.
1285 ft.
Relative: Lower

OKA AUTO PAINT & REPAIR
94-279 LEONUI ST
WAIPAHU, HI 96797

RCRA-SQG **1012178264**
HIR000139253

Click here for full text details

RCRA-SQG
EPA Id: HIR000139253

29
SSW
1/8-1/4
0.245 mi.
1292 ft.
Relative: Lower

94275 PUPUOLE ST
WAIPAHU, HI 96797

EDR US Hist Auto Stat **1015681145**
N/A

Click here for full text details

30
WSW
1/8-1/4
0.245 mi.
1292 ft.

Relative: Lower

94264 FARRINGTON HWY
WAIPAHU, HI 96797

EDR US Hist Auto Stat — **1015681141** / **N/A**

Click here for full text details

J31
WSW
1/8-1/4
0.245 mi.
1296 ft.

Relative: Lower

94267 FARRINGTON HWY
WAIPAHU, HI 96797

EDR US Hist Auto Stat — **1015681142** / **N/A**

Click here for full text details

J32
WSW
1/4-1/2
0.270 mi.
1428 ft.

Relative: Lower

EAST BAY TIRE COMPANY
94-299 FARRINGTON HWY
WAIPAHU, HI 96797

LUST / **UST** — **U003967139** / **N/A**

Click here for full text details

LUST
Facility Id: 9-203772
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-203772
Tank Status: Permanently Out of Use

33
SW
1/4-1/2
0.273 mi.
1439 ft.

Relative: Lower

YELLOW FREIGHT SYSTEM, INC
94-164 LEOKANE ST
WAIPAHU, HI 96797

LUST / **UST** / **Financial Assurance** — **U001236140** / **N/A**

Click here for full text details

LUST
Facility Id: 9-200366
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-200366
Tank Status: Permanently Out of Use

34
WSW
1/4-1/2
0.289 mi.
1525 ft.

Relative: Lower

KAMA'AINA KONCRETE (FORMERLY MINI-MIX OAHU/L.T. KUWASAKI)
94-233 LEONUI ST
WAIPAHU, HI 96797

LUST — **1006843795** / **N/A**

Click here for full text details

LUST
Facility Id: 9-201465
Facility Status: Site Cleanup Completed (NFA)

35
SW
1/4-1/2
0.321 mi.
1696 ft.

Relative: Lower

WILSON FOOD SERVICE
94-150 LEOKANE ST
WAIPAHU, HI 96797

LUST / **UST** — **U001235070** / **N/A**

Click here for full text details

LUST
Facility Id: 9-100158
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-100158
Tank Status: Permanently Out of Use

36
WSW
1/4-1/2
0.324 mi.
1710 ft.

Relative: Lower

SHELLY MAZDA/HYUNDAI
94-223 FARRINGTON HWY
WAIPAHU, HI 96797

SHWS / **LUST** / **UST** / **SPILLS** / **ENG CONTROLS** / **INST CONTROL** — **U001236198** / **N/A**

Click here for full text details

LUST
Facility Id: 9-200839
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-200839
Tank Status: Permanently Out of Use

37
SSW
1/4-1/2
0.327 mi.
1727 ft.

Relative: Lower

REDONDO'S INC.
94-140 LEOKANE ST
WAIPAHU, HI 96797

LUST / **UST** — **U001236342** / **N/A**

Click here for full text details

LUST
Facility Id: 9-201466
Facility Status: Site Cleanup Completed (NFA)

UST

REDONDO'S INC. (Continued) — **U001236342**

Facility Id: 9-201466
Tank Status: Permanently Out of Use

---

38 WSW 1/4-1/2 0.328 mi. 1731 ft. Relative: Lower

7-ELEVEN WAIPAHU
94-264 FARRINGTON HWY
WAIPAHU, HI 96797

LUST, UST, Financial Assurance — **U001236126**, **N/A**

Click here for full text details

LUST
Facility Id: 9-200323
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-200323
Tank Status: Currently in Use
Tank Status: Permanently Out of Use

---

39 WNW 1/4-1/2 0.378 mi. 1994 ft. Relative: Higher

EWA REPAIR SHOP INC.
94-303 WAIPAHU ST
WAIPAHU, HI 96797

SHWS, LUST, UST, INST CONTROL, Financial Assurance — **U001236030**, **N/A**

Click here for full text details

LUST
Facility Id: 9-200024
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-200024
Tank Status: Permanently Out of Use
Tank Status: Currently In Use

---

40 SW 1/4-1/2 0.418 mi. 2209 ft. Relative: Lower

CITY MILL WAIPAHU
94-157 LEOLEO ST
WAIPAHU, HI 96797

LUST — **S113830832**, **N/A**

Click here for full text details

LUST
Facility Id: 9-203934
Facility Status: Site Cleanup Completed (NFA)

41 WSW 1/4-1/2 0.427 mi. 2253 ft. Relative: Lower

FINOVA HAWAIIAN HOLDINGS, LLC DBA LEX BRODIE'S TIRE CO.
94-169 FARRINGTON HWY
WAIPAHU, HI 96797

LUST, UST, Financial Assurance — **U003222031**, **N/A**

Click here for full text details

LUST
Facility Id: 9-201467
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-201467
Tank Status: Permanently Out of Use
Tank Status: Currently In Use

---

42 SSW 1/4-1/2 0.456 mi. 2410 ft. Relative: Lower

HT&T CO.,INC.
94-099 LEOKANE ST
WAIPAHU, HI 96797

LUST, UST — **U003541822**, **N/A**

Click here for full text details

LUST
Facility Id: 9-200711
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-200711
Tank Status: Permanently Out of Use

---

43 WSW 1/4-1/2 0.481 mi. 2540 ft. Relative: Lower

NISSAN OF WAIPAHU - SERVICE CENTER
94-133 LEONUI ST
WAIPAHU, HI 96797

LUST, UST — **U001237421**, **N/A**

Click here for full text details

LUST
Facility Id: 9-202522
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-202522
Tank Status: Permanently Out of Use

44 WSW 1/4-1/2 0.484 mi. 2557 ft. Relative: Lower

CUTTER MITSUBISHI DODGE
94 149 FARRINGTON HWY
WAIPAHU, HI 96797

RCRA-CESQG, FINDS, LUST, UST
1000401591
HID981967672

Click here for full text details

RCRA-CESQG
EPA Id: HID981967672

LUST
Facility Id: 9-201495
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-201495
Tank Status: Permanently Out of Use

---

45 NNE 1/4-1/2 0.494 mi. 2607 ft. Relative: Lower

A&B PROPERTIES, INC . MILL TOWN SITE
MOKUOLA STREET EXTENSION (FORMER WAIPAHU SUGAR MILL CAMP HOU
WAIPAHU, HI 96797

LUST, UST
U003832864
N/A

Click here for full text details

LUST
Facility Id: 9-203726
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-203726
Tank Status: Permanently Out of Use

---

46 WSW 1/4-1/2 0.498 mi. 2630 ft. Relative: Lower

TESORO GAS EXPRESS #61041
94-120 FARRINGTON HWY
WAIPAHU, HI 96797

LUST, UST, Financial Assurance
U004220497
N/A

Click here for full text details

LUST
Facility Id: 9-200922
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-200922
Tank Status: Currently In Use
Tank Status: Permanently Out of Use

47 ENE 1/2-1 0.632 mi. 3337 ft. Relative: Lower

WAIPAHU AUTO COMPANY
HONOLULU, HI 96797

SHWS, SPILLS, INST CONTROL
S108009297
N/A

Click here for full text details

---

48 WSW 1/2-1 0.642 mi. 3389 ft. Relative: Lower

PACIFIC MACHINERY
94-025 FARRINGTON HWY
WAIPAHU, HI 96797

RCRA-CESQG, SHWS, LUST, UST, SPILLS, Financial Assurance
1000252022
HID981651698

Click here for full text details

RCRA-CESQG
EPA Id: HID981651698

LUST
Facility Id: 9-200846
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-200846
Tank Status: Permanently Out of Use

---

49 NE 1/2-1 0.667 mi. 3524 ft. Relative: Higher

AMFAC/OAHU SUGAR COMPANY, LTD (WAIPAHU SUGAR MILL)
94-833 MAKAALOHA ST
WAIPAHU, HI 96797

SHWS, SPILLS, INST CONTROL, VCP
U001236230
N/A

Click here for full text details

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50 East 1/2-1 0.684 mi. 3609 ft. Relative: Lower

ABC CORPORATION DEPOT ROAD
94-049 DEPOT RD
WAIPAHU, HI 96797

SHWS
S108008474
N/A

Click here for full text details

MAP FINDINGS

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
51 ESE 1/2-1 0.754 mi. 3979 ft. Relative: Lower	**WAIPAHU INCINERATOR/ASH DUMP 93-071 WAIPAHU DEPOT RD WAIPAHU, HI 96797 Click here for full text details**	**SHWS SPILLS**	**S106821081 N/A**
52 ENE 1/2-1 0.947 mi. 5001 ft. Relative: Lower	**COMPLETE AUTO REPAIR AND ESTIMATES 94-875 FARRINGTON HWY WAIPAHU, HI 96797 Click here for full text details**	**SHWS SPILLS INST CONTROL**	**S106816759 N/A**

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
HI	AIRS	List of Permitted Facilities	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	BROWNFIELDS	Brownfields Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	CDL	Clandestine Drug Lab Listing	Department of Health	08/04/2010	09/10/2010	10/22/2010
HI	DRYCLEANERS	Permitted Drycleaner Facility Listing	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	ENG CONTROLS	Engineering Control Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	Financial Assurance	Financial Assurance Information Listing	Department of Health	12/01/2014	12/19/2014	01/28/2015
HI	INST CONTROL	Sites with Institutional Controls	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	LUST	Leaking Underground Storage Tank Database	Department of Health	12/16/2014	12/19/2014	01/28/2015
HI	RGA HWS	Recovered Government Archive State Hazardous Waste Facilitie	Department of Health		07/01/2013	01/08/2014
HI	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Health		07/01/2013	01/17/2014
HI	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	Department of Health		07/01/2013	01/03/2014
HI	SHWS	Sites List	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	SPILLS	Release Notifications	Department of Health	12/02/2014	12/22/2014	01/28/2015
HI	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	03/10/2012	01/03/2013	02/11/2013
HI	SWF/LF	Permitted Landfills in the State of Hawaii	Department of Health	09/17/2012	04/03/2013	05/10/2013
HI	UIC	Underground Injection Wells Listing	Department of Health	02/07/2013	02/12/2013	04/09/2013
HI	UST	Underground Storage Tank Database	Department of Health	12/18/2014	12/19/2014	01/28/2015
HI	VCP	Voluntary Response Program Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	04/22/2013	03/03/2015	03/09/2015
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2011	02/26/2013	04/19/2013
US	CERCLIS	Comprehensive Environmental Response, Compensation, and Liab	EPA	10/25/2013	11/11/2013	02/13/2014
US	CERCLIS-NFRAP	CERCLIS No Further Remedial Action Planned	EPA	10/25/2013	11/11/2013	02/13/2014
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	07/01/2014	09/10/2014	10/20/2014
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	01/23/2015	02/13/2015	03/09/2015
US	CORRACTS	Corrective Action Report	EPA	12/09/2014	12/29/2014	01/29/2015
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DELISTED NPL	National Priority List Deletions	EPA	12/16/2014	01/08/2015	02/09/2015
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	07/31/2012	08/07/2012	09/18/2012
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EDR US Hist Auto Stat	EDR Exclusive Historic Gas Stations	EDR, Inc.			
US	EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	09/29/2014	09/30/2014	11/06/2014
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	07/21/2014	10/07/2014	10/20/2014
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
US	FEMA UST	Underground Storage Tank Listing	FEMA	01/01/2010	02/16/2010	04/12/2010
US	FINDS	Facility Index System/Facility Registry System	EPA	08/16/2014	09/10/2014	10/20/2014
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	06/06/2014	09/10/2014	09/18/2014
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	12/29/2014	12/30/2014	03/09/2015
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	01/23/2015	02/06/2015	03/09/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	02/01/2013	05/01/2013	11/01/2013

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	01/30/2015	02/05/2015	03/09/2015
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/10/2015	03/13/2015
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	01/28/2015	01/30/2015	03/13/2015
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	01/08/2015	01/08/2015	02/09/2015
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2005	12/08/2006	01/11/2007
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	02/01/2013	05/01/2013	01/27/2014
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	01/30/2015	02/05/2015	03/13/2015
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/13/2015	03/13/2015
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	01/29/2015	01/30/2015	03/13/2015
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	12/14/2014	02/13/2015	03/13/2015
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	09/29/2014	10/01/2014	11/06/2014
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	11/25/2014	11/26/2014	01/29/2015
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	02/18/2014	03/18/2014	04/24/2014
US	LUCIS	Land Use Control Information System	Department of the Navy	12/03/2014	12/12/2014	01/29/2015
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	12/29/2014	01/08/2015	01/29/2015
US	NPL	National Priority List	EPA	12/16/2014	01/08/2015	02/09/2015
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	07/01/2014	10/15/2014	11/17/2014
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	02/01/2011	10/19/2011	01/10/2012
US	PRP	Potentially Responsible Parties	EPA	10/25/2013	10/17/2014	10/20/2014
US	Proposed NPL	Proposed National Priority List Sites	EPA	12/16/2014	01/08/2015	02/09/2015
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	10/07/2014	10/08/2014	10/20/2014
US	RCRA NonGen / NLR	RCRA - Non Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RMP	Risk Management Plans	Environmental Protection Agency	08/01/2014	08/12/2014	11/06/2014
US	ROD	Records Of Decision	EPA	11/25/2013	12/12/2013	02/24/2014
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	03/07/2011	03/09/2011	05/02/2011
US	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2011	07/31/2013	09/13/2013
US	TSCA	Toxic Substances Control Act	EPA	12/31/2012	01/15/2015	01/29/2015
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	09/14/2010	10/07/2011	03/01/2012
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/16/2014	10/31/2014	11/17/2014
US	US AIRS MINOR	Air Facility System Data	EPA	10/16/2014	10/31/2014	11/17/2014

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	12/22/2014	12/22/2014	01/29/2015
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	11/19/2014	11/21/2014	01/29/2015
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	12/30/2014	12/31/2014	01/29/2015
US	Oil/Gas Pipelines	GeoData Digital Line Graphs from 1:100,000-Scale Maps	USGS			
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
US	USGS 7.5' Topographic Map	Scanned Digital USGS 7.5' Topographic Map (DRG)	USGS			

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

WAIPAHU II
94-132 PUPUPUHI ST.
WAIPAHU, HI 96797

TARGET PROPERTY COORDINATES

Latitude (North):	21.3809 - 21˚ 22' 51.24''
Longitude (West):	158.0156 - 158˚ 0' 56.16''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	602051.1
UTM Y (Meters):	2364484.2
Elevation:	46 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	21158-D1 SCHOFIELD BARRACKS, HI
Most Recent Revision:	Not reported
South Map:	21158-C1 EWA, HI
Most Recent Revision:	Not reported

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

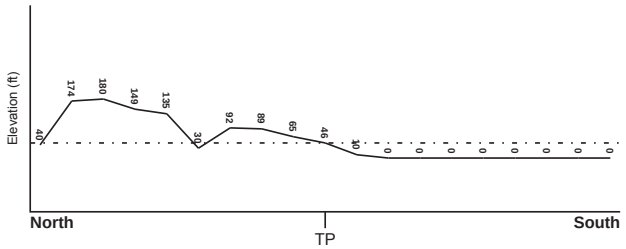
TOPOGRAPHIC INFORMATION

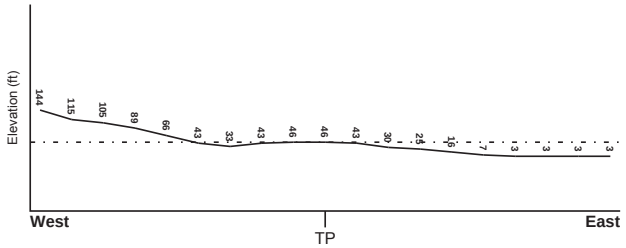
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General South

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 46 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
HONOLULU, HI	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 15003C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
SCHOFIELD BARRACKS	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

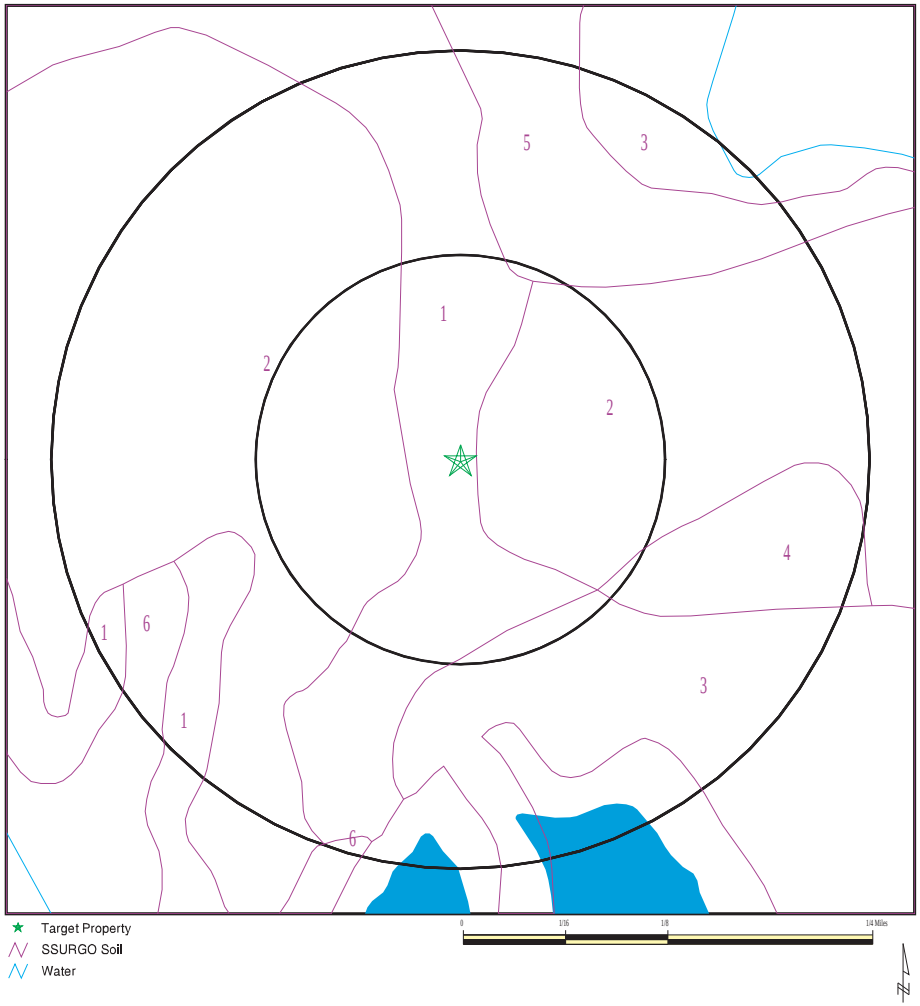
Era: -
System: -
Series: -
Code: N/A *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: -

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4237094.18s



SITE NAME: Waipahu II ADDRESS: 94-132 Pupupuhi St. Walpahu HI 96797 LAT/LONG: 21.3809 / 158.0156	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.18s DATE: March 17, 2015 5:34 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Waipahu

Soil Surface Texture: silty clay

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14.11 Min: 4.23	Max: 6.5 Min: 6.1
2	11 inches	70 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4.23 Min: 0.42	Max: 6.5 Min: 6.1

Soil Map ID: 2

Soil Component Name: Waipahu

Soil Surface Texture: silty clay

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14.11 Min: 4.23	Max: 6.5 Min: 6.1
2	11 inches	70 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4.23 Min: 0.42	Max: 6.5 Min: 6.1

Soil Map ID: 3

Soil Component Name: Tropaquepts

Soil Surface Texture: mucky silt loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 31 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	mucky silt loam	Not reported	Highly organic soils, Peat.	Max: 42 Min: 14.11	Max: 6.5 Min: 5.6
2	9 inches	18 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 4 Min: 1.41	Max: 6.5 Min: 5.6
3	18 inches	59 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4.23	Max: 6.5 Min: 5.6

Soil Map ID: 4

Soil Component Name: Honouliuli

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	14 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4 Min: 0.42	Max: 7.3 Min: 6.6

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	14 inches	68 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 7.8 Min: 6.6

Soil Map ID: 5

Soil Component Name: Helemano

Soil Surface Texture: silty clay

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 42 Min: 14.11	Max: 7.3 Min: 5.6
2	9 inches	40 inches	paragravelly silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 42.34 Min: 4.23	Max: 7.3 Min: 5.6

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
3	40 inches	59 inches	very paragravelly silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14 Min: 4.23	Max: 7.3 Min: 5.6

Soil Map ID: 6

Soil Component Name: Pearl Harbor

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 30 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4.23 Min: 0.42	Max: 7.3 Min: 6.6
2	11 inches	31 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 8.4 Min: 6.6

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
3	31 inches	48 inches	muck	A-8	Highly organic soils, Peat.	Max: 0.42 Min: 0.01	Max: 7.8 Min: 7.4

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A3	USGS40000270254	0 - 1/8 Mile SSE
A4	USGS40000270253	0 - 1/8 Mile SE
B5	USGS40000270304	1/4 - 1/2 Mile NNE
C7	USGS40000270260	1/4 - 1/2 Mile East
D10	USGS40000270226	1/4 - 1/2 Mile SSW
E13	USGS40000270255	1/4 - 1/2 Mile WSW
D14	USGS40000270223	1/4 - 1/2 Mile SSW
15	USGS40000270316	1/4 - 1/2 Mile NNW
F16	USGS40000270284	1/2 - 1 Mile ENE
H20	USGS40000270340	1/2 - 1 Mile NE
H21	USGS40000270339	1/2 - 1 Mile NE
H22	USGS40000270342	1/2 - 1 Mile NE
H23	USGS40000270341	1/2 - 1 Mile NE
H24	USGS40000270338	1/2 - 1 Mile NE
H25	USGS40000270334	1/2 - 1 Mile NE
H26	USGS40000270333	1/2 - 1 Mile NE
H27	USGS40000270335	1/2 - 1 Mile NE
H28	USGS40000270337	1/2 - 1 Mile NE
H29	USGS40000270336	1/2 - 1 Mile NE
I40	USGS40000270303	1/2 - 1 Mile ENE
G45	USGS40000270319	1/2 - 1 Mile WNW

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
G46	USGS40000270318	1/2 - 1 Mile WNW
G47	USGS40000270317	1/2 - 1 Mile WNW
G48	USGS40000270320	1/2 - 1 Mile WNW
G49	USGS40000270323	1/2 - 1 Mile WNW
G50	USGS40000270322	1/2 - 1 Mile WNW
G51	USGS40000270321	1/2 - 1 Mile WNW
H53	USGS40000270348	1/2 - 1 Mile NE
H54	USGS40000270347	1/2 - 1 Mile NE
H55	USGS40000270350	1/2 - 1 Mile NE
H56	USGS40000270349	1/2 - 1 Mile NE
I60	USGS40000270301	1/2 - 1 Mile ENE
J63	USGS40000270227	1/2 - 1 Mile WSW
L68	USGS40000270175	1/2 - 1 Mile SSW
L70	USGS40000270172	1/2 - 1 Mile SSW
M72	USGS40000270365	1/2 - 1 Mile NE
N74	USGS40000270481	1/2 - 1 Mile NNW
N75	USGS40000270482	1/2 - 1 Mile NNW
N76	USGS40000270483	1/2 - 1 Mile NNW
N77	USGS40000270480	1/2 - 1 Mile NNW
N78	USGS40000270477	1/2 - 1 Mile NNW
N79	USGS40000270478	1/2 - 1 Mile NNW
N80	USGS40000270479	1/2 - 1 Mile NNW
N81	USGS40000270488	1/2 - 1 Mile NNW
N82	USGS40000270489	1/2 - 1 Mile NNW
N83	USGS40000270490	1/2 - 1 Mile NNW
N84	USGS40000270487	1/2 - 1 Mile NNW
N85	USGS40000270484	1/2 - 1 Mile NNW
N86	USGS40000270485	1/2 - 1 Mile NNW
N87	USGS40000270486	1/2 - 1 Mile NNW
P101	USGS40000270210	1/2 - 1 Mile ESE
O102	USGS40000270229	1/2 - 1 Mile WSW
N104	USGS40000270497	1/2 - 1 Mile North
N105	USGS40000270498	1/2 - 1 Mile North
N106	USGS40000270496	1/2 - 1 Mile North
N107	USGS40000270494	1/2 - 1 Mile North
N108	USGS40000270495	1/2 - 1 Mile North
N109	USGS40000270502	1/2 - 1 Mile North
N110	USGS40000270503	1/2 - 1 Mile North
N111	USGS40000270501	1/2 - 1 Mile North
N112	USGS40000270499	1/2 - 1 Mile North
N113	USGS40000270500	1/2 - 1 Mile North
Q125	USGS40000270224	1/2 - 1 Mile WSW

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
G44	HI0000335	1/2 - 1 Mile WNW

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	HI8000000002866	0 - 1/8 Mile SE
A2	HI8000000002867	0 - 1/8 Mile SE
B6	HI8000000002922	1/4 - 1/2 Mile NNE
C8	HI8000000002872	1/4 - 1/2 Mile East
D9	HI8000000002841	1/4 - 1/2 Mile SSW
E11	HI8000000002865	1/4 - 1/2 Mile WSW
D12	HI8000000002837	1/4 - 1/2 Mile SSW
F17	HI8000000002896	1/2 - 1 Mile ENE
18	HI8000000002981	1/2 - 1 Mile North
G19	HI8000000002936	1/2 - 1 Mile WNW
G30	HI8000000002941	1/2 - 1 Mile NW
H31	HI8000000002944	1/2 - 1 Mile NE
H32	HI8000000002945	1/2 - 1 Mile NE
H33	HI8000000002942	1/2 - 1 Mile NE
H34	HI8000000002943	1/2 - 1 Mile NE
H35	HI8000000002948	1/2 - 1 Mile NE
H36	HI8000000002949	1/2 - 1 Mile NE
H37	HI8000000002946	1/2 - 1 Mile NE
H38	HI8000000002947	1/2 - 1 Mile NE
G39	HI8000000002940	1/2 - 1 Mile NW
G41	HI8000000002935	1/2 - 1 Mile WNW
I42	HI8000000002924	1/2 - 1 Mile ENE
G43	HI8000000002953	1/2 - 1 Mile NW
G52	HI8000000002939	1/2 - 1 Mile WNW
H57	HI8000000002961	1/2 - 1 Mile NE
H58	HI8000000002962	1/2 - 1 Mile NE
H59	HI8000000002963	1/2 - 1 Mile NE
J61	HI8000000002840	1/2 - 1 Mile WSW
I62	HI8000000002919	1/2 - 1 Mile ENE
K64	HI8000000003058	1/2 - 1 Mile North
K65	HI8000000003067	1/2 - 1 Mile North
L66	HI8000000002792	1/2 - 1 Mile SSW
K67	HI8000000003068	1/2 - 1 Mile North
L69	HI8000000002791	1/2 - 1 Mile SSW
K71	HI8000000003073	1/2 - 1 Mile North
M73	HI8000000002973	1/2 - 1 Mile NE
N88	HI8000000003093	1/2 - 1 Mile NNW
N89	HI8000000003094	1/2 - 1 Mile NNW
N90	HI8000000003095	1/2 - 1 Mile NNW
N91	HI8000000003090	1/2 - 1 Mile NNW
N92	HI8000000003091	1/2 - 1 Mile NNW
N93	HI8000000003092	1/2 - 1 Mile NNW
N94	HI8000000003099	1/2 - 1 Mile NNW
N95	HI8000000003100	1/2 - 1 Mile NNW
N96	HI8000000003101	1/2 - 1 Mile NNW
N97	HI8000000003096	1/2 - 1 Mile NNW
N98	HI8000000003097	1/2 - 1 Mile NNW
N99	HI8000000003098	1/2 - 1 Mile NNW
O100	HI8000000002844	1/2 - 1 Mile WSW
P103	HI8000000002823	1/2 - 1 Mile ESE
N114	HI8000000003106	1/2 - 1 Mile North
N115	HI8000000003107	1/2 - 1 Mile North

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
N116	HI8000000003105	1/2 - 1 Mile North
N117	HI8000000003103	1/2 - 1 Mile North
N118	HI8000000003104	1/2 - 1 Mile North
N119	HI8000000003111	1/2 - 1 Mile North
N120	HI8000000003112	1/2 - 1 Mile North
N121	HI8000000003110	1/2 - 1 Mile North
N122	HI8000000003108	1/2 - 1 Mile North
N123	HI8000000003109	1/2 - 1 Mile North
Q124	HI8000000002836	1/2 - 1 Mile WSW
R126	HI8000000002817	1/2 - 1 Mile WSW
R127	HI8000000002818	1/2 - 1 Mile WSW
R128	HI8000000002819	1/2 - 1 Mile WSW

PHYSICAL SETTING SOURCE MAP - 4237094.18s

- County Boundary
- Major Roads
- Contour Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

0 1/4 1/2 1 Miles

- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location

N

SITE NAME: Waipahu II ADDRESS: 94-132 Pupuhi St. Waipahu HI 96797 LAT/LONG: 21.3809 / 158.0156	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.18s DATE: March 17, 2015 5:34 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
A1 **SE** **0 - 1/8 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002866**
A2 **SE** **0 - 1/8 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002867**
A3 **SSE** **0 - 1/8 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270254**
A4 **SE** **0 - 1/8 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270253**
B5 **NNE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270304**
B6 **NNE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002922**
C7 **East** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270260**
C8 **East** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002872**
D9 **SSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002841**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
D10 **SSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270226**
E11 **WSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002865**
D12 **SSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002837**
E13 **WSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270255**
D14 **SSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270223**
15 **NNW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270316**
F16 **ENE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270284**
F17 **ENE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002896**
18 **North** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002981**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
G19 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002936**
H20 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270340**
H21 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270339**
H22 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270342**
H23 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270341**
H24 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270338**
H25 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270334**
H26 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270333**
H27 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270335**

Map ID Direction Distance Elevation		Database	EDR ID Number
H28 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270337**
H29 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270336**
G30 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002941**
H31 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002944**
H32 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002945**
H33 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002942**
H34 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002943**
H35 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002948**
H36 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002949**

Map ID Direction Distance Elevation		Database	EDR ID Number
H37 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002946**
H38 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002947**
G39 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002940**
I40 **ENE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270303**
G41 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002935**
I42 **ENE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002924**
G43 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002953**
G44 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FRDS PWS**	**HI0000335**
G45 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270319**

Map ID Direction Distance Elevation		Database	EDR ID Number
G46 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270318**
G47 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270317**
G48 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270320**
G49 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270323**
G50 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270322**
G51 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270321**
G52 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002939**
H53 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270348**
H54 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270347**

Map ID Direction Distance Elevation		Database	EDR ID Number
H55 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270350**
H56 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270349**
H57 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002961**
H58 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002962**
H59 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002963**
I60 **ENE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270301**
J61 **WSW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002840**
I62 **ENE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002919**
J63 **WSW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270227**

Map ID Direction Distance Elevation		Database	EDR ID Number
K64 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003058**
K65 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003067**
L66 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002792**
K67 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003068**
L68 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270175**
L69 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002791**
L70 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270172**
K71 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003073**
M72 **NE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270365**

Map ID Direction Distance Elevation		Database	EDR ID Number
M73 **NE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002973**
N74 **NNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270481**
N75 **NNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270482**
N76 **NNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270483**
N77 **NNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270480**
N78 **NNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270477**
N79 **NNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270478**
N80 **NNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270479**
N81 **NNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270488**

Map ID Direction Distance Elevation		Database	EDR ID Number
N82 **NNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270489**
N83 **NNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270490**
N84 **NNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270487**
N85 **NNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270484**
N86 **NNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270485**
N87 **NNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270486**
N88 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003093**
N89 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003094**
N90 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003095**

Map ID Direction Distance Elevation		Database	EDR ID Number
N91 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003090**
N92 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003091**
N93 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003092**
N94 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003099**
N95 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003100**
N96 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003101**
N97 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003096**
N98 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003097**
N99 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003098**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
O100 WSW 1/2 - 1 Mile Higher	Click here for full text details	**HI WELLS**	**HI8000000002844**
P101 ESE 1/2 - 1 Mile Lower	Click here for full text details	**FED USGS**	**USGS40000270210**
O102 WSW 1/2 - 1 Mile Higher	Click here for full text details	**FED USGS**	**USGS40000270229**
P103 ESE 1/2 - 1 Mile Lower	Click here for full text details	**HI WELLS**	**HI8000000002823**
N104 North 1/2 - 1 Mile Higher	Click here for full text details	**FED USGS**	**USGS40000270497**
N105 North 1/2 - 1 Mile Higher	Click here for full text details	**FED USGS**	**USGS40000270498**
N106 North 1/2 - 1 Mile Higher	Click here for full text details	**FED USGS**	**USGS40000270496**
N107 North 1/2 - 1 Mile Higher	Click here for full text details	**FED USGS**	**USGS40000270494**
N108 North 1/2 - 1 Mile Higher	Click here for full text details	**FED USGS**	**USGS40000270495**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
N109 North 1/2 - 1 Mile Higher	Click here for full text details	**FED USGS**	**USGS40000270502**
N110 North 1/2 - 1 Mile Higher	Click here for full text details	**FED USGS**	**USGS40000270503**
N111 North 1/2 - 1 Mile Higher	Click here for full text details	**FED USGS**	**USGS40000270501**
N112 North 1/2 - 1 Mile Higher	Click here for full text details	**FED USGS**	**USGS40000270499**
N113 North 1/2 - 1 Mile Higher	Click here for full text details	**FED USGS**	**USGS40000270500**
N114 North 1/2 - 1 Mile Lower	Click here for full text details	**HI WELLS**	**HI8000000003106**
N115 North 1/2 - 1 Mile Lower	Click here for full text details	**HI WELLS**	**HI8000000003107**
N116 North 1/2 - 1 Mile Lower	Click here for full text details	**HI WELLS**	**HI8000000003105**
N117 North 1/2 - 1 Mile Lower	Click here for full text details	**HI WELLS**	**HI8000000003103**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
N118 **North** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003104**
N119 **North** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003111**
N120 **North** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003112**
N121 **North** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003110**
N122 **North** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003108**
N123 **North** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003109**
Q124 **WSW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002836**
Q125 **WSW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270224**
R126 **WSW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002817**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
R127 **WSW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002818**
R128 **WSW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002819**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for HONOLULU County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 96797

Number of sites tested: 12

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.200 pCi/L	100%	0%	0%
Living Area - 2nd Floor	0.000 pCi/L	100%	0%	0%
Basement	0.100 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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HAWAII PUBLIC HOUSING AUTHORITY

ENVIRONMENTAL REVIEW

SALT LAKE APARTMENTS

Honolulu, O`ahu

AMP 30
HPHA No. 1066

Prepared for:

State of Hawaii
Hawaii Public Housing Authority

Prepared by:

HHF PLANNERS
places for people

U.S. Department of Housing and Urban Development
451 Seventh Street, SW
Washington, DC 20410
www.hud.gov

espanol.hud.gov

Environmental Review for Activity/Project that is Categorically Excluded Subject to Section 58.5

Pursuant to 24 CFR 58.35(a)

Project Information

Project Name: Salt Lake Apartments (AMP 30)

Responsible Entity: Hawaii Public Housing Authority
1002 North School Street
Honolulu, HI 96817

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

State/Local Identifier: State of Hawai‘i

Preparer: Mr. Scott Ezer, Vice President
HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawai‘i 96813

Certifying Officer Name and Title: Mr. David Y. Ige
Governor, State of Hawai‘i

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

Consultant (if applicable): HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawai‘i 96813

Direct Comments to: Mr. Hakim Ouansafi, Executive Director
Hawaii Public Housing Authority
1002 North School Street
Honolulu, Hawai‘i 96817

Project Location: 2907 Ala ‘Ilima Street
Honolulu, Hawai‘i 96818

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]**:**

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a "major construction activity" and would involve one or a combination of several HUD designated categories of actions.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent;
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons;
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland;
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation;
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls);
7. Interior and exterior renovations and rehabilitation;
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site;
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Level of Environmental Review Determination:

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.5. Compliance with and completion of conformance determinations for other statute, executive order, or regulation has been completed and support the Categorical Exclusion.

Funding Information

Grant Number	HUD Program	Funding Amount
To be determined	Capital Fund	To be determined
To be determined	Economic Development Initiative Special Project Grant	To be determined
To be determined	Other Grants	To be determined

Estimated Total HUD Funded Amount:

To be determined by HUD using a formula and based upon Federal budget.

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]**:**

Depends on funds available.

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	*The project is not within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.*
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☒	*The State of Hawai'i does not have any designated coastal barrier resource units. (http://www.fws.gov/CBRA/Maps/Mapper.html)*
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes ☐ No ☒	*As indicated in the Flood Insurance Rate Panel 15003C0332H, Revised November 05, 2014, this project is located in Zone X (area of minimal flood hazard) and is located outside the 500-year flood zone. Based on its description, this project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.*

STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5		
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes ☐ No ☒	*The State of Hawai'i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. EPA's Green Book for currently designated "nonattainment areas" as of June 2015. Planned repair and rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.*
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes ☐ No ☒	*Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai'i's Coastal Zone Management (CZM) program.*
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☐ No ☒	*There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.*
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes ☒ No ☐	*The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (USFWS) in their letter dated September 28, 2015 which is included in the Appendices, while project-specific mitigation measures are identified in the following section.*
Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes ☐ No ☒	*There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.*

Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes ☐ No ☒	*The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.*
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes ☐ No ☒	*The project site is located in Zone X, an area of minimal flooding (i.e., 0.2% annual chance flood), and is located outside the 500-year flood zone. A field inspection and information obtained from the property manager confirmed no major flooding issues within the project site.*
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes ☐ No ☒	*The Salt Lake housing project was first occupied in 1969 and is 46 years old. To be eligible for listing in the National Register of Historic Places (NRHP), a property must meet the National Register criteria for evaluation which involves examining its integrity, significance, and age (generally at least 50 years old). Due to its age, this housing project does not meet the eligibility criteria to be evaluated for the NRHP. In a letter to the State Historic Preservation Officer dated July 23, 2015, the HPHA determined that no historic properties would be affected by repair and rehabilitation improvements for this housing project. No comments or objections about this no effect determination were received.*
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes ☐ No ☒	*The project site is not situated along a highway or major arterial roadway that has a high volume of vehicular traffic that may generate significant noise. The HUD noise calculator estimated noise levels at the project site to be 57.3 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.*
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes ☐ No ☒	*The housing project is located within the O‘ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation.*

Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☐ No ☒	*There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.* *(http://www.fws.gov/wetlands/data/mapper.HTML)*
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes ☐ No ☒	*There are no Wild and Scenic Rivers in Hawai'i, which excludes this project from mitigation or formal consultation requirements (http://www.rivers.gov/map.php)*
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes ☐ No ☒	*Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, these improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects on minority populations and low-income populations. Improvements should benefit low-income and minority populations living within this housing project.*

Field Inspection (Date and completed by)**:** June 18, 2015
Questor Lau, Planner
HHF Planners

Summary of Findings and Conclusions:

Repair and rehabilitation improvements implemented for this existing housing project by HPHA should not result in significant environmental impacts based upon research data collected, a field inspection, consultation with the site manager and maintenance staff, consultation with pertinent resource agencies, and prior HPHA experience implementing repair and rehabilitation improvements. Therefore, repair and rehabilitation improvements would comply and be consistent with the statutes, executive orders, and regulations addressed. Furthermore, HPHA would evaluate improvements planned to ensure the work is consistent with the designated categories of actions described under the project description section. Compliance with these factors evaluated are further addressed in the attached Source Documentation Statutory Worksheet along with relevant technical reports/assessments.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Law, Authority, or Factor	Mitigation Measure
Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	*Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.* *Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.* *Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.* *Newell's shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.* *Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.* *Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo'i, impoundments or other vegetated water bodies.*

	1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols. *2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.* *3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.* *In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.* *<u>Additional Measures</u>: The following additional measures would be implemented:* *1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.*

Determination:

☐ This categorically excluded activity/project converts to **EXEMPT** per Section 58.34(a)(12), because it does not require any mitigation for compliance with any listed statutes or authorities, nor requires any formal permit or license; **Funds may be committed and drawn down after certification of this part** for this (now) EXEMPT project; OR

☒ This categorically excluded activity/project cannot convert to Exempt status because one or more statutes or authorities listed at Section 58.5 requires formal consultation or mitigation. Complete consultation/mitigation protocol requirements, **publish NOI/RROF and obtain "Authority to Use Grant Funds"** (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR

☐ This project is not categorically excluded OR, if originally categorically excluded, is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

Preparer Signature: Scott Ezer Date: 12-17-15

Name/Title/Organization: Mr. Scott Ezer, Vice President
HHF Planners

Responsible Entity Agency Official Signature:

David Y. Ige Date: APR 28 2016

Name/Title: Mr. David Y. Ige, Governor

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

Salt Lake Apartments (HA # 1066)

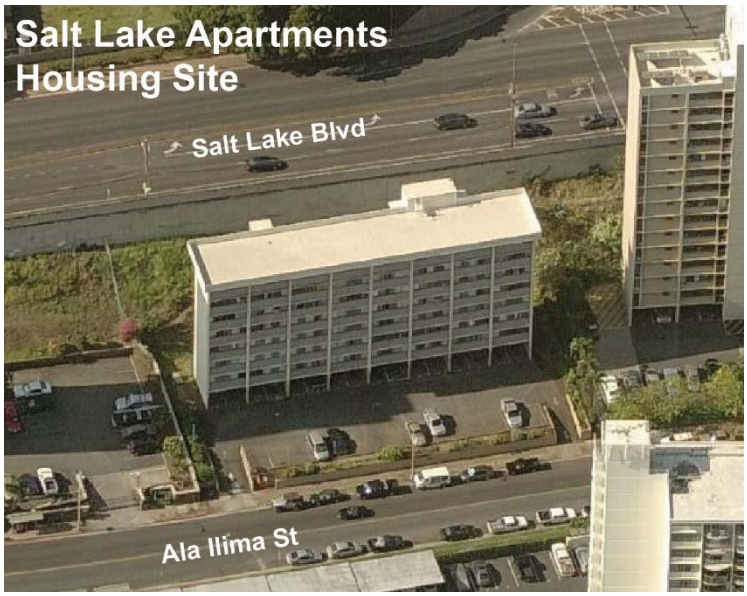
TMK: (1) 1-1-062:007

Hawai‘i Public Housing Authority (HPHA) Environmental Review

SOURCE DOCUMENTATION (SD) STATUTORY WORKSHEET

Site Visit Date: June 18, 2015
Prepared By: Questor Lau

The Salt Lake Apartments housing project is located in the Salt Lake community of the Honolulu district on the island of O‘ahu. Salt Lake is located between the urban center of Honolulu to the east and Joint Base Pearl Harbor-Hickam to the west.



The housing project site is situated off of Salt Lake Boulevard with access provided by Ala Ilima Street. The property is bordered by Salt Lake Boulevard to the south and Moanalua High School is located approximately one quarter mile to the east. This housing project is within HPHA’s Asset Management Project (AMP) 30 which includes four other housing projects.

The Salt Lake Apartments were first occupied in 1969 and has a street address of 2907 Ala Ilima Street. This property consists of 0.47 acres, and it is identified as Tax Map Key (TMK) No. (1) 1-1-062:007. The housing project is comprised of 1 eight-story apartment building providing a total of 28 one-bedroom housing units. The ground level of the structure serves as covered parking stalls for tenants. The State’s land use designation for the property is the “Urban District,” and the City’s zoning for the site is A-2 Medium-Density Apartment.

The project site is not located within a tsunami evacuation zone, and the entire site is located in Flood Zone D, an area of undetermined flood hazard (Community Panel Number 15003C0332G, Revised January 19, 2011). Zone D is defined as areas where possible but undetermined flood hazards may exist, as no analysis of flood hazards has been conducted.

The following figures in Exhibit A provide supporting information on this housing project:

Figure 1: Location Map
Figure 2: TMK Map
Figure 3: Site Map
Figure 4: Flood Map

COMPLIANCE FACTORS

I. AIRPORT CLEAR ZONES AND ACCIDENT POTENTIAL ZONES (24 CFR PART 51D)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The housing project does not lie within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: 24 CFR 51 (D).

Honolulu International Airport Master Plan - 2010 (August 1994), State Department of Transportation, Airports Division;

*Hawai`i Airports and Flying Safety Guide (2012-13, Fifth Edition, Revision 1)* Hawai`i Department of Transportation, Airports Division; and

http://hidot.hawaii.gov/airports/files/2013/01/Airport-Safety-Guide-2012-2013-5rev1.pdf

II. COASTAL BARRIER RESOURCES (COASTAL BARRIER IMPROVEMENT ACT OF 1990 [16 USC 3501])

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i does not have any designated coastal barrier resource units.

SUPPORTING DOCUMENTATION:

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/cbra/maps/mapper.html (Date accessed: 6/30/15).

III. FLOOD INSURANCE (FLOOD DISASTER PROTECTION ACT OF 1973 AND NATIONAL FLOOD INSURANCE REFORM ACT OF 1994 [42 USC 4001-4128 AND 42 USC 5154a])

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program.

As indicated in the Flood Insurance Rate Panel 15003C0332H, Revised November 05, 2014, this project is located in Zone X (area of minimal flood hazard) and is located outside the 500-year flood zone. Based on its description, this project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal signs of previous flooding problems. An interview with the Maintenance Supervisor also determined that major ponding or flooding issues are currently not an issue for the project site.

Printed: Flood Insurance Rate Map Panel 15003C0332H, Revised November 05, 2014.

Hawai`i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 7/27/15)

IV. CLEAN AIR ACT (40 CFR PARTS 6, 51, 93)

SUPPORTING DOCUMENTS	
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. Environmental Protection Agency's Green Book for currently designated "nonattainment areas" as of June 2015. Planned rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.

SUPPORTING DOCUMENTATION:

Printed: *State of Hawai‘i Annual Summary 2013 Air Quality Data*. State of Hawai'i, Department of Health, July 2014.

U.S. Environmental Protection Agency website at: http://epa.gov/airquality/greenbk/

V. COASTAL ZONE MANAGEMENT ACT (16 USC 1451, SECTIONS 307 (C), (D)

CONTACT:

Mr. John Nakagawa
Office of Planning
Department of Business, Economic Development & Tourism
State of Hawai‘i
P.O. Box 2359
Honolulu, Hawai'i, 96804-2359

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai‘i's Coastal Zone Management (CZM) program.

SUPPORTING DOCUMENTATION:

Contact: In an email to the Office of Planning (OP) dated July 27, 2015, the HPHA determined that the use of HUD funds for the implementation of repair and rehabilitation improvements does not require review for consistency with Hawai‘i's CZM program. The OP confirmed this determination in an email dated July 28, 2015 and it is included in the Appendices.

Experience: Previous reviews conducted by OP in 2003, 2005, and 2010 determined that projects receiving federal funds from HUD do not require CZM federal consistency review. OP's current determination confirms this condition is still applicable. Copies of these prior documentations are included in the Appendices.

VI. CONTAMINATION AND TOXIC SUBSTANCES (24 CFR PART 50.3 & 58.5(I)(2))

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Project Not Affected.

There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.

SUPPORTING DOCUMENTATION:

Field: A site inspection and interview with the Asset Management Project (AMP) Manager and Maintenance Supervisor revealed no presence of any toxic or radioactive materials on the project site that warrant concern. There is an unmarked, secured storage area on the first floor, however the AMP Manager and Maintenance Supervisor stated that no hazardous or toxic materials are stored on site.

Study: Environmental Data Resources, Inc. (EDR), conducted a search of available environmental records and prepared a Radius Map Report (Inquiry Number 4237094.10s, March 17, 2015). EDR reviewed more than 25 federal and statewide regulatory databases for information regarding the treatment, storage, disposal and release of toxic chemicals at the project site and within specific radii (generally 1 mile) of the site. A Detail Map within the EDR report documents those sites identified within a 0.25 mile radius of the project site. The EDR report in Exhibit B includes the results of their research findings.

The EDR report notes the following activities within a 0.125 mile radius of the project site: Pacific Island Air Conditioner Company is classified as a Conditionally Exempt Small Quantity Generator (Handler). No violations were found for this site. City and County of Honolulu Moanalua Fire Station is listed as having two 1,000 gallon Underground Storage Tanks (UST). One is currently in Use; the other is Permanently Out of Use.

The Pearl Harbor Naval Complex, US Naval Command, is identified as a National Priority List site (NPL) that is located within 0.125 miles of this housing site. The NPL is the list of national priorities among the known releases or threatened releases of hazardous substances, pollutants, or contaminants throughout the U.S., and is intended primarily to guide the EPA in determining which sites warrant further investigation such as this naval station. The project site is not identified as a Formerly Used Defense Site (FUDS) by the U.S. Army Corps of Engineers that is subject to cleanup actions for DOD generated contamination.

VII. ENDANGERED SPECIES (50 CFR PART 402)

CONTACT:
Mr. Loyal Mehrhoff, Field Supervisor
Pacific Islands Administrator
Fish and Wildlife Services
U.S. Department of the Interior
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawai‘i 96813
Tel. #: 792-9400

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Adverse Effect Subject to Mitigation

The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices.

SUPPORTING DOCUMENTATION:

Contact: A letter from the HPHA dated July 24, 2015 was submitted to the Pacific Island Administrator for the FWS determining that repair and rehabilitation improvements that may be implemented using HUD funds for this housing project would have no likelihood of effect on any listed species or proposed species, or existing or proposed designated critical habitat subject to certain measures. Concurrence with this determination along with proposed minimization and avoidance measures was received from the FWS in a letter dated September 28, 2015 which is included in the Appendices. This housing project is subject to the following minimization and avoidance measures.

Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.

Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.

Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.

Newell's shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.

Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.

Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo‘i, impoundments or other vegetated water bodies.

1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols.
2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.
3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.

In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.

Additional Measures: The following additional measures would be implemented:

1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.

Experience: The FWS was previously consulted as part of environmental reviews that were completed in 2005 (39 housing projects) and 2010 (70 housing projects) which supported the determination that repair and rehabilitation improvements would either: 1) have no likelihood of effect for certain housing projects; or 2) not likely adversely affect federally listed species or critical habitat for certain housing projects subject to mitigative measures. A summary of these consultation efforts follows.

2005 Consultation: In a letter dated July 15, 2005, the Housing and Community Development Corporation of Hawai‘i (predecessor to the HPHA), determined that the implementation of minor repair and rehabilitation improvements for 39 housing projects would not have an adverse effect on federally-listed species or critical habitat. In a letter dated August 11, 2005, the FWS concurred with the HCDCH determination.

2010 Consultation: In a letter dated May 17, 2010, the HPHA informed the FWS that HUD funds would be used to immediately implement repair and rehabilitation improvements for six housing projects on O‘ahu and the island of Hawai`i. In a subsequent letter dated May 21, 2010, the FWS was informed that HPHA would be using HUD funds to implement minor repair and rehabilitation improvements for 64 projects throughout the State. In both letters, the HPHA determined that the repair and rehabilitation improvements were not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat. Based on further consultation and a meeting with FWS staff on June 24, 2010, the HPHA determined that repair and rehabilitation improvements for most of their housing projects would not likely adversely affect any listed or proposed species, or existing or proposed designated habitat, subject to various mitigative measures for certain housing projects.

VIII. EXPLOSIVE AND FLAMMABLE OPERATIONS (24 CFR PART 51C)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

SUPPORTING DOCUMENTATION:

Field: Field inspection was limited to the exterior of residential buildings and associated structures for this housing project. No above-ground explosive or flammable material storage containers in excess of 100 gallons were observed at the site. The Maintenance Supervisor estimated the backup diesel generator has a 50 gallon storage capacity.

Printed: 24 CFR Part 51, Subpart C addresses acceptable separation distance from above-ground explosive or flammable fuels or chemical containers. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

IX. FARMLANDS PROTECTION (7 CFR PART 658)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. Since the property consists of an existing housing development within an urbanized area, no farmlands would be impacted by the implementation of repair and rehabilitation improvements.

Printed: The property is designated for "Urban" use by the State Land Use Commission and the County's zoning for the parcel is RD-3.75 Double-Family Residential District.

Hawai`i Office of Planning website at: http://planning.hawaii.gov/gis/
(Date accessed: 6/30/2015)

X. FLOODPLAIN MANAGEMENT (EXECUTIVE ORDER 11988, 24 CFR PART 55)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program

The project site is located in Zone X, an area of minimal flooding (i.e., 0.2% annual chance flood), and is located outside the 500-year flood zone. A field inspection and information obtained from the property manager confirmed no major flooding issues within the project site.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal signs of previous flooding problems. An interview with the Maintenance Supervisor also determined that no major ponding or flooding issues have occurred on the project site.

Printed: Flood Insurance Rate Map Panel 15003C0332H, Revised November 05, 2014.

Hawai`i Department of Land and Natural Resources website at:
http://gis.hawaiinfip.org/FHAT/ (Date accessed7/21/15)

XI. HISTORIC PRESERVATION (NATIONAL HISTORIC PRESERVATION ACT OF 1966; SECTIONS 106 AND 110; 36 CFR, PART 800)

CONTACT:

Ms. Suzanne Case, Chairperson
Department of Land and Natural Resources (DLNR)
State of Hawai'i
1151 Punchbowl Street
Honolulu, Hawai'i 96813
Tel. #: 587-0400

SUPPORTING DOCUMENTS

X	Field
X	Contact
X	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Effect on Historic Properties

The Salt Lake Apartments housing project was initially occupied in 1969 and is 46 years old. To be eligible for listing in the National Register of Historic Places (NRHP), a property must meet the National Register criteria for evaluation which involves examining its integrity, significance, and age (generally at least 50 years old). Due to its age, this housing project does not meet the eligibility criteria to be evaluated for the NRHP. In a letter to the State Historic Preservation Officer (SHPO) dated July 23, 2015, the HPHA determined that no historic properties would be affected (no effect) by repair and rehabilitation improvements for this housing project. No comments or objections about this no effect determination were received.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not locate any existing or potential archaeological sites (e.g., heiau) or cultural features on the property. An interview with the property manager and maintenance supervisor indicates that no known sites or features are present on the property.

Contact: A letter from the HPHA dated July 23, 2015, which is included in the Appendix, was submitted to the State Historic Preservation Officer [SHPO] (Chair of State Board of Land and Natural Resources) as part of Section 106 consultation determining that no historic properties would be affected (no effect) by repair and rehabilitation improvements that may be implemented using HUD funds for this housing project. The SHPO did not submit any comments or objections on the "no effect" determination for this housing project, which included follow-up e-mails with the State Historic Preservation Division regarding a response. On September 28, 2015, notice of HPHA's determination was also distributed to several native Hawaiian organizations and the various County Planning Departments. No concerns or opposition to this determination was received.

Printed: A review of the U.S. National Parks Service website for the National Register of Historic Places did not identify any historic properties within the limits of this housing project. A similar review of the State DLNR website for the State Register of Historic Places revealed that there are no historic properties within the project site.

National Register: U.S. National Park Service website at: http://www.nps.gov/nr/research/ (Date accessed: 7/2/15).

State Register: Hawai`i Department of Land and Natural Resources website at: http://dlnr.hawaii.gov/shpd/state-register/ (Date accessed: 7/2/15).

Experience: In letter to the State Historic Preservation Officer (SHPO) dated April 19, 2011, the HPHA determined that minor repair and rehabilitation improvement at 57 public housing projects throughout Hawai'i (including this housing site) would have "no effect" on historic properties. The SHPO had no comments or objections on the "no effect" determination.

XII. NOISE ABATEMENT CONTROL (24 CFR PART 51B)

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Within HUD Noise Standards

The project site is not situated along a highway or major arterial roadway that has a high volume of vehicular traffic that may generate significant noise. The HUD noise calculator estimated noise levels at the project site to be 57.3 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

SUPPORTING DOCUMENTATION:

Field: There were no significant noise generating sources identified within the project site during the site inspection. An interview with the AMP Manager and Maintenance Supervisor did not identify any loud noise producing sources in the area. As a result, notable noise sources are predominantly associated with vehicular traffic along adjacent roadways. Traffic noise did not appear significant during the site visit. There is an approximately 25-foot-high concrete wall along the rear of the property buffering the subject housing site from traffic noise along Salt Lake Boulevard.

Study: The HUD day/night noise level calculator was used to estimate approximate traffic noise levels at the project site. Ala Napunani Street is a primary County roadway located approximately 560 feet east of the project site. Ala Napunani Street serves vehicular traffic entering and exiting Salt Lake along with providing access to other surrounding urban areas. Ala 'Ilima Street is a minor County road that runs perpendicular to Ala Napunani Street and provides access to the project site. State Department of Transportation 2013 traffic count data available for Likini Street (a similar street that runs parallel and is one block away from Ala 'Ilima Street) was used for the HUD noise calculation. Given the distance of the center line of Ala Ilima Street to the project site (about 75 feet), the estimated noise levels at the project site using this HUD calculator was 57.3 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards.

Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

XIII. SOLE SOURCE AQUIFER (40 CFR PART 149)

SUPPORTING DOCUMENTS	
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact on Sole Source Aquifer

The housing project is located within the O‘ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation. However, if exceptional circumstances require compliance steps with any of these authorities, such compliance must be established and documented prior to approving the site-specific loan or grant.

SUPPORTING DOCUMENTATION:

Printed: This determination was based upon review of the Sole Source Aquifer Memorandum of 4/30/90 (Sections II.B.1 and II.B.2) and consideration of the type of rehabilitation related improvements that would be conducted for this project.

XIV. WETLANDS PROTECTION (EXECUTIVE ORDER 11990)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the property did not identify the presence of any wetlands.

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/wetlands/data/mapper.html (Date accessed 7/23/2015).

XV. WILD AND SCENIC RIVERS ACT (16 USC 1271, SECTION 7 (B), (C))

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no Wild and Scenic Rivers in Hawai‘i, which excludes this project from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: National Wild and Scenic Rivers System website at: http://www.rivers.gov/index.php (Date accessed: 6/30/2015).

XVI. ENVIRONMENTAL JUSTICE (EXECUTIVE ORDER NO. 12898)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Conflict with Requirements

Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, repair and rehabilitation improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations. Repair and rehabilitation improvements should benefit low-income and minority populations living within this housing project.

SUPPORTING DOCUMENTATION:

Printed: Executive Order 12898.

U.S. Department of Housing and Urban Development website at:
https://www.hudexchange.info/environmental-review/environmental-justice/

EXHIBIT A

Location Map, TMK Map, Site Map, Flood Map, and Site Photos

Source: State of Hawai‘i GIS Data and Google Earth Pro - 1/12/13

HONOLULU RAIL TRANSIT

Transit Corridor

Transit Station

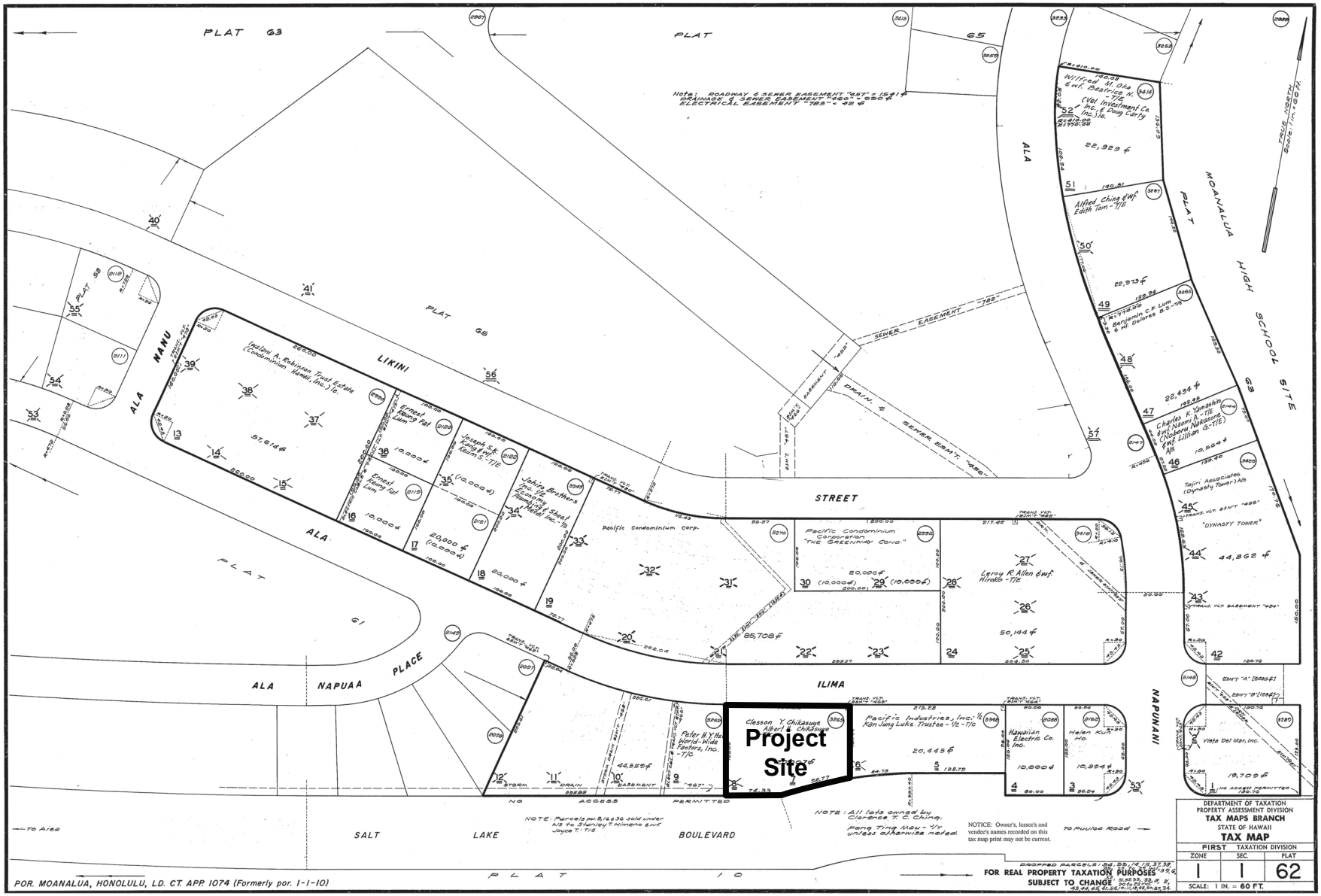
HPHA No. 1066 - Salt Lake Apartments (AMP 30)

Figure 1 - Project Location Map

Honolulu, O‘ahu

1,000 FT

HHF PLANNERS
places for people



HPHA No. 1066 - Salt Lake Apartments (AMP 30)

Figure 2 - TMK Map

Honolulu, O'ahu

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1066 - Salt Lake Apartments (AMP 30)

Figure 3 - Site Map

Honolulu, O'ahu

20 FEET

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

LEGEND

Zone D - Unstudied Area

HPHA No. 1066 - Salt Lake Apartments (AMP 30)

Figure 4 - Flood Map

Honolulu, O'ahu

20 FEET

HHF PLANNERS
places for people

SALT LAKE APARTMENTS
SITE PHOTOS

West property line (facing south) adjacent to the rail transport right-of-way, along Kamehameha Highway

West property line (facing north) adjacent to the rail transport right-of-way

Construction area adjacent to Pu‘uwai Momi is fenced off

Construction area adjacent to Pu‘uwai Momi is fenced off

Construction area and hazards adjacent to Pu‘uwai Momi are secure and safeguarded, including this hole in the ground

Flammable materials storage

SALT LAKE APARTMENTS
SITE PHOTOS

North property line along Salt Lake Boulevard

North property line along Salt Lake Boulevard

North property line and intersection of Salt Lake Boulevard and Kamehameha Highway

Hazardous material storage

Abandoned vehicles will be removed according to AMP Manager

Broken refrigerators and other household appliances are removed from the site on a regular basis

EXHIBIT B

EDR Radius Map Report

Salt Lake
2907 Ala Ilima St.
Honolulu, HI 96818

Inquiry Number: 4237094.10s
March 17, 2015

EDR Summary Radius Map Report

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

FORM-NULL-PVC

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

2907 ALA ILIMA ST.
HONOLULU County, HI 96818

COORDINATES

Latitude (North):	21.3448000 - 21˚ 20' 41.28''
Longitude (West):	157.9029000 - 157˚ 54' 10.44''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	613763.3
UTM Y (Meters):	2360565.8
Elevation:	59 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	USGS 7.5 min quad index

MAPPED SITES SUMMARY

Target Property Address:
2907 ALA ILIMA ST.
, HI 96818

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
Reg	HICKAM AIR FORCE BAS		DOD	Same	4531, SW
Reg	PEARL HARBOR NAVAL S		DOD	Same	1 ft.
Reg	PEARL HARBOR NAVAL C	US NAVAL COMMAND	NPL, CERCLIS, US ENG CONTROLS, US INST CONTROL,...	Same	192, South
1	PACIFIC ISLAND AIR C	822 G MAPUNAPUNA	RCRA-CESQG, FINDS	Higher	182, South
2	C&CH MOANALUA FIRE S	2835 ALA ILIMA ST	UST, Financial Assurance	Higher	578, ENE
3		2976 ALA ILIMA ST	EDR US Hist Cleaners	Lower	711, WNW
4		5333 LIKINI ST	EDR US Hist Auto Stat	Lower	838, WNW
5	GRABBER PACIFIC	2970 MOKUMOA ST	LUST, UST	Lower	1264, ESE
6	HALSEY TERRACE FAMIL	2958/2960 GORDON ST	LUST, UST	Lower	1457, SSW
7	COCA-COLA BOTTLING C	949 MAPUNAPUNA ST	SHWS, LUST, UST, SPILLS	Lower	1543, ESE
A8	DELUXE SHEET METAL W	852 MAPUNAPUNA ST	LUST, UST	Lower	1592, SE
A9	HAWAII STAGING AND L	842A MAPUNAPUNA STRE	CERCLIS, PRP	Lower	1612, SE
A10	VERMICULITE OF HAWAI	842-A MAPUNAPUNA STR	CERCLIS, ICIS	Lower	1612, SE
A11	HAWAII STAGING AND L	842 MAPUNAPUNA ST	SHWS, SPILLS	Lower	1612, SE
A12	MR. SANDMAN	842 MAPUNAPUNA ST	LUST, UST	Lower	1612, SE
13	UNITEK ENVIRONMENTAL	2889 MOKUMOA STREET	RCRA-TSDF, CORRACTS, RCRA NonGen / NLR, FINDS,...	Lower	1642, ESE
B14	THE WOW COMPANY, INC	822 MAPUNAPUNA ST	LUST, UST	Lower	1662, SE
B15	B & C TRUCKING CO.,	812 MAPUNAPUNA ST	LUST, UST	Lower	1697, SE
B16	KAM'S EXPRESS, INC.	802 MAPUNAPUNA ST	LUST, UST, Financial Assurance	Lower	1741, SE
C17	G.M.I. WASTE SYSTEMS	2861 MOKUMOA ST	LUST, UST	Lower	1812, ESE
C18	WEBCO HAWAII, INC.	2840 MOKUMOA ST	LUST, UST	Lower	1933, ESE
19	PACIFIC FENCE, INC.	770 MAPUNAPUNA ST	LUST, UST	Lower	1934, SSE
C20	HAWAIIAN ISLES ENTER	2839 MOKUMOA ST	LUST, UST	Lower	1946, ESE
D21	WEBCO HAWAII, INC.	2830 MOKUMOA ST	LUST, UST	Lower	1993, ESE
D22	BEACON MOVING & STOR	2819A MOKUMOA ST	LUST, UST	Lower	2070, ESE
D23	HONEYWELL	2809 MOKUMOA STREET	RCRA-CESQG, FINDS, LUST, UST	Lower	2128, ESE
24	HECO PAD-MOUNT TRANS	2875 PAA ST (MAPUNAP	SHWS, SPILLS	Lower	2194, East
E25	ATLAS ELEC CO	1151 MAPUNAPUNA ST	CERC-NFRAP	Lower	2201, ENE
E26	HECO PAD-MOUNTED TRA	1151 MAPUNAPUNA ST	SHWS, SPILLS	Lower	2201, ENE
27	MONARCH BUILDING SUP	749 MAPUNAPUNA ST	SHWS, LUST, UST, Financial Assurance	Lower	2206, SSE
28	HAWAIIAN GROCERY STO	2915 KAIHIKAPU ST	LUST, UST	Lower	2218, SE
F29	HALSEY TERRACE FAMIL	720 LOUNSBURY	LUST, UST	Lower	2278, SW
30	HASLEY TERRACE FAMIL	FORMER BLDG 725HALSE	LUST, UST	Lower	2310, SW
G31	PUKOLOA WOOD TREATIN	2841 PUKOLOA STREET	CERCLIS	Lower	2395, ESE
G32	VOLKSWAGON OF AMERIC	2865 PUKOLOA ST	LUST, UST	Lower	2395, ESE
G33	PUKOLOA WOOD TREATIN	2819 PUKOLOA ST	SHWS	Lower	2395, ESE
G34	GIBSON - SERVICE STA	2850 PUKOLOA ST	LUST, UST	Lower	2395, ESE
G35	TOYOTA PARTS & SERVI	2841 PUKOLOA ST	LUST, UST, Financial Assurance	Lower	2395, ESE
F36	HALSEY TERRACE FAMIL	722 LOUNSBURY STREET	LUST, UST	Lower	2404, SW

MAPPED SITES SUMMARY

Target Property Address:
2907 ALA ILIMA ST.
, HI 96818

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
37	WILLIAM J. KIMI, JR.	692 MAPUNAPUNA ST OR	LUST, UST	Lower	2474, SSE
H38	DI MAURO PROPERTIES	2855 KAIHIKAPU ST	LUST, UST	Lower	2526, SE
H39	BILS FAMILY PARTNERS	2850 KAIHIKAPU ST	LUST, UST	Lower	2543, SE
40	HALSEY TERRACE FAMIL	3090 HAMPTON CIRCLE	LUST, UST	Higher	2548, WSW
41	AMFAC DIST.- INDUSTR	2846 AWAAWALOA ST	LUST, UST	Lower	2548, SSE
H42	A-1 A-LECTRICIAN, IN	2849 KAIHIKAPU ST	LUST, UST	Lower	2557, SE
43	ABC DSPL	2760 KAMEHAMEHA HWY	CERC-NFRAP	Lower	2631, SSE
44	SWIFT ADHESIVES & CO	2847 AWAAWALOA ST	SHWS	Lower	2830, SSE
45	HAWAIIAN FLUID POWER	803 AHUA ST	SHWS, SPILLS	Lower	2841, SE
46	WAREHOUSE AND MAINTE	727 KAKOI ST	SHWS, SPILLS	Lower	3667, SE
47	ALSCO (AMERICAN LINE	2771 WAIWAI LP	SHWS, SPILLS, ENG CONTROLS, INST CONTROL	Lower	3972, South
48	OCEANIC CABLEVISION	2669 KILIHAU ST	SHWS, SPILLS	Lower	4242, SE
49	VECTOR CONTROL BRANC	2611 KILIHAU ST	CERC-NFRAP, RCRA NonGen / NLR, SHWS, LUST, UST	Lower	4376, SE
50	NATIONAL CAR RENTAL	3223 N NIMITZ HWY	SHWS, UST, Financial Assurance	Lower	4420, SW
51	FORMER ZIEGLER STEEL	2919 UALENA ST	SHWS, ENG CONTROLS, INST CONTROL	Lower	4447, SSW
52	AMERICAN PACIFIC TRA	2635 WAIWAI LP	SHWS, LUST, UST	Lower	4525, SSE
53	OCCIDENTAL CHEM CO	2660 WAIWAI LP	SHWS	Lower	4558, SSE
54	UNITED AIRLINES CARG	3071 AOLELE ST	SHWS, LUST, UST, Financial Assurance	Lower	5020, SSW
55	GTE BASE YARD SUMP	3239 UALENA ST	SHWS, SPILLS, ENG CONTROLS, INST CONTROL	Lower	5180, SW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: A review of the NPL list, as provided by EDR, and dated 12/16/2014 has revealed that there is 1 NPL site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PEARL HARBOR NAVAL C	***US NAVAL COMMAND***	***S 0 - 1/8 (0.036 mi.)***	***0***	***7***

Federal CERCLIS list

CERCLIS: A review of the CERCLIS list, as provided by EDR, and dated 10/25/2013 has revealed that there are 4 CERCLIS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PEARL HARBOR NAVAL C	***US NAVAL COMMAND***	***S 0 - 1/8 (0.036 mi.)***	***0***	***7***

Lower Elevation	Address	Direction / Distance	Map ID	Page
HAWAII STAGING AND L	***842A MAPUNAPUNA STRE***	***SE 1/4 - 1/2 (0.305 mi.)***	***A9***	***9***
VERMICULITE OF HAWAI	***842-A MAPUNAPUNA STR***	***SE 1/4 - 1/2 (0.305 mi.)***	***A10***	***9***
PUKOLOA WOOD TREATIN	2841 PUKOLOA STREET	ESE 1/4 - 1/2 (0.454 mi.)	G31	15

Federal CERCLIS NFRAP site List

CERC-NFRAP: A review of the CERC-NFRAP list, as provided by EDR, and dated 10/25/2013 has revealed that there are 2 CERC-NFRAP sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ATLAS ELEC CO	1151 MAPUNAPUNA ST	ENE 1/4 - 1/2 (0.417 mi.)	E25	13
ABC DSPL	2760 KAMEHAMEHA HWY	SSE 1/4 - 1/2 (0.498 mi.)	43	18

Federal RCRA CORRACTS facilities list

CORRACTS: A review of the CORRACTS list, as provided by EDR, and dated 12/09/2014 has revealed that there is 1 CORRACTS site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
UNITEK ENVIRONMENTAL	***2889 MOKUMOA STREET***	***ESE 1/4 - 1/2 (0.311 mi.)***	***13***	***10***

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: A review of the RCRA-TSDF list, as provided by EDR, and dated 12/09/2014 has revealed that there is 1 RCRA-TSDF site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
UNITEK ENVIRONMENTAL	***2889 MOKUMOA STREET***	***ESE 1/4 - 1/2 (0.311 mi.)***	***13***	***10***

Federal RCRA generators list

RCRA-CESQG: A review of the RCRA-CESQG list, as provided by EDR, and dated 12/09/2014 has revealed that there is 1 RCRA-CESQG site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PACIFIC ISLAND AIR C	***822 G MAPUNAPUNA***	***S 0 - 1/8 (0.034 mi.)***	***1***	***7***

Federal institutional controls / engineering controls registries

US ENG CONTROLS: A review of the US ENG CONTROLS list, as provided by EDR, and dated 09/18/2014 has revealed that there is 1 US ENG CONTROLS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PEARL HARBOR NAVAL C	***US NAVAL COMMAND***	***S 0 - 1/8 (0.036 mi.)***	***0***	***7***

US INST CONTROL: A review of the US INST CONTROL list, as provided by EDR, and dated 09/18/2014 has revealed that there is 1 US INST CONTROL site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PEARL HARBOR NAVAL C	***US NAVAL COMMAND***	***S 0 - 1/8 (0.036 mi.)***	***0***	***7***

State- and tribal - equivalent CERCLIS

SHWS: A review of the SHWS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 18 SHWS sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
COCA-COLA BOTTLING C	***949 MAPUNAPUNA ST***	***ESE 1/4 - 1/2 (0.292 mi.)***	***7***	***9***
HAWAII STAGING AND L	***842 MAPUNAPUNA ST***	***SE 1/4 - 1/2 (0.305 mi.)***	***A11***	***10***
HECO PAD-MOUNT TRANS	***2875 PAA ST (MAPUNAP***	***E 1/4 - 1/2 (0.416 mi.)***	***24***	***13***
HECO PAD-MOUNTED TRA	***1151 MAPUNAPUNA ST***	***ENE 1/4 - 1/2 (0.417 mi.)***	***E26***	***14***
MONARCH BUILDING SUP	***749 MAPUNAPUNA ST***	***SSE 1/4 - 1/2 (0.418 mi.)***	***27***	***14***
PUKOLOA WOOD TREATIN	2819 PUKOLOA ST	ESE 1/4 - 1/2 (0.454 mi.)	G33	15
SWIFT ADHESIVES & CO	2847 AWAAWALOA ST	SSE 1/2 - 1 (0.536 mi.)	44	18
HAWAIIAN FLUID POWER	***803 AHUA ST***	***SE 1/2 - 1 (0.538 mi.)***	***45***	***19***
WAREHOUSE AND MAINTE	***727 KAKOI ST***	***SE 1/2 - 1 (0.695 mi.)***	***46***	***19***
ALSCO (AMERICAN LINE	***2771 WAIWAI LP***	***S 1/2 - 1 (0.752 mi.)***	***47***	***19***
OCEANIC CABLEVISION	***2669 KILIHAU ST***	***SE 1/2 - 1 (0.803 mi.)***	***48***	***19***
VECTOR CONTROL BRANC	***2611 KILIHAU ST***	***SE 1/2 - 1 (0.829 mi.)***	***49***	***19***
NATIONAL CAR RENTAL	***3223 N NIMITZ HWY***	***SW 1/2 - 1 (0.837 mi.)***	***50***	***20***
FORMER ZIEGLER STEEL	***2919 UALENA ST***	***SSW 1/2 - 1 (0.842 mi.)***	***51***	***20***
AMERICAN PACIFIC TRA	***2635 WAIWAI LP***	***SSE 1/2 - 1 (0.857 mi.)***	***52***	***20***
OCCIDENTAL CHEM CO	2660 WAIWAI LP	SSE 1/2 - 1 (0.863 mi.)	53	20
UNITED AIRLINES CARG	***3071 AOLELE ST***	***SSW 1/2 - 1 (0.951 mi.)***	***54***	***21***
GTE BASE YARD SUMP	***3239 UALENA ST***	***SW 1/2 - 1 (0.981 mi.)***	***55***	***21***

State and tribal leaking storage tank lists

LUST: A review of the LUST list, as provided by EDR, and dated 12/16/2014 has revealed that there are 29 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HALSEY TERRACE FAMIL	***3090 HAMPTON CIRCLE***	***WSW 1/4 - 1/2 (0.483 mi.)***	***40***	***17***
Facility Status: Site Cleanup Completed (NFA)				

Lower Elevation	Address	Direction / Distance	Map ID	Page
GRABBER PACIFIC	***2970 MOKUMOA ST***	***ESE 1/8 - 1/4 (0.239 mi.)***	***5***	***8***
Facility Status: Site Cleanup Completed (NFA)				

Lower Elevation	Address	Direction / Distance	Map ID	Page
HALSEY TERRACE FAMIL	*2958/2960 GORDON ST*	*SSW 1/4 - 1/2 (0.276 mi.)*	*6*	*8*
Facility Status: Site Cleanup Completed (NFA)				
COCA-COLA BOTTLING C	*949 MAPUNAPUNA ST*	*ESE 1/4 - 1/2 (0.292 mi.)*	*7*	*9*
Facility Status: Site Cleanup Completed (NFA)				
DELUXE SHEET METAL W	*852 MAPUNAPUNA ST*	*SE 1/4 - 1/2 (0.302 mi.)*	*A8*	*9*
Facility Status: Site Cleanup Completed (NFA)				
MR. SANDMAN	*842 MAPUNAPUNA ST*	*SE 1/4 - 1/2 (0.305 mi.)*	*A12*	*10*
Facility Status: Site Cleanup Completed (NFA)				
THE WOW COMPANY, INC	*822 MAPUNAPUNA ST*	*SE 1/4 - 1/2 (0.315 mi.)*	*B14*	*10*
Facility Status: Site Cleanup Completed (NFA)				
B & C TRUCKING CO.,	*812 MAPUNAPUNA ST*	*SE 1/4 - 1/2 (0.321 mi.)*	*B15*	*11*
Facility Status: Site Cleanup Completed (NFA)				
KAM'S EXPRESS, INC.	*802 MAPUNAPUNA ST*	*SE 1/4 - 1/2 (0.330 mi.)*	*B16*	*11*
Facility Status: Site Cleanup Completed (NFA)				
G.M.I. WASTE SYSTEMS	*2861 MOKUMOA ST*	*ESE 1/4 - 1/2 (0.343 mi.)*	*C17*	*11*
Facility Status: Site Cleanup Completed (NFA)				
WEBCO HAWAII, INC.	*2840 MOKUMOA ST*	*ESE 1/4 - 1/2 (0.366 mi.)*	*C18*	*11*
Facility Status: Site Cleanup Completed (NFA)				
PACIFIC FENCE, INC.	*770 MAPUNAPUNA ST*	*SSE 1/4 - 1/2 (0.366 mi.)*	*19*	*12*
Facility Status: Site Cleanup Completed (NFA)				
HAWAIIAN ISLES ENTER	*2839 MOKUMOA ST*	*ESE 1/4 - 1/2 (0.369 mi.)*	*C20*	*12*
Facility Status: Site Cleanup Completed (NFA)				
WEBCO HAWAII, INC.	*2830 MOKUMOA ST*	*ESE 1/4 - 1/2 (0.377 mi.)*	*D21*	*12*
Facility Status: Site Cleanup Completed (NFA)				
BEACON MOVING & STOR	*2819A MOKUMOA ST*	*ESE 1/4 - 1/2 (0.392 mi.)*	*D22*	*13*
Facility Status: Site Cleanup Completed (NFA)				
HONEYWELL	*2809 MOKUMOA STREET*	*ESE 1/4 - 1/2 (0.403 mi.)*	*D23*	*13*
Facility Status: Site Cleanup Completed (NFA)				
MONARCH BUILDING SUP	*749 MAPUNAPUNA ST*	*SSE 1/4 - 1/2 (0.418 mi.)*	*27*	*14*
Facility Status: Site Cleanup Completed (NFA)				
HAWAIIAN GROCERY STO	*2915 KAIHIKAPU ST*	*SE 1/4 - 1/2 (0.420 mi.)*	*28*	*14*
Facility Status: Site Cleanup Completed (NFA)				
HALSEY TERRACE FAMIL	*720 LOUNSBURY*	*SW 1/4 - 1/2 (0.431 mi.)*	*F29*	*14*
Facility Status: Site Cleanup Completed (NFA)				
HASLEY TERRACE FAMIL	*FORMER BLDG 725HALSE*	*SW 1/4 - 1/2 (0.438 mi.)*	*30*	*15*
Facility Status: Site Cleanup Completed (NFA)				
VOLKSWAGON OF AMERIC	*2865 PUKOLOA ST*	*ESE 1/4 - 1/2 (0.454 mi.)*	*G32*	*15*
Facility Status: Site Cleanup Completed (NFA)				
GIBSON - SERVICE STA	*2850 PUKOLOA ST*	*ESE 1/4 - 1/2 (0.454 mi.)*	*G34*	*16*
Facility Status: Site Cleanup Completed (NFA)				
TOYOTA PARTS & SERVI	*2841 PUKOLOA ST*	*ESE 1/4 - 1/2 (0.454 mi.)*	*G35*	*16*
Facility Status: Site Cleanup Completed (NFA)				
HALSEY TERRACE FAMIL	*722 LOUNSBURY STREET*	*SW 1/4 - 1/2 (0.455 mi.)*	*F36*	*16*
Facility Status: Site Cleanup Completed (NFA)				
WILLIAM J. KIMI, JR.	*692 MAPUNAPUNA ST OR*	*SSE 1/4 - 1/2 (0.469 mi.)*	*37*	*16*
Facility Status: Site Cleanup Completed (NFA)				

Lower Elevation	Address	Direction / Distance	Map ID	Page
DI MAURO PROPERTIES	*2855 KAIHIKAPU ST*	*SE 1/4 - 1/2 (0.478 mi.)*	*H38*	*17*
Facility Status: Site Cleanup Completed (NFA)				
BILS FAMILY PARTNERS	*2850 KAIHIKAPU ST*	*SE 1/4 - 1/2 (0.482 mi.)*	*H39*	*17*
Facility Status: Site Cleanup Completed (NFA)				
AMFAC DIST.- INDUSTR	*2846 AWAAWALOA ST*	*SSE 1/4 - 1/2 (0.483 mi.)*	*41*	*18*
Facility Status: Site Cleanup Completed (NFA)				
A-1 A-LECTRICIAN, IN	*2849 KAIHIKAPU ST*	*SE 1/4 - 1/2 (0.484 mi.)*	*H42*	*18*
Facility Status: Site Cleanup Completed (NFA)				

State and tribal registered storage tank lists

UST: A review of the UST list, as provided by EDR, and dated 12/18/2014 has revealed that there are 2 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
C&CH MOANALUA FIRE S	*2835 ALA ILIMA ST*	*ENE 0 - 1/8 (0.109 mi.)*	*2*	*7*

Lower Elevation	Address	Direction / Distance	Map ID	Page
GRABBER PACIFIC	*2970 MOKUMOA ST*	*ESE 1/8 - 1/4 (0.239 mi.)*	*5*	*8*

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

DOD: A review of the DOD list, as provided by EDR, and dated 12/31/2005 has revealed that there are 2 DOD sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HICKAM AIR FORCE BAS		SW 1/2 - 1 (0.858 mi.)	0	7
PEARL HARBOR NAVAL S		0 - 1/8 (0.000 mi.)	0	7

ROD: A review of the ROD list, as provided by EDR, and dated 11/25/2013 has revealed that there is 1 ROD site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PEARL HARBOR NAVAL C	*US NAVAL COMMAND*	*S 0 - 1/8 (0.036 mi.)*	*0*	*7*

EXECUTIVE SUMMARY

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Auto Stat: A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there is 1 EDR US Hist Auto Stat site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	5333 LIKINI ST	WNW 1/8 - 1/4 (0.159 mi.)	4	8

EDR US Hist Cleaners: A review of the EDR US Hist Cleaners list, as provided by EDR, has revealed that there is 1 EDR US Hist Cleaners site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	2976 ALA ILIMA ST	WNW 1/8 - 1/4 (0.135 mi.)	3	8

Count: 8 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
HONOLULU	S116403649	SALT LAKE CHEVRON	846 ALA LILIKOI		RGA LUST
HONOLULU	1016340849	SUNSET LAKE VIEW, UNIT B-403	3215 ALA LLIMA STREET	96818	FINDS
HONOLULU	1010351692	SUNSET LAKE VIEW, UNIT B-403	3215 ALA LLIMA STREET	96818	FTTS
HONOLULU	S111704669	ALA WAI HARBOR BOAT REPAIR YARD	ALA MOANA BLVD		SHWS
HONOLULU	1006820337	ABC DISPOSAL COMPANY	2760 KAMEHAMEHA HWY	96819	SHWS
HONOLULU	S111704706	FORMER KAPALAMA MILITARY RESERVATI	N NIMITZ HWY		SHWS
HONOLULU	S106816200	ALOHA TOWER DEVELOPMENT	NIMITZ HWY	96818	SHWS
HONOLULU	S108008765	CITIZENS ENERGY SERVICES PIER 38	NIMITZ HWY		SHWS, SPILLS, ENG CONTROLS, IN CONTROL

OVERVIEW MAP - 4237094.10S

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Salt Lake ADDRESS: 2907 Ala Ilima St. Honolulu HI 96818 LAT/LONG: 21.3448 / 157.9029	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.10s DATE: March 17, 2015 5:34 pm

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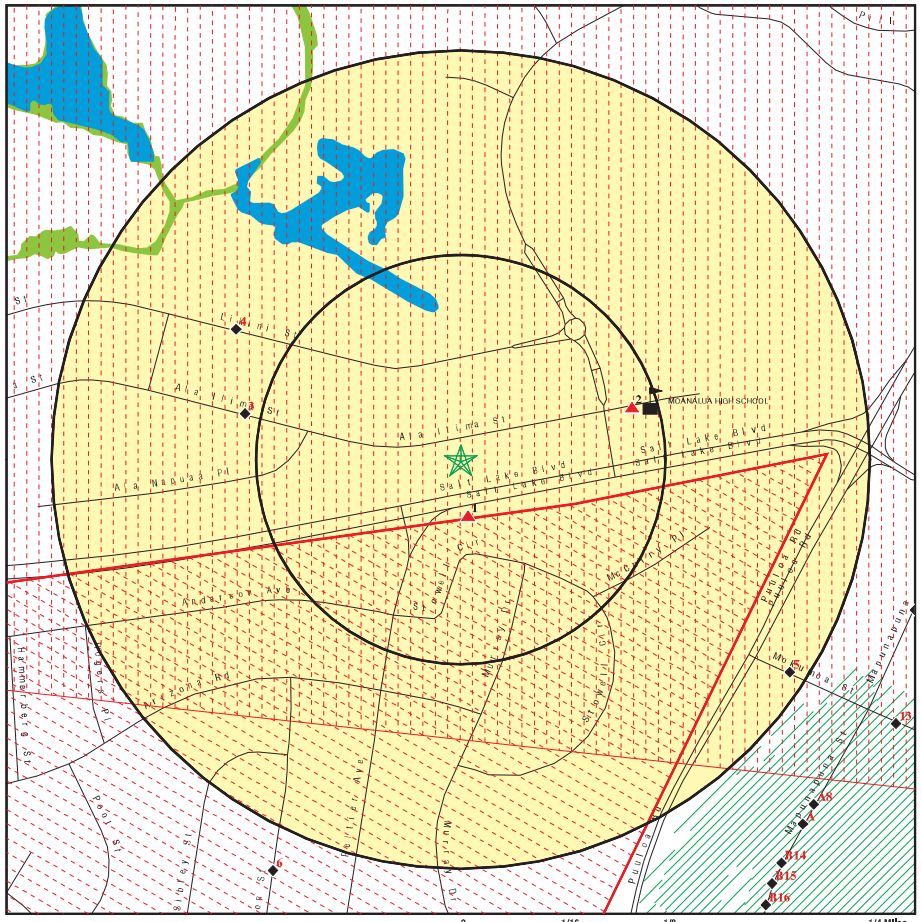
DETAIL MAP - 4237094.10S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		1	0	0	0	NR	1
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		1	0	3	NR	NR	4
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	2	NR	NR	2
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	1	0	NR	1
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	1	NR	NR	1
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		1	0	NR	NR	NR	1
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		1	0	0	NR	NR	1
US INST CONTROL	0.500		1	0	0	NR	NR	1
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
SHWS	1.000		0	0	6	12	NR	18
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	1	28	NR	NR	29
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250		1	1	NR	NR	NR	2

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		0	0	0	NR	NR	0
INST CONTROL	0.500		0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		1	0	0	1	NR	2
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		1	0	0	0	NR	1
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		0	1	NR	NR	NR	1
EDR US Hist Cleaners	0.250		0	1	NR	NR	NR	1
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
RGA HWS	TP		NR	NR	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
DOD Region SW 1/2-1 4531 ft.	**HICKAM AIR FORCE BASE** **HICKAM AIR FORCE BASE (County), HI** Click here for full text details	**DOD**	**CUSA147754 N/A**
DOD Region < 1/8 1 ft.	**PEARL HARBOR NAVAL STATION** **PEARL HARBOR NAVAL STATIO (County), HI** Click here for full text details	**DOD**	**CUSA147748 N/A**
NPL Region South < 1/8 192 ft.	**PEARL HARBOR NAVAL COMPLEX** **US NAVAL COMMAND** **PEARL HARBOR, HI 96860** Click here for full text details **NPL** EPA Id: HI4170090076 **CERCLIS** EPA Id: HI4170090076	**NPL** **CERCLIS** **US ENG CONTROLS** **US INST CONTROL** **ROD** **PRP**	**1000707626** **HI4170090076**
1 South < 1/8 0.034 mi. 182 ft. **Relative: Higher**	**PACIFIC ISLAND AIR COND CO INC** **822 G MAPUNAPUNA** **HONOLULU, HI 96819** Click here for full text details **RCRA-CESQG** EPA Id: HID984467803	**RCRA-CESQG** **FINDS**	**1000601543** **HID984467803**
2 ENE < 1/8 0.109 mi. 578 ft. **Relative: Higher**	**C&CH MOANALUA FIRE STATION** **2835 ALA ILIMA ST** **HONOLULU, HI 96818** Click here for full text details **UST** Facility Id: 9-100084 Tank Status: Currently in Use Tank Status: Permanently Out of Use	**UST** **Financial Assurance**	**U004223397** **N/A**

3
WNW
1/8-1/4
0.135 mi.
711 ft.

Relative: Lower

2976 ALA ILIMA ST
HONOLULU, HI 96818

EDR US Hist Cleaners — **1015036532** / **N/A**

Click here for full text details

4
WNW
1/8-1/4
0.159 mi.
838 ft.

Relative: Lower

5333 LIKINI ST
HONOLULU, HI 96818

EDR US Hist Auto Stat — **1015543705** / **N/A**

Click here for full text details

5
ESE
1/8-1/4
0.239 mi.
1264 ft.

Relative: Lower

GRABBER PACIFIC
2970 MOKUMOA ST
HONOLULU, HI 96819

LUST — **U001235466**
UST — **N/A**

Click here for full text details

LUST
Facility Id: 9-101390
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-101390
Tank Status: Permanently Out of Use

6
SSW
1/4-1/2
0.276 mi.
1457 ft.

Relative: Lower

HALSEY TERRACE FAMILY HOUSING
2958/2960 GORDON ST
HONOLULU, HI 96818

LUST — **U004130645**
UST — **N/A**

Click here for full text details

LUST
Facility Id: 9-103842
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-103842
Tank Status: Permanently out of Use

7
ESE
1/4-1/2
0.292 mi.
1543 ft.

Relative: Lower

COCA-COLA BOTTLING CO. OF HONOLULU
949 MAPUNAPUNA ST
HONOLULU, HI 96819

SHWS — **U001235239**
LUST — **N/A**
UST
SPILLS

Click here for full text details

LUST
Facility Id: 9-100799
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-100799
Tank Status: Permanently Out of Use

A8
SE
1/4-1/2
0.302 mi.
1592 ft.

Relative: Lower

DELUXE SHEET METAL WORKS, INC
852 MAPUNAPUNA ST
HONOLULU, HI 96819

LUST — **U003541767**
UST — **N/A**

Click here for full text details

LUST
Facility Id: 9-102905
Facility Id: 9-102515
Facility Id: 9-102888
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-102515
Facility Id: 9-102888
Facility Id: 9-102905
Tank Status: Permanently Out of Use

A9
SE
1/4-1/2
0.305 mi.
1612 ft.

Relative: Lower

HAWAII STAGING AND LIGHTING
842A MAPUNAPUNA STREET
HONOLULU, HI 96819

CERCLIS — **1004654586**
PRP — **HIN000905895**

Click here for full text details

CERCLIS
EPA Id: HIN000905895

A10
SE
1/4-1/2
0.305 mi.
1612 ft.

Relative: Lower

VERMICULITE OF HAWAII, INC.
842-A MAPUNAPUNA STREET
HONOLULU, HI 96819

CERCLIS — **1003073267**
ICIS — **HIN000905638**

Click here for full text details

CERCLIS
EPA Id: HIN000905638

A11
SE
1/4-1/2
0.305 mi.
1612 ft.
Relative: Lower

HAWAII STAGING AND LIGHTING
842 MAPUNAPUNA ST
HONOLULU, HI 96818

SHWS — **S106817378**
SPILLS — **N/A**

Click here for full text details

A12
SE
1/4-1/2
0.305 mi.
1612 ft.
Relative: Lower

MR. SANDMAN
842 MAPUNAPUNA ST
HONOLULU, HI 96819

LUST — **U003402853**
UST — **N/A**

Click here for full text details

LUST
Facility Id: 9-103460
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-103460
Tank Status: Permanently Out of Use

13
ESE
1/4-1/2
0.311 mi.
1642 ft.
Relative: Lower

UNITEK ENVIRONMENTAL SERVICES
2889 MOKUMOA STREET
HONOLULU, HI 96819

RCRA-TSDF — **1000224245**
CORRACTS — **HID033969072**
RCRA NonGen / NLR
FINDS
RAATS

Click here for full text details

RCRA-TSDF
EPA Id: HID033969072

RCRA NonGen / NLR
EPA Id: HID033969072

B14
SE
1/4-1/2
0.315 mi.
1662 ft.
Relative: Lower

THE WOW COMPANY, INC
822 MAPUNAPUNA ST
HONOLULU, HI 96800

LUST — **U001237376**
UST — **N/A**

Click here for full text details

LUST
Facility Id: 9-102187
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-102187
Tank Status: Permanently Out of Use

B15
SE
1/4-1/2
0.321 mi.
1697 ft.
Relative: Lower

B & C TRUCKING CO., LTD.
812 MAPUNAPUNA ST
HONOLULU, HI 96819

LUST — **U001235543**
UST — **N/A**

Click here for full text details

LUST
Facility Id: 9-101545
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-101545
Tank Status: Permanently Out of Use

B16
SE
1/4-1/2
0.330 mi.
1741 ft.
Relative: Lower

KAM'S EXPRESS, INC.
802 MAPUNAPUNA ST
HONOLULU, HI 96819

LUST — **U001235913**
UST — **N/A**
Financial Assurance

Click here for full text details

LUST
Facility Id: 9-102440
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-102440
Tank Status: Permanently Out of Use

C17
ESE
1/4-1/2
0.343 mi.
1812 ft.
Relative: Lower

G.M.I. WASTE SYSTEMS, INC.
2861 MOKUMOA ST
HONOLULU, HI 96819

LUST — **U001235494**
UST — **N/A**

Click here for full text details

LUST
Facility Id: 9-101447
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-101447
Tank Status: Permanently Out of Use

C18
ESE
1/4-1/2
0.366 mi.
1933 ft.
Relative: Lower

WEBCO HAWAII, INC.
2840 MOKUMOA ST
HONOLULU, HI 96819

LUST — **U001235233**
UST — **N/A**

Click here for full text details

LUST
Facility Id: 9-100792

WEBCO HAWAII, INC. (Continued) — **U001235233**

Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-100792
Tank Status: Permanently Out of Use

---

19 SSE 1/4-1/2 0.366 mi. 1934 ft. Relative: Lower

PACIFIC FENCE, INC.
770 MAPUNAPUNA ST
HONOLULU, HI 96819

LUST, UST — **U001235486** / **N/A**

Click here for full text details

LUST
Facility Id: 9-101438
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-101438
Tank Status: Permanently Out of Use

C20 ESE 1/4-1/2 0.369 mi. 1946 ft. Relative: Lower

HAWAIIAN ISLES ENTERPRISES, INC
2839 MOKUMOA ST
HONOLULU, HI 96819

LUST, UST — **U003154746** / **N/A**

Click here for full text details

LUST
Facility Id: 9-102967
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-102967
Tank Status: Permanently Out of Use

D21 ESE 1/4-1/2 0.377 mi. 1993 ft. Relative: Lower

WEBCO HAWAII, INC.
2830 MOKUMOA ST
HONOLULU, HI 96819

LUST, UST — **U001235309** / **N/A**

Click here for full text details

LUST
Facility Id: 9-100955
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-100955
Tank Status: Permanently Out of Use

D22 ESE 1/4-1/2 0.392 mi. 2070 ft. Relative: Lower

BEACON MOVING & STORAGE
2819A MOKUMOA ST
HONOLULU, HI 96814

LUST, UST — **U003154702** / **N/A**

Click here for full text details

LUST
Facility Id: 9-102886
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-102886
Tank Status: Permanently Out of Use

D23 ESE 1/4-1/2 0.403 mi. 2128 ft. Relative: Lower

HONEYWELL
2809 MOKUMOA STREET
HONOLULU, HI 96819

RCRA-CESQG, FINDS, LUST, UST — **1000334048** / **HID981661093**

Click here for full text details

RCRA-CESQG
EPA Id: HID981661093

LUST
Facility Id: 9-100245
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-100245
Tank Status: Permanently Out of Use

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24 East 1/4-1/2 0.416 mi. 2194 ft. Relative: Lower

HECO PAD-MOUNT TRANSFORMER NO. 57270
2875 PAA ST (MAPUNAPUNA)
HONOLULU, HI 96819

SHWS, SPILLS — **S113230444** / **N/A**

Click here for full text details

E25 ENE 1/4-1/2 0.417 mi. 2201 ft. Relative: Lower

ATLAS ELEC CO
1151 MAPUNAPUNA ST
HONOLULU, HI 96813

CERC-NFRAP — **1003879115** / **HID980497127**

Click here for full text details

CERC-NFRAP
EPA Id: HID980497127

E26
ENE
1/4-1/2
0.417 mi.
2201 ft.

Relative: Lower

HECO PAD-MOUNTED TRANSFORMER #66132 RELEASE — **SHWS** — **1006820495**
1151 MAPUNAPUNA ST — **SPILLS** — **N/A**
HONOLULU, HI 96819

Click here for full text details

27
SSE
1/4-1/2
0.418 mi.
2206 ft.

Relative: Lower

MONARCH BUILDING SUPPLY — **SHWS** — **U001235129**
749 MAPUNAPUNA ST — **LUST** — **N/A**
HONOLULU, HI 96819 — **UST**
Financial Assurance

Click here for full text details

LUST
Facility Id: 9-100275
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-100275
Tank Status: Permanently Out of Use

28
SE
1/4-1/2
0.420 mi.
2218 ft.

Relative: Lower

HAWAIIAN GROCERY STORES, LTD — **LUST** — **U001235617**
2915 KAIHIKAPU ST — **UST** — **N/A**
HONOLULU, HI 96819

Click here for full text details

LUST
Facility Id: 9-101897
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-101897
Tank Status: Permanently Out of Use

F29
SW
1/4-1/2
0.431 mi.
2278 ft.

Relative: Lower

HALSEY TERRACE FAMILY HOUSING — **LUST** — **U004109513**
720 LOUNSBURY — **UST** — **N/A**
PEARL HARBOR, HI 96860

Click here for full text details

LUST
Facility Id: 9-103829
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-103829
Tank Status: Permanently out of Use

30
SW
1/4-1/2
0.438 mi.
2310 ft.

Relative: Lower

HASLEY TERRACE FAMILY HOUSING — **LUST** — **U004109515**
FORMER BLDG 725HALSEY TERRACE OFF OF LOWNSBURY STREET — **UST** — **N/A**
PEARL HARBOR, HI 96860

Click here for full text details

LUST
Facility Id: 9-103824
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-103824
Tank Status: Permanently out of Use

G31
ESE
1/4-1/2
0.454 mi.
2395 ft.

Relative: Lower

PUKOLOA WOOD TREATING SITE — **CERCLIS** — **1001126529**
2841 PUKOLOA STREET — **HI0001821883**
HONOLULU, HI 96819

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CERCLIS
EPA Id: HI0001821883

G32
ESE
1/4-1/2
0.454 mi.
2395 ft.

Relative: Lower

VOLKSWAGON OF AMERICA — **LUST** — **U003402803**
2865 PUKOLOA ST — **UST** — **N/A**
HONOLULU, HI 96819

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LUST
Facility Id: 9-100186
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-100186
Tank Status: Permanently Out of Use

G33
ESE
1/4-1/2
0.454 mi.
2395 ft.

Relative: Lower

PUKOLOA WOOD TREATING SITE — **SHWS** — **1006819810**
2819 PUKOLOA ST — **N/A**
HONOLULU, HI 96819

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G34 ESE 1/4-1/2 0.454 mi. 2395 ft.
Relative: Lower

GIBSON - SERVICE STATION
2850 PUKOLOA ST
HONOLULU, HI 96819

LUST / UST
U003541713 / N/A

Click here for full text details

LUST
Facility Id: 9-100877
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-100877
Tank Status: Permanently Out of Use

G35 ESE 1/4-1/2 0.454 mi. 2395 ft.
Relative: Lower

TOYOTA PARTS & SERVICE CENTER
2841 PUKOLOA ST
HONOLULU, HI 96819

LUST / UST / Financial Assurance
U003541747 / N/A

Click here for full text details

LUST
Facility Id: 9-101833
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-101833
Tank Status: Permanently Out of Use

F36 SW 1/4-1/2 0.455 mi. 2404 ft.
Relative: Lower

HALSEY TERRACE FAMILY HOUSING
722 LOUNSBURY STREET (FORMERLY BLDG 722)
PEARL HARBOR, HI 96860

LUST / UST
U004130644 / N/A

Click here for full text details

LUST
Facility Id: 9-103827
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-103827
Tank Status: Permanently out of Use

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37 SSE 1/4-1/2 0.469 mi. 2474 ft.
Relative: Lower

WILLIAM J. KIMI, JR., LTD
692 MAPUNAPUNA ST OR 701 PUULOA RD
HONOLULU, HI 96819

LUST / UST
U003346380 / N/A

Click here for full text details

LUST
Facility Id: 9-103354

WILLIAM J. KIMI, JR., LTD (Continued)
U003346380

Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-103354
Tank Status: Permanently Out of Use

H38 SE 1/4-1/2 0.478 mi. 2526 ft.
Relative: Lower

DI MAURO PROPERTIES
2855 KAIHIKAPU ST
HONOLULU, HI 96819

LUST / UST
U003402843 / N/A

Click here for full text details

LUST
Facility Id: 9-103439
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-103439
Tank Status: Permanently Out of Use

H39 SE 1/4-1/2 0.482 mi. 2543 ft.
Relative: Lower

BILS FAMILY PARTNERSHIP
2850 KAIHIKAPU ST
HONOLULU, HI 96817

LUST / UST
U003711690 / N/A

Click here for full text details

LUST
Facility Id: 9-103513
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-103513
Tank Status: Permanently Out of Use

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40 WSW 1/4-1/2 0.483 mi. 2548 ft.
Relative: Higher

HALSEY TERRACE FAMILY HOUSING
3090 HAMPTON CIRCLE
HONOLULU, HI 96818

LUST / UST
U004109514 / N/A

Click here for full text details

LUST
Facility Id: 9-103828
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-103828
Tank Status: Permanently out of Use

41 SSE 1/4-1/2 0.483 mi. 2548 ft. Relative: Lower

AMFAC DIST.- INDUSTRIAL SUPPLIES
2846 AWAAWALOA ST
HONOLULU, HI 96819

LUST U003154511
UST N/A

Click here for full text details

LUST
Facility Id: 9-101448
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-101448
Tank Status: Permanently Out of Use

H42 SE 1/4-1/2 0.484 mi. 2557 ft. Relative: Lower

A-1 A-LECTRICIAN, INC.
2849 KAIHIKAPU ST
HONOLULU, HI 96819

LUST U001235210
UST N/A

Click here for full text details

LUST
Facility Id: 9-100747
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-100747
Tank Status: Permanently Out of Use

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43 SSE 1/4-1/2 0.498 mi. 2631 ft. Relative: Lower

ABC DSPL
2760 KAMEHAMEHA HWY
HONOLULU, HI 96819

CERC-NFRAP 1003879112
HID055770028

Click here for full text details

CERC-NFRAP
EPA Id: HID055770028

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44 SSE 1/2-1 0.536 mi. 2830 ft. Relative: Lower

SWIFT ADHESIVES & COATINGS
2847 AWAAWALOA ST
HONOLULU, HI 96819

SHWS 1006819890
N/A

Click here for full text details

45 SE 1/2-1 0.538 mi. 2841 ft. Relative: Lower

HAWAIIAN FLUID POWER COMPANY
803 AHUA ST
HONOLULU, HI 96818

SHWS S106817405
SPILLS N/A

Click here for full text details

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46 SE 1/2-1 0.695 mi. 3667 ft. Relative: Lower

WAREHOUSE AND MAINTENANCE YARD
727 KAKOI ST
HONOLULU, HI 96819

SHWS S106821114
SPILLS N/A

Click here for full text details

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47 South 1/2-1 0.752 mi. 3972 ft. Relative: Lower

ALSCO (AMERICAN LINEN) TANK
2771 WAIWAI LP
HONOLULU, HI 96819

SHWS S104657391
SPILLS N/A
ENG CONTROLS
INST CONTROL

Click here for full text details

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48 SE 1/2-1 0.803 mi. 4242 ft. Relative: Lower

OCEANIC CABLEVISION
2669 KILIHAU ST
HONOLULU, HI 96819

SHWS 1006819035
SPILLS N/A

Click here for full text details

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49 SE 1/2-1 0.829 mi. 4376 ft. Relative: Lower

VECTOR CONTROL BRANCH HI DOH
2611 KILIHAU ST
HONOLULU, HI 96819

CERC-NFRAP 1000417823
RCRA NonGen / NLR HID000628321
SHWS
LUST
UST

Click here for full text details

CERC-NFRAP
EPA Id: HID000628321

RCRA NonGen / NLR
EPA Id: HID000628321

LUST
Facility Id: 9-100110
Facility Status: Site Cleanup Completed (NFA)

UST

VECTOR CONTROL BRANCH HI DOH (Continued) — **1000417823**

Facility Id: 9-100110
Tank Status: Permanently Out of Use

---

50 SW 1/2-1 0.837 mi. 4420 ft. Relative: Lower

NATIONAL CAR RENTAL SYSTEM, INC. — **SHWS, UST, Financial Assurance** — **U001235306, N/A**
3223 N NIMITZ HWY
HONOLULU, HI 96819

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UST
Facility Id: 9-100951
Tank Status: Permanently Out of Use

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51 SSW 1/2-1 0.842 mi. 4447 ft. Relative: Lower

FORMER ZIEGLER STEEL SITE — **SHWS, ENG CONTROLS, INST CONTROL** — **1006820228, N/A**
2919 UALENA ST
HONOLULU, HI 96819

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52 SSE 1/2-1 0.857 mi. 4525 ft. Relative: Lower

AMERICAN PACIFIC TRANSPORT CO. — **SHWS, LUST, UST** — **U001235244, N/A**
2635 WAIWAI LP
HONOLULU, HI 96819

Click here for full text details

LUST
Facility Id: 9-100807
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-100807
Tank Status: Permanently Out of Use

---

53 SSE 1/2-1 0.863 mi. 4558 ft. Relative: Lower

OCCIDENTAL CHEM CO — **SHWS** — **S104534325, N/A**
2660 WAIWAI LP
HONOLULU, HI 96819

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54 SSW 1/2-1 0.951 mi. 5020 ft. Relative: Lower

UNITED AIRLINES CARGO FACILITY (PMID 001101) — **SHWS, LUST, UST, Financial Assurance** — **1000601454, N/A**
3071 AOLELE ST
HONOLULU, HI 96819

Click here for full text details

LUST
Facility Id: 9-103319
Facility Id: 9-100267
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-103319
Facility Id: 9-100267
Tank Status: Permanently Out of Use

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55 SW 1/2-1 0.981 mi. 5180 ft. Relative: Lower

GTE BASE YARD SUMP — **SHWS, SPILLS, ENG CONTROLS, INST CONTROL** — **S106817209, N/A**
3239 UALENA ST
HONOLULU, HI 96819

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GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
HI	AIRS	List of Permitted Facilities	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	BROWNFIELDS	Brownfields Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	CDL	Clandestine Drug Lab Listing	Department of Health	08/04/2010	09/10/2010	10/22/2010
HI	DRYCLEANERS	Permitted Drycleaner Facility Listing	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	ENG CONTROLS	Engineering Control Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	Financial Assurance	Financial Assurance Information Listing	Department of Health	12/01/2014	12/19/2014	01/28/2015
HI	INST CONTROL	Sites with Institutional Controls	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	LUST	Leaking Underground Storage Tank Database	Department of Health	12/16/2014	12/19/2014	01/28/2015
HI	RGA HWS	Recovered Government Archive State Hazardous Waste Facilitie	Department of Health		07/01/2013	01/08/2014
HI	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Health		07/01/2013	01/17/2014
HI	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	Department of Health		07/01/2013	01/03/2014
HI	SHWS	Sites List	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	SPILLS	Release Notifications	Department of Health	12/02/2014	12/22/2014	01/28/2015
HI	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	03/10/2012	01/03/2013	02/11/2013
HI	SWF/LF	Permitted Landfills in the State of Hawaii	Department of Health	09/17/2012	04/03/2013	05/10/2013
HI	UIC	Underground Injection Wells Listing	Department of Health	02/07/2013	02/12/2013	04/09/2013
HI	UST	Underground Storage Tank Database	Department of Health	12/18/2014	12/19/2014	01/28/2015
HI	VCP	Voluntary Response Program Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	04/22/2013	03/03/2015	03/09/2015
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2011	02/26/2013	04/19/2013
US	CERCLIS	Comprehensive Environmental Response, Compensation, and Liab	EPA	10/25/2013	11/11/2013	02/13/2014
US	CERCLIS-NFRAP	CERCLIS No Further Remedial Action Planned	EPA	10/25/2013	11/11/2013	02/13/2014
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	07/01/2014	09/10/2014	10/20/2014
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	01/23/2015	02/13/2015	03/09/2015
US	CORRACTS	Corrective Action Report	EPA	12/09/2014	12/29/2014	01/29/2015
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DELISTED NPL	National Priority List Deletions	EPA	12/16/2014	01/08/2015	02/09/2015
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	07/31/2012	08/07/2012	09/18/2012
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EDR US Hist Auto Stat	EDR Exclusive Historic Gas Stations	EDR, Inc.			
US	EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	09/29/2014	09/30/2014	11/06/2014
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	07/21/2014	10/07/2014	10/20/2014
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
US	FEMA UST	Underground Storage Tank Listing	FEMA	01/01/2010	02/16/2010	04/12/2010
US	FINDS	Facility Index System/Facility Registry System	EPA	08/16/2014	09/10/2014	10/20/2014
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	06/06/2014	09/10/2014	09/18/2014
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	12/29/2014	12/30/2014	03/09/2015
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	01/23/2015	02/06/2015	03/09/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	02/01/2013	05/01/2013	11/01/2013

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	01/30/2015	02/05/2015	03/09/2015
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/10/2015	03/13/2015
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	01/28/2015	01/30/2015	03/13/2015
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	01/08/2015	01/08/2015	02/09/2015
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2005	12/08/2006	01/11/2007
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	02/01/2013	05/01/2013	01/27/2014
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	01/30/2015	02/05/2015	03/13/2015
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/13/2015	03/13/2015
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	01/29/2015	01/30/2015	03/13/2015
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	12/14/2014	02/13/2015	03/13/2015
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	09/29/2014	10/01/2014	11/06/2014
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	11/25/2014	11/26/2014	01/29/2015
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	02/18/2014	03/18/2014	04/24/2014
US	LUCIS	Land Use Control Information System	Department of the Navy	12/03/2014	12/12/2014	01/29/2015
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	12/29/2014	01/08/2015	01/29/2015
US	NPL	National Priority List	EPA	12/16/2014	01/08/2015	02/09/2015
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	07/01/2014	10/15/2014	11/17/2014
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	02/01/2011	10/19/2011	01/10/2012
US	PRP	Potentially Responsible Parties	EPA	10/25/2013	10/17/2014	10/20/2014
US	Proposed NPL	Proposed National Priority List Sites	EPA	12/16/2014	01/08/2015	02/09/2015
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	10/07/2014	10/08/2014	10/20/2014
US	RCRA NonGen / NLR	RCRA - Non Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RMP	Risk Management Plans	Environmental Protection Agency	08/01/2014	08/12/2014	11/06/2014
US	ROD	Records Of Decision	EPA	11/25/2013	12/12/2013	02/24/2014
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	03/07/2011	03/09/2011	05/02/2011
US	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2011	07/31/2013	09/13/2013
US	TSCA	Toxic Substances Control Act	EPA	12/31/2012	01/15/2015	01/29/2015
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	09/14/2010	10/07/2011	03/01/2012
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/16/2014	10/31/2014	11/17/2014
US	US AIRS MINOR	Air Facility System Data	EPA	10/16/2014	10/31/2014	11/17/2014

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	12/22/2014	12/22/2014	01/29/2015
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	11/19/2014	11/21/2014	01/29/2015
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	12/30/2014	12/31/2014	01/29/2015
US	Oil/Gas Pipelines	GeoData Digital Line Graphs from 1:100,000-Scale Maps	USGS			
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
US	USGS 7.5' Topographic Map	Scanned Digital USGS 7.5' Topographic Map (DRG)	USGS			

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

SALT LAKE
2907 ALA ILIMA ST.
HONOLULU, HI 96818

TARGET PROPERTY COORDINATES

Latitude (North):	21.3448 - 21˚ 20' 41.28''
Longitude (West):	157.9029 - 157˚ 54' 10.44''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	613763.3
UTM Y (Meters):	2360565.8
Elevation:	59 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	21157-C8 PEARL HARBOR, HI
Most Recent Revision:	Not reported

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

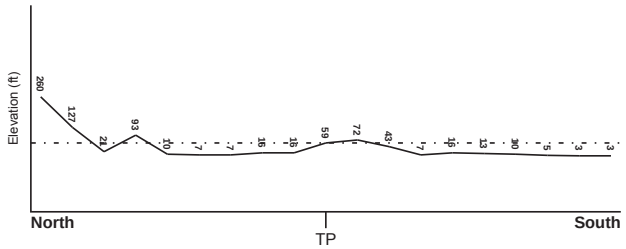
TOPOGRAPHIC INFORMATION

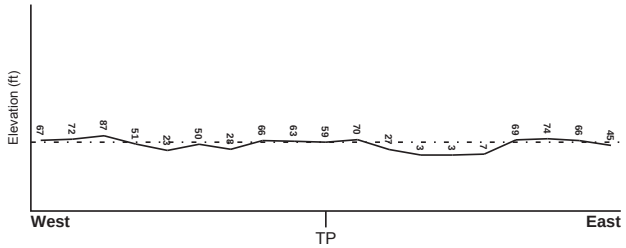
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General NE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 59 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
HONOLULU, HI	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 15003C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
PUULOA	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

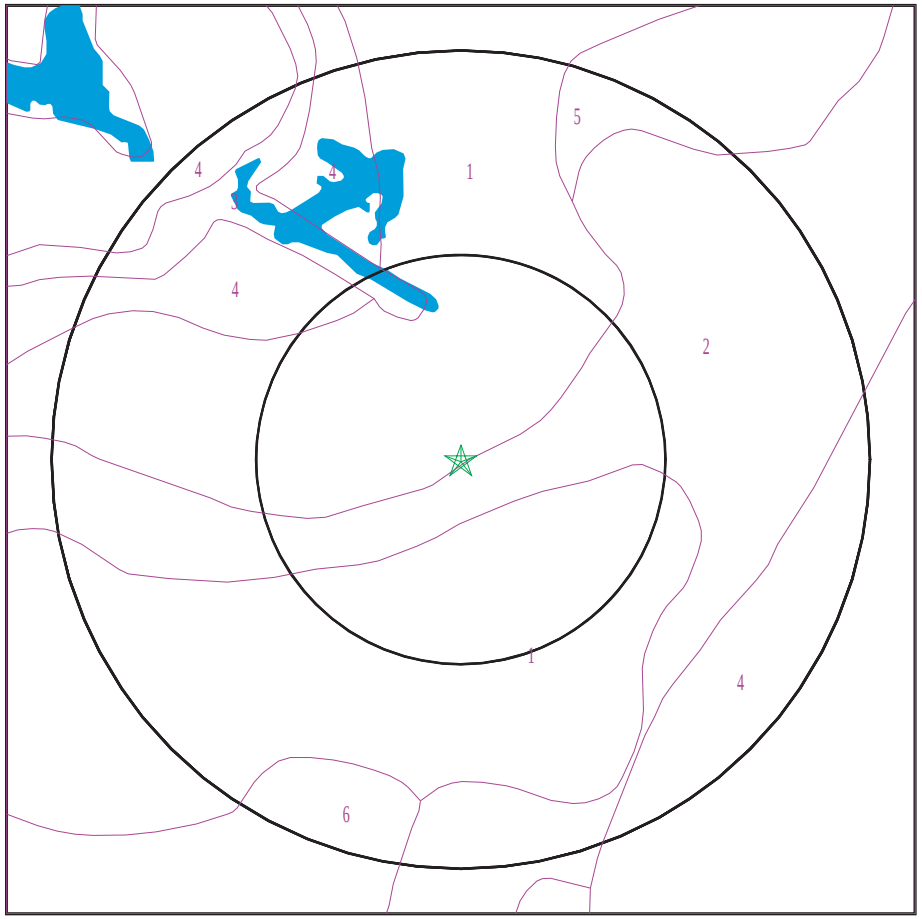
Era: -
System: -
Series: -
Code: N/A *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: -

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4237094.10s



★ Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME: Salt Lake ADDRESS: 2907 Ala Ilima St. Honolulu HI 96818 LAT/LONG: 21.3448 / 157.9029	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.10s DATE: March 17, 2015 5:34 pm

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DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Makalapa

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4.23 Min: 0.42	Max: 7.8 Min: 7.4
2	7 inches	37 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 8.4 Min: 7.4
3	37 inches	48 inches	bedrock	Not reported	Not reported	Max: 0.42 Min: 0.02	Max: Min:

Soil Map ID: 2

Soil Component Name: Rock land

Soil Surface Texture: silty clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	3 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6
2	3 inches	7 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6
3	7 inches	20 inches	bedrock	Not reported	Not reported	Max: 0.42 Min: 0.02	Max: Min:

Soil Map ID: 3

Soil Component Name: Water > 40 acres

Soil Surface Texture: silty clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class:
Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

Soil Map ID: 4

Soil Component Name: Fill land, mixed

Soil Surface Texture: gravelly sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 152 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	gravelly sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 1.41	Max: 7.3 Min: 6.1
2	5 inches	59 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 1.41	Max: 7.3 Min: 6.1
3	59 inches	70 inches	bedrock	Not reported	Not reported	Max: 0.42 Min: 0.02	Max: Min:

Soil Map ID: 5

Soil Component Name: Makalapa

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4.23 Min: 0.42	Max: 7.8 Min: 7.4
2	7 inches	37 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 8.4 Min: 7.4
3	37 inches	48 inches	bedrock	Not reported	Not reported	Max: 0.42 Min: 0.02	Max: Min:

Soil Map ID: 6

Soil Component Name: Makalapa

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4.23 Min: 0.42	Max: 7.8 Min: 7.4
2	7 inches	37 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 8.4 Min: 7.4
3	37 inches	48 inches	bedrock	Not reported	Not reported	Max: 0.42 Min: 0.02	Max: Min:

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	USGS40000270026	1/4 - 1/2 Mile ENE
B4	USGS40000269943	1/2 - 1 Mile South
C5	USGS40000270049	1/2 - 1 Mile North
D7	USGS40000270010	1/2 - 1 Mile East
E10	USGS40000270040	1/2 - 1 Mile NE
E12	USGS40000270042	1/2 - 1 Mile NE
E13	USGS40000270043	1/2 - 1 Mile NE
E16	USGS40000270041	1/2 - 1 Mile NE
E17	USGS40000270045	1/2 - 1 Mile NE

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
E19	USGS40000270046	1/2 - 1 Mile NE
E20	USGS40000270047	1/2 - 1 Mile NE
E21	USGS40000270048	1/2 - 1 Mile NE
D24	USGS40000270007	1/2 - 1 Mile East
F26	USGS40000269918	1/2 - 1 Mile South
G29	USGS40000270035	1/2 - 1 Mile NE
G31	USGS40000270034	1/2 - 1 Mile NE
G32	USGS40000270036	1/2 - 1 Mile NE
F33	USGS40000269916	1/2 - 1 Mile South
H34	USGS40000270027	1/2 - 1 Mile ENE
I36	USGS40000270032	1/2 - 1 Mile ENE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
E11	HI0000331	1/2 - 1 Mile NE

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A2	HI8000000002641	1/2 - 1 Mile ENE
B3	HI8000000002546	1/2 - 1 Mile South
C6	HI8000000002669	1/2 - 1 Mile North
D8	HI8000000002621	1/2 - 1 Mile East
E9	HI8000000002661	1/2 - 1 Mile NE
E14	HI8000000002663	1/2 - 1 Mile NE
E15	HI8000000002662	1/2 - 1 Mile NE
E18	HI8000000002665	1/2 - 1 Mile NE
E22	HI8000000002666	1/2 - 1 Mile NE
F23	HI8000000002516	1/2 - 1 Mile South
D25	HI8000000002615	1/2 - 1 Mile East
F27	HI8000000002511	1/2 - 1 Mile South
G28	HI8000000002653	1/2 - 1 Mile NE
G30	HI8000000002656	1/2 - 1 Mile NE
H35	HI8000000002643	1/2 - 1 Mile ENE
I37	HI8000000002651	1/2 - 1 Mile ENE

PHYSICAL SETTING SOURCE MAP - 4237094.10s

County Boundary
Major Roads
Contour Lines
Airports
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons

0 1/4 1/2 1 Miles

Groundwater Flow Direction
GI Indeterminate Groundwater Flow at Location
GV Groundwater Flow Varies at Location

N

SITE NAME: Salt Lake ADDRESS: 2907 Ala Ilima St. Honolulu HI 96818 LAT/LONG: 21.3448 / 157.9029	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.10s DATE: March 17, 2015 5:34 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
A1 **ENE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270026**
A2 **ENE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002641**
B3 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002546**
B4 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269943**
C5 **North** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270049**
C6 **North** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002669**
D7 **East** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270010**
D8 **East** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002621**
E9 **NE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002661**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
E10 **NE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270040**
E11 **NE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FRDS PWS**	**HI0000331**
E12 **NE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270042**
E13 **NE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270043**
E14 **NE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002663**
E15 **NE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002662**
E16 **NE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270041**
E17 **NE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270045**
E18 **NE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002665**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
E19 **NE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270046**
E20 **NE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270047**
E21 **NE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270048**
E22 **NE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002666**
F23 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002516**
D24 **East** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270007**
D25 **East** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002615**
F26 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269918**
F27 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002511**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
G28 **NE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002653**
G29 **NE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270035**
G30 **NE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002656**
G31 **NE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270034**
G32 **NE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270036**
F33 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269916**
H34 **ENE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270027**
H35 **ENE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002643**
I36 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270032**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
I37 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002651**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for HONOLULU County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 96818

Number of sites tested: 11

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	-0.145 pCi/L	100%	0%	0%
Living Area - 2nd Floor	0.900 pCi/L	100%	0%	0%
Basement	4.800 pCi/L	0%	100%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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HAWAII PUBLIC HOUSING AUTHORITY

ENVIRONMENTAL REVIEW

KALIHI VALLEY HOMES

Honolulu, O`ahu

AMP 31
HPHA No. 1005

Prepared for:

State of Hawaii
Hawaii Public Housing Authority

Prepared by:

HHF PLANNERS
places for people

U.S. Department of Housing and Urban Development
451 Seventh Street, SW
Washington, DC 20410
www.hud.gov

espanol.hud.gov

Environmental Review for Activity/Project that is Categorically Excluded Subject to Section 58.5

Pursuant to 24 CFR 58.35(a)

Project Information

Project Name: Kalihi Valley Homes (AMP 31)

Responsible Entity: Hawaii Public Housing Authority
1002 North School Street
Honolulu, HI 96817

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

State/Local Identifier: State of Hawai‘i

Preparer: Mr. Scott Ezer, Vice President
HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawai‘i 96813

Certifying Officer Name and Title: Mr. David Y. Ige
Governor, State of Hawai‘i

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

Consultant (if applicable): HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawai‘i 96813

Direct Comments to: Mr. Hakim Ouansafi, Executive Director
Hawaii Public Housing Authority
1002 North School Street
Honolulu, Hawai‘i 96817

Project Location: 2250 Kalena Drive
Honolulu, Hawai‘i 96819

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]**:**

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a "major construction activity" and would involve one or a combination of several HUD designated categories of actions.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent;
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons;
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland;
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation;
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls);
7. Interior and exterior renovations and rehabilitation;
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site;
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Level of Environmental Review Determination:

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.5. Compliance with and completion of conformance determinations for other statute, executive order, or regulation has been completed and support the Categorical Exclusion.

Funding Information

Grant Number	HUD Program	Funding Amount
To be determined	Capital Fund	To be determined
To be determined	Economic Development Initiative Special Project Grant	To be determined
To be determined	Other Grants	To be determined

Estimated Total HUD Funded Amount:

To be determined by HUD using a formula and based upon federal budget.

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]**:**

Depends upon funds available.

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	*The project is not within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.*
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☒	*The State of Hawai'i does not have any designated coastal barrier resource units. (http://www.fws.gov/CBRA/Maps/Mapper.html)*
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes ☐ No ☒	*As indicated in the Flood Insurance Rate Panel 15003C0352F and 15003C0351G (Effective Date: respectively Sept 30, 2004 and Jan 19, 2011, Index Date: November 05, 2014), this housing project is located in Flood Hazard Zone X (areas determined to be outside the 0.2% annual chance floodplain). A field inspection and information obtained from the site manager confirmed no major flooding issues within the site. Based on its description, this project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.*

STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5		
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes ☐ No ☒	*The State of Hawai'i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. EPA's Green Book for currently designated "nonattainment areas" as of June 2015. Planned repair and rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.*
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes ☐ No ☒	*Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai'i's Coastal Zone Management (CZM) program.*
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☐ No ☒	*There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.*
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes ☒ No ☐	*The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices, while project-specific mitigation measures are identified in the following section.*
Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes ☐ No ☒	*There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.*

Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes ☐ No ☒	*The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.*
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes ☐ No ☒	*The entire housing site is located within Zone X, an area of minimal flooding (i.e., 0.2% annual chance flood), and is located outside the 500-year flood zone. A field inspection and information obtained from AMP Manager confirmed no major flooding issues within the project site.*
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes ☒ No ☐	*This housing project was first occupied in 1953 and is 62 years old. A 2015 Historic Property Evaluation noted that Buildings 25, 28, 29, 30, 32, 33, 34, 36, 37, 38, 39, 41, 42, 43 and 44 are eligible for listing in the National Register of Historic Places. In a letter dated November 30, 2015, the State Historic Preservation Officer concurred with the HPHA's determination that repair and rehabilitation improvements for this housing project would have "no adverse effect" on historic properties pursuant to NHPA Section 106 and subject to certain mitigative measures.*
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes ☐ No ☒	*The project site is situated along a highway that has a high volume of vehicular traffic. The HUD noise calculator estimated noise levels at the project site to be 59.3 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.*
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes ☐ No ☒	*The housing project is located within the O'ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation.*

Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☐ No ☒	*There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.* *(http://www.fws.gov/wetlands/data/mapper.HTML)*
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes ☐ No ☒	*There are no Wild and Scenic Rivers in Hawai'i, which excludes this project from mitigation or formal consultation requirements (http://www.rivers.gov/map.php)*
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes ☐ No ☒	*Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, these improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects on minority populations and low-income populations. Improvements should benefit low-income and minority populations living within this housing project.*

Field Inspection (Date and completed by)**:** June 12, 2015
Joseph Tamburello, Planner
HHF Planners

Summary of Findings and Conclusions:

Repair and rehabilitation improvements implemented for this existing housing project by HPHA should not result in significant environmental impacts based upon research data collected, a field inspection, consultation with the site manager and maintenance staff, consultation with pertinent resource agencies, and prior HPHA experience implementing repair and rehabilitation improvements. Therefore, repair and rehabilitation improvements would comply and be consistent with the statutes, executive orders, and regulations addressed. Furthermore, HPHA would evaluate improvements planned to ensure the work is consistent with the designated categories of actions described under the project description section. Compliance with these factors evaluated are further addressed in the attached Source Documentation Statutory Worksheet along with relevant technical reports/assessments.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Law, Authority, or Factor	Mitigation Measure
Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	*Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.* *Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.* *Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.* *Newell's shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.* *Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s).* *Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.* *Blackburn's sphinx moth: If any tree removal or brush clearing activities are anticipated in the known range of the Blackburn's Sphinx Moth (BSM), a qualified biologist will survey the project area for the presence of larval host plants. If host plants are discovered in the area affected by the activity, host plants will not be cut or removed, and the soil within 33 feet of the host plants will not be disturbed. If the trimming or removal of any host plants are required, the FWS must first be consulted.*

	<u>Additional Measures:</u> The following additional measures would be implemented: *1. In the event that any earth-disturbing activities are proposed (e.g., foundation repair) near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.* *2. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.*
National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	*1. When considering rehabilitation improvements or building modifications: 1) the buildings' character-defining features shall be retained to the extent practicable; and 2) the renovations shall adhere to the Secretary of the Interior's (SOI) Standards for Rehabilitation.* *2. If rehabilitation improvements or building modifications cannot retain the character-defining features or adhere to the SOI's Standards, a Historic American Buildings Survey (HABS) will be conducted subject to the following conditions:* *a. Level II HABS documentation will be conducted in accordance with the National Park Service standards; and* *b. A representative sample of multiple building types would be selected for HABS documentation due to the multiple types of buildings constructed for housing projects.* *3. If ground disturbing activity is anticipated, HPHA will consult with the SHPD to determine the effect on potential historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation.* *a. Submit detailed plans, specifications and a detailed scope of work once the plans have been developed.* *b. Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation.* *c. Submit a TMK map showing the full extent of the project area within the affected parcel/s.* *d. Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area.* *e. Summary of land use history, such as previous intensive cultivation, grubbing or grading.* *f. Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.* *In addition to these mitigation measures, the HPHA would enter into a Programmatic Agreement with the SHPO to address the implementation of future repair and rehabilitation improvements to*

	In addition to these mitigation measures, the HPHA would enter into a Programmatic Agreement with the SHPO to address the implementation of future repair and rehabilitation improvements to State housing projects after the current Section 106 review process is completed and prior to the next environmental review process in approximately five years. Furthermore, should subsurface human remains or other traces of human activity greater than 50 years old be encountered during construction, all work in the vicinity of the find would immediately stop and the SHPD would be promptly notified. The treatment of any human remains that are encountered would be conducted in accordance with applicable requirements of Chapter 6E, Hawai'i Revised Statutes (Historic Preservation) and Chapter 13-300, Hawai'i Administrative Rules (Rules of Practice and Procedure Relating to Burial Sites and Human Remains).

Determination:

☒ This categorically excluded activity/project converts to **EXEMPT** per Section 58.34(a)(12), because it does not require any mitigation for compliance with any listed statutes or authorities, nor requires any formal permit or license; **Funds may be committed and drawn down after certification of this part** for this (now) EXEMPT project; OR

☐ This categorically excluded activity/project cannot convert to Exempt status because one or more statutes or authorities listed at Section 58.5 requires formal consultation or mitigation. Complete consultation/mitigation protocol requirements, **publish NOI/RROF and obtain "Authority to Use Grant Funds"** (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR

☐ This project is not categorically excluded OR, if originally categorically excluded, is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

Preparer Signature: Scott Ezer Date: 12-9-15

Name/Title/Organization: Mr. Scott Ezer, Vice President
HHF Planners

Responsible Entity Agency Official Signature:

David Y Ige Date: APR 28 2016

Name/Title: Mr. David Y. Ige, Governor

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

Kalihi Valley Homes (HA # 1005)

TMK: (1) 1-3-022:001

Hawaii Public Housing Authority (HPHA) Environmental Review

SOURCE DOCUMENTATION (SD) STATUTORY WORKSHEET

Site Visit Date: June 10, 2015
Prepared By: Questor Lau

The Kalihi Valley Homes housing project is located in the Kalihi community in the Honolulu district on the island of O‘ahu. Kalihi is located west of the Honolulu urban center and east of the Fort Shafter Army Base.

The housing project site is situated west of Likelike Highway and Kamehameha IV Road with access provided by Kalena Drive. The property is located less than a quarter mile north east of Ka‘ewai Elementary School. This housing project is within HPHA’s Asset Management Project (AMP) 31.

Kalihi Valley Homes was first occupied in 1953 and has a street address of 2250 Kalena Drive. This property consists of 24.53 acres, and it is identified as Tax Map Key (TMK) No. (1) 1-3-022:001. The housing project is comprised of 42 two-story buildings providing a total of 373 housing units with one, two, three, four, or five bedrooms per unit. Additionally, two common area buildings are present at the site including a two-story community building and a single-story administrative building. The State’s land use designation for the property is the “Urban District,” and the City’s zoning for the site is A-2 Medium-Density Apartment.

The project site is not located within a tsunami evacuation zone, and the entire site is located in Flood Zone X, an area of minimal flood hazard (Community Panels 15003C0352F and 15003C0351G, Panel Effective Date: respectively Sept 30, 2004 and Jan 19, 2011, Index Date: November 05, 2014).

The following figures in Exhibit A provide supporting information on this housing project:

Figure 1: Location Map
Figure 2: TMK Map
Figure 3: Site Map
Figure 4: Flood Map

COMPLIANCE FACTORS

I. AIRPORT CLEAR ZONES AND ACCIDENT POTENTIAL ZONES (24 CFR PART 51D)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The housing project does not lie within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: 24 CFR 51 (D).

Honolulu International Airport Master Plan - 2010 (August 1994), State Department of Transportation, Airports Division;

*Hawai`i Airports and Flying Safety Guide (2012-13, Fifth Edition, Revision 1)* Hawai`i Department of Transportation, Airports Division; and

http://hidot.hawaii.gov/airports/files/2013/01/Airport-Safety-Guide-2012-2013-5rev1.pdf

II. COASTAL BARRIER RESOURCES (COASTAL BARRIER IMPROVEMENT ACT OF 1990 [16 USC 3501])

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i does not have any designated coastal barrier resource units.

SUPPORTING DOCUMENTATION:

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/cbra/maps/mapper.html (Date accessed: 6/30/15).

III. FLOOD INSURANCE (FLOOD DISASTER PROTECTION ACT OF 1973 AND NATIONAL FLOOD INSURANCE REFORM ACT OF 1994 [42 USC 4001-4128 AND 42 USC 5154a])

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program.

As indicated in the Flood Insurance Rate Panel 15003C0352F and 15003C0351G (Effective Date: respectively Sept 30, 2004 and Jan 19, 2011, Index Date: November 05, 2014), this housing project is located in Flood Hazard Zone X (areas determined to be outside the 0.2% annual chance floodplain). A field inspection and information obtained from the site manager confirmed no major flooding issues within the site. Based on its description, this project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal signs of flooding problems. An interview with the AMP Manager also determined that major ponding or flooding issues are currently not an issue for the project site.

Printed: Flood Insurance Rate Map, Community Panels: 15003C0352F and 15003C0351G, Effective Date: respectively Sept 30, 2004 and Jan 19, 2011, Index Date: November 05, 2014.

Hawai`i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 7/27/15)

IV. CLEAN AIR ACT (40 CFR PARTS 6, 51, 93)

SUPPORTING DOCUMENTS	
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. Environmental Protection Agency's Green Book for currently designated "nonattainment areas" as of June 2015. Planned rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.

SUPPORTING DOCUMENTATION:

Printed: *State of Hawai‘i Annual Summary 2013 Air Quality Data*. State of Hawai'i, Department of Health, July 2014.

U.S. Environmental Protection Agency website at: http://epa.gov/airquality/greenbk/

V. COASTAL ZONE MANAGEMENT ACT (16 USC 1451, SECTIONS 307 (C), (D)

CONTACT:

Mr. John Nakagawa
Office of Planning
Department of Business, Economic Development & Tourism
State of Hawai‘i
P.O. Box 2359
Honolulu, Hawai'i, 96804-2359

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai‘i's Coastal Zone Management (CZM) program.

SUPPORTING DOCUMENTATION:

Contact: In an email to the Office of Planning (OP) dated July 27, 2015, the HPHA determined that the use of HUD funds for the implementation of repair and rehabilitation improvements does not require review for consistency with Hawai‘i's CZM program. The OP confirmed this determination in an email dated July 28, 2015 and it is included in the Appendices.

Experience: Previous reviews conducted by OP in 2003, 2005, and 2010 determined that projects receiving federal funds from HUD do not require CZM federal consistency review. OP's current determination confirms this condition is still applicable. Copies of these prior documentations are included in the Appendices.

VI. CONTAMINATION AND TOXIC SUBSTANCES (24 CFR PART 50.3 & 58.5(I)(2))

	SUPPORTING DOCUMENTS
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Project Not Affected.

There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.

SUPPORTING DOCUMENTATION:

Field: A site inspection and interview with the Asset Management Project (AMP) Manager revealed no presence of any toxic or radioactive materials on the project site that warrant concern. There is a secured storage area in the rear portion of the Administration building. The building is located in the middle of the site plan but is not numbered.

Study: Environmental Data Resources, Inc. (EDR), conducted a search of available environmental records and prepared a Radius Map Report (Inquiry Number 4237094.22s, March 17, 2015). EDR reviewed more than 25 federal and statewide regulatory databases for information regarding the treatment, storage, disposal and release of toxic chemicals at the project site and within specific radii (generally 1 mile) of the site. A Detail Map within the EDR report documents those sites identified within a 0.25 mile radius of the project site. The EDR report in Exhibit B includes the results of their research findings.

The EDR report notes the following activities within a 0.125 mile radius of the project site: This housing project is within the Fort Shafter Army Department of Defense region. First Union Self-Serve (754 feet away) had a LUST, Status: Site Cleanup Completed (NFA); three UST are permanently out of use. Unocal 76 SS (754 feet away) is classified as a Conditionally Exempt Small Quantity Generator (Handler). 2147 ‘AO‘AO Street (1,200 feet away) had a Chlordane spill; Use Restrictions: No Hazard Present for Unrestricted Residential Use.

This project site was not identified as a Formerly Used Defense Site (FUDS) by the U.S. Army Corps of Engineers and is not subject to any cleanup actions for Department of Defense-generated contamination.

VII. ENDANGERED SPECIES (50 CFR PART 402)

CONTACT:
Mr. Loyal Mehrhoff, Field Supervisor
Pacific Islands Administrator
Fish and Wildlife Services
U.S. Department of the Interior
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawai'i 96813
Tel. #: 792-9400

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Adverse Effect Subject to Mitigation

SUPPORTING DOCUMENTATION:

Contact: A letter from the HPHA dated July 24, 2015 was submitted to the Pacific Island Administrator for the FWS determining that repair and rehabilitation improvements that may be implemented using HUD funds for this housing project would have no likelihood of effect on any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination along with proposed minimization and avoidance measures was received from the FWS in a letter dated September 28, 2015 which is included in the Appendices. This housing project is subject to the following minimization and avoidance measures.

Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.

Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.

Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.

Newell's shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.

Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene

flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.

Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo‘i, impoundments or other vegetated water bodies.

1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols.
2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.
3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.

In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.

Additional Measures: The following additional measures would be implemented:

1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.

Experience: The FWS was previously consulted as part of environmental reviews that were completed in 2005 (39 housing projects) and 2010 (70 housing projects) which supported the determination that repair and rehabilitation improvements would either: 1) have no likelihood of effect for certain housing projects; or 2) not likely adversely affect federally listed species or critical habitat for certain housing projects subject to mitigative measures. A summary of these consultation efforts follows.

2005 Consultation: In a letter dated July 15, 2005, the Housing and Community Development Corporation of Hawai‘i (predecessor to the HPHA), determined that the implementation of minor repair and rehabilitation improvements for 39 housing projects would not have an adverse effect on federally-listed species or critical habitat. In a letter dated August 11, 2005, the FWS concurred with the HCDCH determination.

2010 Consultation: In a letter dated May 17, 2010, the HPHA informed the FWS that HUD funds would be used to immediately implement repair and rehabilitation improvements for six housing projects on O‘ahu and the island of Hawai`i. In a subsequent letter dated May 21, 2010, the FWS was informed that HPHA would be using HUD funds

to implement minor repair and rehabilitation improvements for 64 projects throughout the State. In both letters, the HPHA determined that the repair and rehabilitation improvements were not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat. Based on further consultation and a meeting with FWS staff on June 24, 2010, the HPHA determined that repair and rehabilitation improvements for most of their housing projects would not likely adversely affect any listed or proposed species, or existing or proposed designated habitat, subject to various mitigative measures for certain housing projects

VIII. EXPLOSIVE AND FLAMMABLE OPERATIONS (24 CFR PART 51C)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

SUPPORTING DOCUMENTATION:

Field: Field inspection was limited to the exterior of residential buildings and associated structures for this housing project. No above-ground explosive or flammable material storage containers in excess of 100 gallons were observed at the site.

Printed: 24 CFR Part 51, Subpart C addresses acceptable separation distance from above-ground explosive or flammable fuels or chemical containers. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

IX. FARMLANDS PROTECTION (7 CFR PART 658)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. Since the property consists of an existing housing development within an urbanized area, no farmlands would be impacted by the implementation of repair and rehabilitation improvements.

Printed: The property is designated for "Urban" use by the State Land Use Commission and the County's zoning for the parcel is RD-3.75 Double-Family Residential District.

Hawai`i Office of Planning website at: http://planning.hawaii.gov/gis/
(Date accessed: 6/30/2015)

X. FLOODPLAIN MANAGEMENT (EXECUTIVE ORDER 11988, 24 CFR PART 55)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program

The entire housing site is located within Zone X, an area of minimal flooding (i.e., 0.2% annual chance flood), and is located outside the 500-year flood zone. A field inspection and information obtained from AMP Manager confirmed no major flooding issues within the project site.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal signs of previous flooding problems. An interview with the AMP Manager also determined that no major ponding or flooding issues occur on the project site.

Printed: Flood Insurance Rate Map, Community Panels: 15003C0352F and 15003C0351G, Effective Date: respectively Sept 30, 2004 and Jan 19, 2011, Index Date: November 05, 2014.

Hawai`i Department of Land and Natural Resources website at:
http://gis.hawaiinfip.org/FHAT/ (Date accessed7/21/15)

XI. HISTORIC PRESERVATION (NATIONAL HISTORIC PRESERVATION ACT OF 1966; SECTIONS 106 AND 110; 36 CFR, PART 800)

CONTACT:

Ms. Suzanne Case, Chairperson
Department of Land and Natural Resources (DLNR)
State of Hawai‘i
1151 Punchbowl Street
Honolulu, Hawai‘i 96813
Tel. #: 587-0400

SUPPORTING DOCUMENTS

X	Field
X	Contact
X	Printed
	Experience
X	Study

DETERMINATION:

Status Category: No Adverse Effect on Historic Properties with Mitigation

This housing project was initially occupied in 1953 and is 62 years old. A 2015 Historic Property Evaluation (HPE) noted that Buildings 25, 28, 29, 30, 32, 33, 34, 36, 37, 38, 39, 41, 42, 43 and 44 are eligible for the National Register of Historic Places (NRHP). In a letter to the State Historic Preservation Officer (SHPO) dated August 20, 2015, the HPHA determined that repair and rehabilitation improvements for this housing project would have “no adverse effect” on historic properties pursuant to NHPA Section 106 and subject to certain mitigative measures. In a letter dated November 30, 2015, the SHPO concurred with the HPHA’s determination and provided additional conditions for ground-disturbing activities. In responding to this letter, the HPHA concurred with the additional conditions set forth by the SHPO.

SUPPORTING DOCUMENTATION:

Field: A site inspection of this housing project did not locate any existing or potential archaeological sites (e.g., heiau) or cultural features on the property. An interview with the AMP Manager indicates that no known sites or features are present on the property.

Contact: Based on the findings and recommendations of the 2015 AIS, the HPHA submitted a letter to the State Historic Preservation Officer dated August 20, 2015 regarding 28 housing projects, which is included in the Appendix. Of this total, 15 housing projects did not meet National Register eligibility criteria, therefore, a “no historic properties affected” determination was proposed for these repair and rehabilitation improvements. Repair and rehabilitation improvements for the other 13 housing projects (including Kalihi Valley Homes) were determined to meet National Register eligibility criteria and were proposed to have “no adverse effect” on historic properties subject to certain mitigative measures.

In a letter dated November 30, 2015, the SHPO concurred with the HPHA’s determination that repair and rehabilitation improvements for this housing project would have “no adverse effect” on historic properties pursuant to NHPA Section 106 and subject to the following mitigative measures. Mitigative measures pertaining to buildings are applicable just to the 15 buildings determined to be eligible for the NRHP, and other measures are pertinent to ground disturbance activities. In response to this letter, the HPHA concurred with the additional conditions set forth by the SHPO. A copy of these letters is included in Exhibit C.

1. When considering rehabilitation improvements or building modifications: 1) the buildings' character-defining features shall be retained to the extent practicable; and 2) the renovations shall adhere to the Secretary of the Interior's (SOI) Standards for Rehabilitation.
2. If rehabilitation improvements or building modifications cannot retain the character-defining features or adhere to the SOI's Standards, a Historic American Buildings Survey (HABS) will be conducted subject to the following conditions:
   a. Level II HABS documentation will be conducted in accordance with the National Park Service standards; and
   b. A representative sample of multiple building types would be selected for HABS documentation due to the multiple types of buildings constructed for housing projects.
3. If ground disturbing activity is anticipated, HPHA will consult with the SHPD to determine the effect to potential historic subsurface properties and to identify appropriate archaeological documentation and/or mitigation required.
   a. Submit detailed plans, specifications and a detailed scope of work once the plans have been developed.
   b. Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and consultation.
   c. Submit a TMK map showing the full extent of the project area within the affected parcels.
   d. Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area.
   e. Summary of land use history, such as previous intensive cultivation, grubbing or grading.
   f. Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

In addition to these mitigation measures, the HPHA would enter into a Programmatic Agreement with the SHPO to address the implementation of future repair and rehabilitation improvements to State housing projects after the current Section 106 review process is completed and prior to the next environmental review process in approximately five years. Furthermore, should subsurface human remains or other traces of human activity greater than 50 years old be encountered during construction, all work in the vicinity of the find would immediately stop and the SHPD would be promptly notified. The treatment of any human remains that are encountered would be conducted in accordance with applicable requirements of Chapter 6E, Hawai'i Revised Statutes (Historic Preservation) and Chapter 13-300, Hawai'i Administrative Rules (Rules of Practice and Procedure Relating to Burial Sites and Human Remains).

Printed: A review of the U.S. National Parks Service website for the National Register of Historic Places did not identify any historic properties within the limits of this housing project. A similar review of the State DLNR website for the State Register of Historic Places revealed that there are no historic properties within the project site.

National Register: U.S. National Park Service website at:
http://www.nps.gov/nr/research/ (Date accessed: 7/2/15).

State Register: Hawai`i Department of Land and Natural Resources website at:
http://dlnr.hawaii.gov/shpd/state-register/ (Date accessed: 7/2/15).

Study: A 2010 an Historical Property Evaluation (HPE) was conducted by Mason Architects and determined that Buildings 28, 29, 30, 32, 33, 34, 36, 37, 38, 39, 41, 42, 43 and 44 were eligible for NRHP. After this project reached 50-years-old, it was reevaluated by Fung Associates and determined that in addition to the previously mentioned structures, building 25 was also eligible for the NRHP.

The 2015 HPE stated that these structures were first occupied in 1953 and are significant because of their association with public housing and general social history in Hawai‘i. They are intact and early examples of concrete construction used for the housing project by the Territory of Hawai‘i, as well as the largest project at its date of competition. Character defining features include a flat roof, canopies over windows and entry doors, wood framed windows with concrete block base, wood panel exterior and interior doors, and intact bathroom fixtures. Some structures have their original building numbers. The site arrangement of low-rise buildings terraced on hillside is also a defining feature.

XII. NOISE ABATEMENT CONTROL (24 CFR PART 51B)

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Within HUD Noise Standards

The project site is situated along a highway that has a high volume of vehicular traffic. The HUD noise calculator estimated noise levels at the project site to be 59.3 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

SUPPORTING DOCUMENTATION:

Field: No significant noise generating sources were identified within the project site during the site inspection. Portions of the housing site is located adjacent to Likelike Highway, a major State highway. Remaining portions of the housing project is located along Kamehameha IV Road. Likelike Highway is situated approximately 110 feet away from the subject site. Access to the housing site is gated and staffed with security guards. Once drivers pass the entry gate, access within the project and to parking areas is via Kalena Drive. Thus, Kalena Drive is strictly an internal road within the housing project. Likelike Highway is the main roadway in the area and has more vehicular traffic than Kamehameha IV Road. Traffic noise from Likelike Highway is somewhat buffered by the site’s terraced terrain and site arrangement of buildings, and a low concrete wall along Likelike Highway. Furthermore, an interview with the AMP Manager did not identify any loud noise producing sources in the area. As a result, notable noise sources are predominantly associated with vehicular traffic along Likelike Highway and Kamehameha IV Road. Traffic noise did not appear significant during the site visit.

Study: The HUD day/night noise level calculator was used to estimate traffic noise levels generated along Likelike Highway, which is a major highway connecting Honolulu with windward O‘ahu. Traffic count data for this highway were based on 2013 State Department of Transportation data and applied to a distance of 110 feet from the project site. Using this HUD calculator, the estimated noise levels at the project site is 59.3 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Traffic noise levels along Kamehameha IV Road should be lower due to considerably lower traffic volumes and traveling speeds (25 mph speed limit). Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

XIII. SOLE SOURCE AQUIFER (40 CFR PART 149)

SUPPORTING DOCUMENTS	
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact on Sole Source Aquifer

The housing project is located within the O‘ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation. However, if exceptional circumstances require compliance steps with any of these authorities, such compliance must be established and documented prior to approving the site-specific loan or grant.

SUPPORTING DOCUMENTATION:

Printed: This determination was based upon review of the Sole Source Aquifer Memorandum of 4/30/90 (Sections II.B.1 and II.B.2) and consideration of the type of rehabilitation related improvements that would be conducted for this project.

XIV. WETLANDS PROTECTION (EXECUTIVE ORDER 11990)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the property did not identify the presence of any wetlands.

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/wetlands/data/mapper.html (Date accessed 7/23/2015).

XV. WILD AND SCENIC RIVERS ACT (16 USC 1271, SECTION 7 (B), (C))

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no Wild and Scenic Rivers in Hawai‘i, which excludes this project from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: National Wild and Scenic Rivers System website at: http://www.rivers.gov/index.php (Date accessed: 6/30/2015).

XVI. ENVIRONMENTAL JUSTICE (EXECUTIVE ORDER NO. 12898)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Conflict with Requirements

Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, repair and rehabilitation improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations. Repair and rehabilitation improvements should benefit low-income and minority populations living within this housing project.

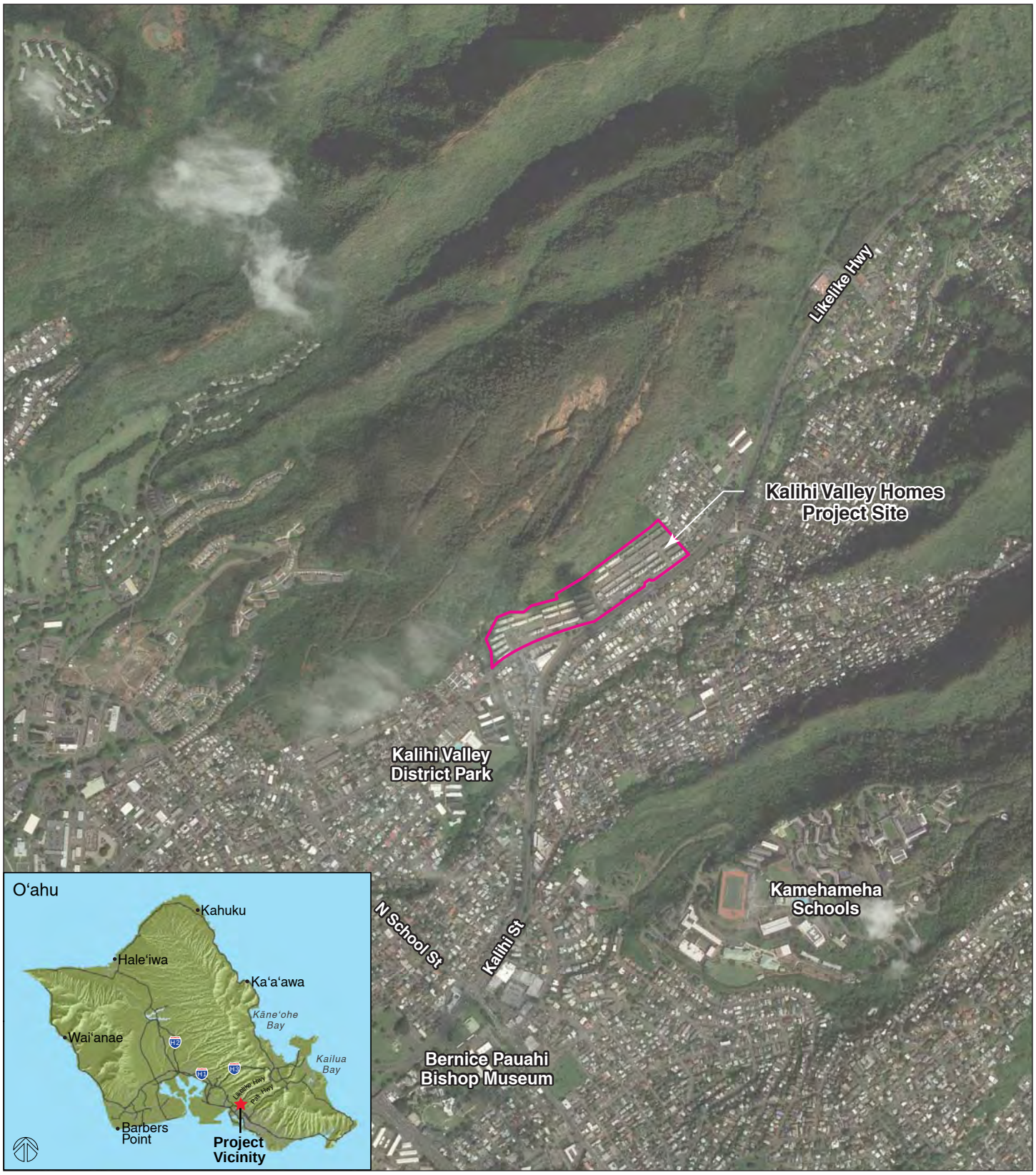
SUPPORTING DOCUMENTATION:

Printed: Executive Order 12898.

U.S. Department of Housing and Urban Development website at:
https://www.hudexchange.info/environmental-review/environmental-justice/

EXHIBIT A

Location Map, TMK Map, Site Map, Flood Map, and Site Photos



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

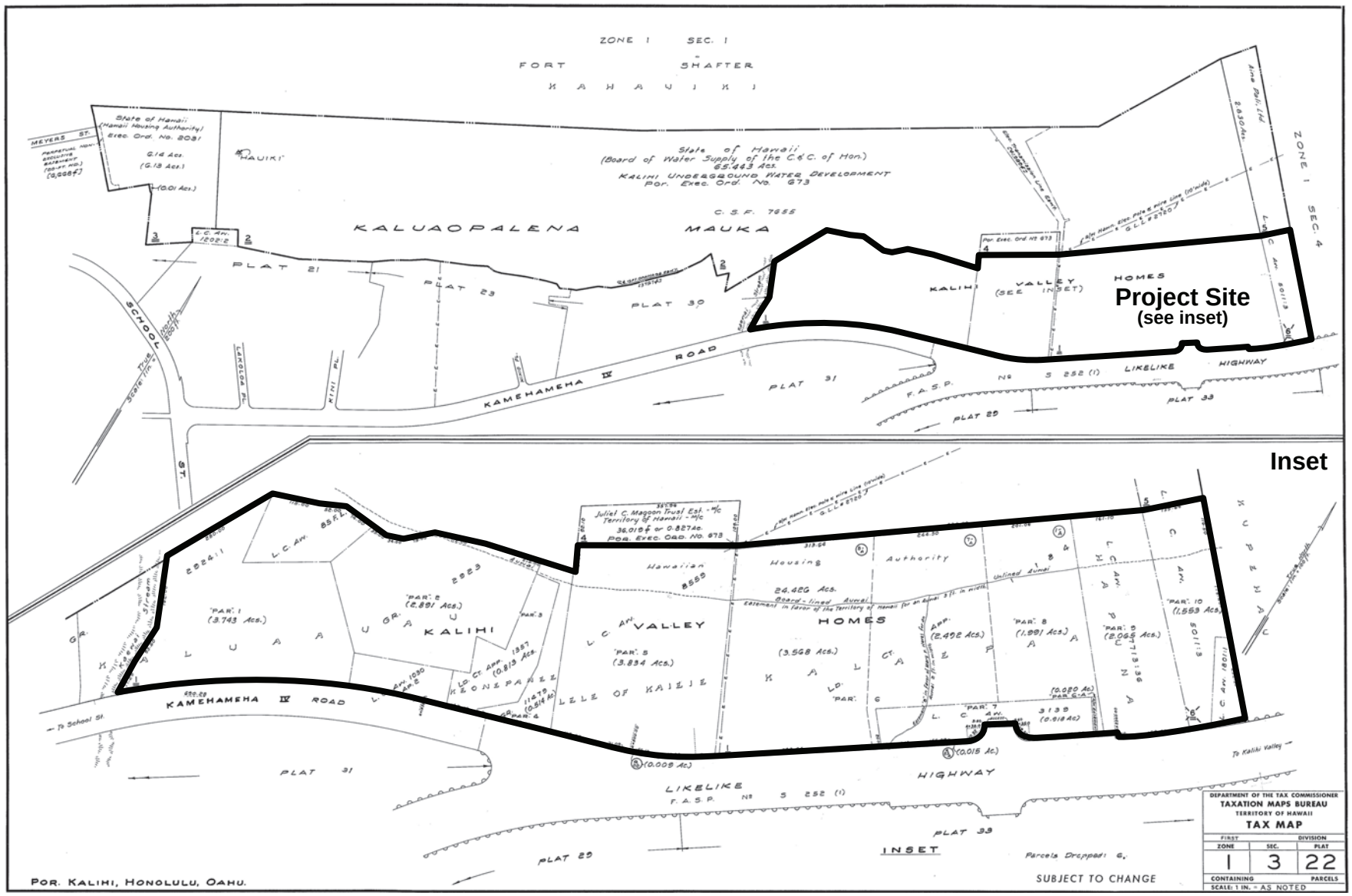
HPHA No. 1005 - Kalihi Valley Homes (AMP 31)

Figure 1 - Project Location Map

Honolulu, O'ahu

2,000 FT

HHF PLANNERS
places for people



HPHA No. 1005 - Kalihi Valley Homes (AMP 31)

Figure 2 - TMK Map

Honolulu, O'ahu

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1005 - Kalihi Valley Homes (AMP 31)

Figure 3 - Site Map

Honolulu, O'ahu

180 FT

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

LEGEND

Zone X - Outside the 0.2% Annual Chance of Flood

HPHA No. 1005 - Kalihi Valley Homes (AMP 31)

Figure 4 - Flood Map

Honolulu, O'ahu

180 FT

HHF PLANNERS
places for people

KALIHI VALLEY HOMES
SITE PHOTOS

Kamehameha IV Road has a posted speed limit of 25 MPH

Kalena Drive runs throughout project, parallel to Likelike Highway (on right). Administrative Building is to the left.

Housing site is terraced along a hillside. Curbs and swales direct runoff away from housing

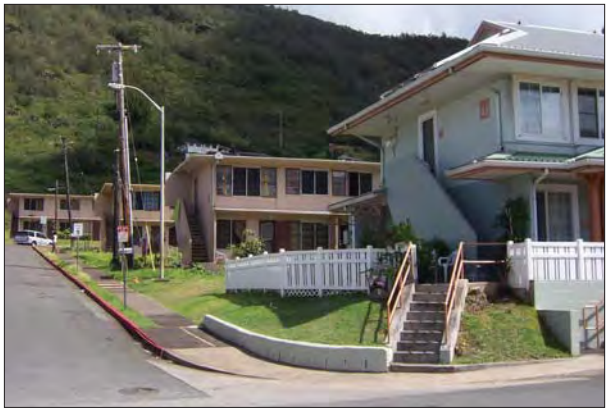
Guardrails and walkways for occupant safety

Community Building has been boarded up to prevent public from entering

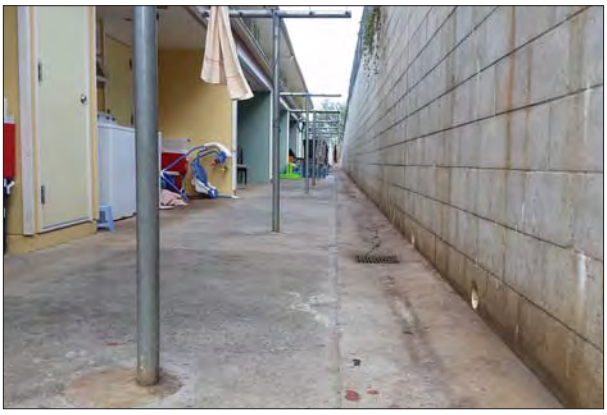
View from project's northeastern corner, looking toward Likelike Highway. Subject housing units to the right, adjacent single-family homes (not visible) behind the fence at left.

KALIHI VALLEY HOMES
SITE PHOTOS

Grassed hillside at rear of site helps reduce runoff into housing site



Contrast between refubished and original condition units: Bldg 45 is not eligible for NRHP; the rear buildings 44, 43, and 42 are eligible.



Drain inlet

Drain culverts

Natural drainage ditch along project's western boundary, looking north from Kamehameha IV Road

Storage Area at rear of Administration Building

EXHIBIT B

EDR Radius Map Report

Kalihi Valley Homes
2250 Kalena Dr.
Honolulu, HI 96819

Inquiry Number: 4237094.22s
March 17, 2015

EDR Summary Radius Map Report

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

FORM-NULL-PVC

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

2250 KALENA DR.
HONOLULU County, HI 96819

COORDINATES

Latitude (North):	21.3484000 - 21˚ 20' 54.24''
Longitude (West):	157.8658000 - 157˚ 51' 56.88''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	617607.9
UTM Y (Meters):	2360991.5
Elevation:	237 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	USGS 7.5 min quad index

Target Property:	W
Source:	USGS 7.5 min quad index

MAPPED SITES SUMMARY

Target Property Address:
2250 KALENA DR.
, HI 96819

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
1	KALIHI VALLEY PARK	2250 KALENA DRIVE	FINDS		TP
Reg	FORT SHAFTER		DOD	Same	1 ft.
A2	FIRST UNION SELF-SER	2077 KAMEHAMEHA IV R	LUST, UST	Lower	754, SW
A3	UNOCAL 76 SS L 4380	2077 KAMEHAMEHA IV R	RCRA-CESQG, FINDS	Lower	754, SW
4		1810 ALU PL	EDR US Hist Auto Stat	Lower	973, ESE
5	2147 AOAO STREET	2147 AOAO ST	SHWS, SPILLS	Lower	1200, SW
6		2340 KULA KOLEA DR	EDR US Hist Auto Stat	Higher	1254, NE
7	2326 KALIHI STREET U	2326 KALIHI ST	SHWS, SPILLS, ENG CONTROLS, INST CONTROL	Lower	1504, SE
B8	KALIHI POLICE STATIO	1865 KAMEHAMEHA IV R	LUST, UST, Financial Assurance	Lower	2278, SW
B9	C&CH KALIHI-UKA FIRE	1861 KAMEHAMEHA IV H	LUST, UST, Financial Assurance	Lower	2296, SW
10	TESORO 2GO # 61021	1950 KALIHI ST.	LUST, UST, Financial Assurance	Lower	2581, South
11	KAMEHAMEHA SCOOLS	1887 MAKUAKANE ST	RCRA-CESQG, FINDS, SHWS, SPILLS, ENG CONTROLS,...	Lower	3303, South
12	CHANG-CHOW PROPERTY,	2161 N SCHOOL ST	SHWS	Lower	4120, SW
13	KUHIO PARK TERRACE T	LINAPUNI ST	SHWS, ENG CONTROLS, INST CONTROL, BROWNFIELDS	Lower	5072, SW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 7 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
KALIHI VALLEY PARK 2250 KALENA DRIVE HONOLULU, HI 96819	FINDS	N/A

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA generators list

RCRA-CESQG: A review of the RCRA-CESQG list, as provided by EDR, and dated 12/09/2014 has revealed that there is 1 RCRA-CESQG site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
UNOCAL 76 SS L 4380	***2077 KAMEHAMEHA IV R***	***SW 1/8 - 1/4 (0.143 mi.)***	***A3***	***7***

State- and tribal - equivalent CERCLIS

SHWS: A review of the SHWS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 5 SHWS sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
2147 AOAO STREET	***2147 AOAO ST***	***SW 1/8 - 1/4 (0.227 mi.)***	***5***	***8***
2326 KALIHI STREET U	***2326 KALIHI ST***	***SE 1/4 - 1/2 (0.285 mi.)***	***7***	***8***
KAMEHAMEHA SCOOLS	***1887 MAKUAKANE ST***	***S 1/2 - 1 (0.626 mi.)***	***11***	***9***
CHANG-CHOW PROPERTY,	2161 N SCHOOL ST	SW 1/2 - 1 (0.780 mi.)	12	9
KUHIO PARK TERRACE T	***LINAPUNI ST***	***SW 1/2 - 1 (0.961 mi.)***	***13***	***9***

EXECUTIVE SUMMARY

State and tribal leaking storage tank lists

LUST: A review of the LUST list, as provided by EDR, and dated 12/16/2014 has revealed that there are 4 LUST sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
FIRST UNION SELF-SER Facility Status: Site Cleanup Completed (NFA)	***2077 KAMEHAMEHA IV R***	***SW 1/8 - 1/4 (0.143 mi.)***	***A2***	***7***
KALIHI POLICE STATIO Facility Status: Site Cleanup Completed (NFA)	***1865 KAMEHAMEHA IV R***	***SW 1/4 - 1/2 (0.431 mi.)***	***B8***	***8***
C&CH KALIHI-UKA FIRE Facility Status: Site Cleanup Completed (NFA)	***1861 KAMEHAMEHA IV H***	***SW 1/4 - 1/2 (0.435 mi.)***	***B9***	***8***
TESORO 2GO # 61021 Facility Status: Site Assessment Ongoing	***1950 KALIHI ST.***	***S 1/4 - 1/2 (0.489 mi.)***	***10***	***9***

State and tribal registered storage tank lists

UST: A review of the UST list, as provided by EDR, and dated 12/18/2014 has revealed that there is 1 UST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
FIRST UNION SELF-SER	***2077 KAMEHAMEHA IV R***	***SW 1/8 - 1/4 (0.143 mi.)***	***A2***	***7***

State and tribal institutional control / engineering control registries

ENG CONTROLS: A review of the ENG CONTROLS list, as provided by EDR, and dated 12/02/2014 has revealed that there is 1 ENG CONTROLS site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
2326 KALIHI STREET U	***2326 KALIHI ST***	***SE 1/4 - 1/2 (0.285 mi.)***	***7***	***8***

INST CONTROL: A review of the INST CONTROL list, as provided by EDR, and dated 12/02/2014 has revealed that there is 1 INST CONTROL site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
2326 KALIHI STREET U	***2326 KALIHI ST***	***SE 1/4 - 1/2 (0.285 mi.)***	***7***	***8***

EXECUTIVE SUMMARY

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

DOD: A review of the DOD list, as provided by EDR, and dated 12/31/2005 has revealed that there is 1 DOD site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
FORT SHAFTER		0 - 1/8 (0.000 mi.)	0	7

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Auto Stat: A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there are 2 EDR US Hist Auto Stat sites within approximately 0.25 miles of the target property.

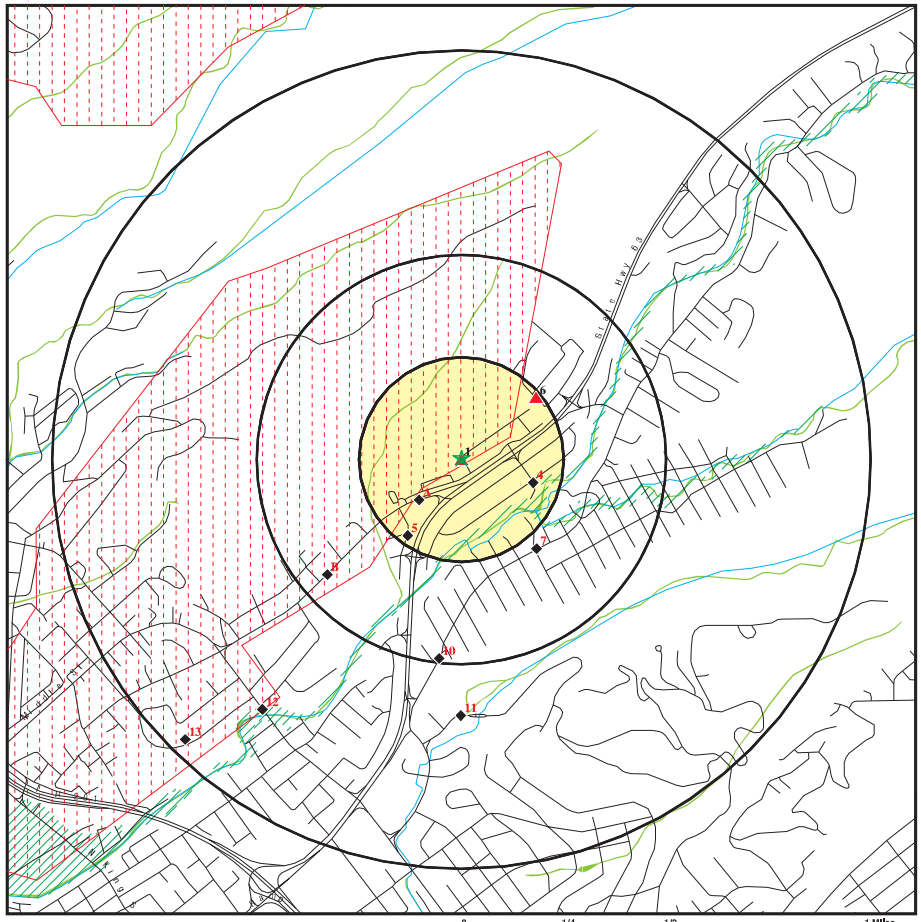
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	2340 KULA KOLEA DR	NE 1/8 - 1/4 (0.237 mi.)	6	8

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	1810 ALU PL	ESE 1/8 - 1/4 (0.184 mi.)	4	7

Count: 3 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
HONOLULU	S117391417	1339 SCHOOL STREET	1339, 1341, 1343 N SCHOOL ST		SHWS, ENG CONTROLS, INST CONT
HONOLULU	S115488703	KALIHI AND KALAEPAA INTERSECTION	KALAEPAA DR AND KALIHI ST		SHWS, SPILLS
HONOLULU	S108859926	KOKUA KALIHI VALLEY ACTIVE LIVING	UPPER KALIHI ST		SHWS, BROWNFIELDS

OVERVIEW MAP - 4237094.22S



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Kalihi Valley Homes ADDRESS: 2250 Kalena Dr. Honolulu HI 96819 LAT/LONG: 21.3484 / 157.8658	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.22s DATE: March 17, 2015 5:33 pm

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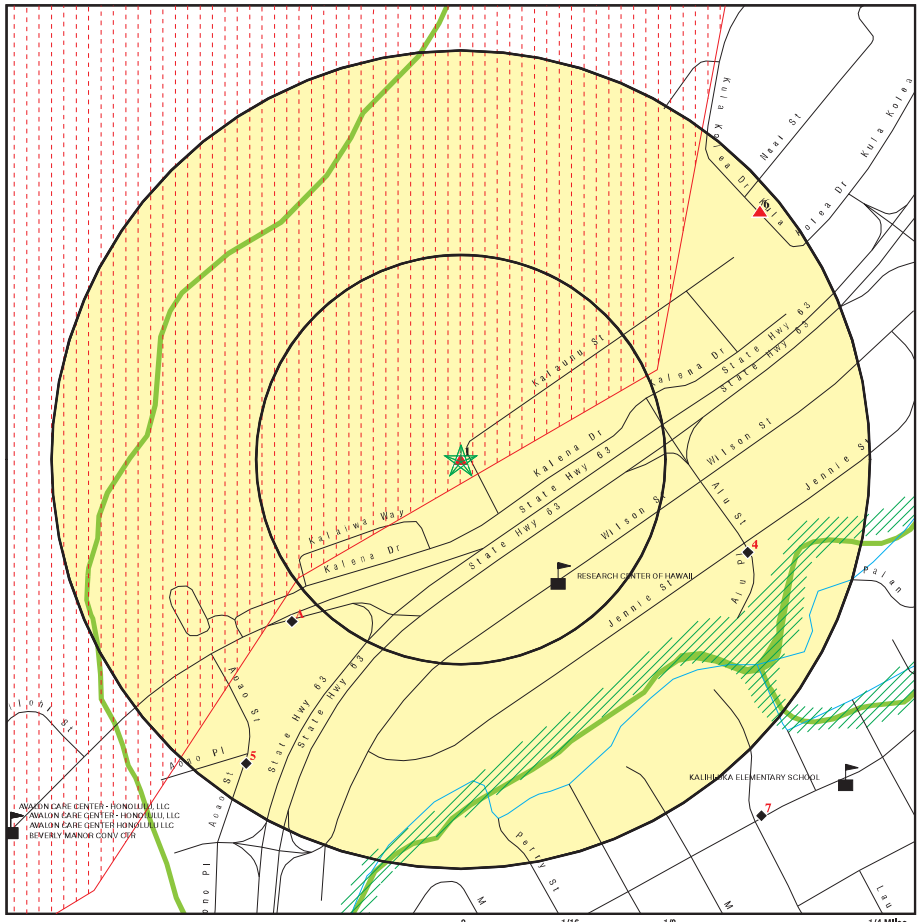
DETAIL MAP - 4237094.22S



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Kalihi Valley Homes ADDRESS: 2250 Kalena Dr. Honolulu HI 96819 LAT/LONG: 21.3484 / 157.8658	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.22s DATE: March 17, 2015 5:33 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	1	NR	NR	NR	1
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
SHWS	1.000		0	1	1	3	NR	5
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	1	3	NR	NR	4
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250		0	1	NR	NR	NR	1

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		0	0	1	NR	NR	1
INST CONTROL	0.500		0	0	1	NR	NR	1
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		1	0	0	0	NR	1
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP	1	NR	NR	NR	NR	NR	1
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		0	2	NR	NR	NR	2
EDR US Hist Cleaners	0.250		0	0	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
RGA HWS	TP		NR	NR	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
1 Target Property	**KALIHI VALLEY PARK 2250 KALENA DRIVE HONOLULU, HI 96819**	**FINDS**	**1009440748 N/A**
Actual: 237 ft.	Click here for full text details		
DOD Region	**FORT SHAFTER**	**DOD**	**CUSA147753 N/A**
< 1/8 1 ft.	**FORT SHAFTER (County), HI**		
	Click here for full text details		
A2 SW 1/8-1/4 0.143 mi. 754 ft.	**FIRST UNION SELF-SERV 2077 KAMEHAMEHA IV RD HONOLULU, HI 96819**	**LUST UST**	**U003221566 N/A**
Relative: Lower	Click here for full text details		
	LUST Facility Id: 9-100107 Facility Status: Site Cleanup Completed (NFA)		
	UST Facility Id: 9-100107 Tank Status: Permanently Out of Use		
A3 SW 1/8-1/4 0.143 mi. 754 ft.	**UNOCAL 76 SS L 4380 2077 KAMEHAMEHA IV RD HONOLULU, HI 96819**	**RCRA-CESQG FINDS**	**1004688901 HID984468777**
Relative: Lower	Click here for full text details		
	RCRA-CESQG EPA Id: HID984468777		
4 ESE 1/8-1/4 0.184 mi. 973 ft.	**1810 ALU PL HONOLULU, HI 96819**	**EDR US Hist Auto Stat**	**1015279989 N/A**
Relative: Lower	Click here for full text details		

5
SW
1/8-1/4
0.227 mi.
1200 ft.

Relative: Lower

2147 AOAO STREET
2147 AOAO ST
HONOLULU, HI 96819

SHWS — **S106815333**
SPILLS — **N/A**

Click here for full text details

6
NE
1/8-1/4
0.237 mi.
1254 ft.

Relative: Higher

2340 KULA KOLEA DR
HONOLULU, HI 96819

EDR US Hist Auto Stat — **1015349140**
N/A

Click here for full text details

7
SE
1/4-1/2
0.285 mi.
1504 ft.

Relative: Lower

2326 KALIHI STREET UST
2326 KALIHI ST
HONOLULU, HI 96819

SHWS — **S106815373**
SPILLS — **N/A**
ENG CONTROLS
INST CONTROL

Click here for full text details

B8
SW
1/4-1/2
0.431 mi.
2278 ft.

Relative: Lower

KALIHI POLICE STATION
1865 KAMEHAMEHA IV RD
HONOLULU, HI 96819

LUST — **U004187912**
UST — **N/A**
Financial Assurance

Click here for full text details

LUST
Facility Id: 9-100117
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-100117
Tank Status: Permanently Out of Use
Tank Status: Currently In Use

B9
SW
1/4-1/2
0.435 mi.
2296 ft.

Relative: Lower

C&CH KALIHI-UKA FIRE STATION
1861 KAMEHAMEHA IV HWY
HONOLULU, HI 96819

LUST — **U004109519**
UST — **N/A**
Financial Assurance

Click here for full text details

LUST
Facility Id: 9-102891
Facility Status: Site Cleanup Completed (NFA)

UST

C&CH KALIHI-UKA FIRE STATION (Continued) — **U004109519**

Facility Id: 9-102891
Tank Status: Permanently Out of Use

10
South
1/4-1/2
0.489 mi.
2581 ft.

Relative: Lower

TESORO 2GO # 61021
1950 KALIHI ST.
HONOLULU, HI 96819

LUST — **U003402818**
UST — **N/A**
Financial Assurance

Click here for full text details

LUST
Facility Id: 9-101120
Facility Status: Site Assessment Ongoing

UST
Facility Id: 9-101120
Tank Status: Temporarily out of Use
Tank Status: To be installed
Tank Status: Permanently Out of Use

11
South
1/2-1
0.626 mi.
3303 ft.

Relative: Lower

KAMEHAMEHA SCOOLS
1887 MAKUAKANE ST
HONOLULU, HI 96817

RCRA-CESQG — **1000202706**
FINDS — **HID981616469**
SHWS
SPILLS
ENG CONTROLS
INST CONTROL

Click here for full text details

RCRA-CESQG
EPA Id: HID981616469

12
SW
1/2-1
0.780 mi.
4120 ft.

Relative: Lower

CHANG-CHOW PROPERTY, NORTH SCHOOL STREET
2161 N SCHOOL ST
HONOLULU, HI 96817

SHWS — **1006820024**
N/A

Click here for full text details

13
SW
1/2-1
0.961 mi.
5072 ft.

Relative: Lower

KUHIO PARK TERRACE TOWERS
LINAPUNI ST
HONOLULU, HI 96819

SHWS — **S108008570**
ENG CONTROLS — **N/A**
INST CONTROL
BROWNFIELDS

Click here for full text details

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
HI	AIRS	List of Permitted Facilities	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	BROWNFIELDS	Brownfields Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	CDL	Clandestine Drug Lab Listing	Department of Health	08/04/2010	09/10/2010	10/22/2010
HI	DRYCLEANERS	Permitted Drycleaner Facility Listing	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	ENG CONTROLS	Engineering Control Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	Financial Assurance	Financial Assurance Information Listing	Department of Health	12/01/2014	12/19/2014	01/28/2015
HI	INST CONTROL	Sites with Institutional Controls	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	LUST	Leaking Underground Storage Tank Database	Department of Health	12/16/2014	12/19/2014	01/28/2015
HI	RGA HWS	Recovered Government Archive State Hazardous Waste Facilitie	Department of Health		07/01/2013	01/08/2014
HI	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Health		07/01/2013	01/17/2014
HI	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	Department of Health		07/01/2013	01/03/2014
HI	SHWS	Sites List	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	SPILLS	Release Notifications	Department of Health	12/02/2014	12/22/2014	01/28/2015
HI	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	03/10/2012	01/03/2013	02/11/2013
HI	SWF/LF	Permitted Landfills in the State of Hawaii	Department of Health	09/17/2012	04/03/2013	05/10/2013
HI	UIC	Underground Injection Wells Listing	Department of Health	02/07/2013	02/12/2013	04/09/2013
HI	UST	Underground Storage Tank Database	Department of Health	12/18/2014	12/19/2014	01/28/2015
HI	VCP	Voluntary Response Program Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	04/22/2013	03/03/2015	03/09/2015
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2011	02/26/2013	04/19/2013
US	CERCLIS	Comprehensive Environmental Response, Compensation, and Liab	EPA	10/25/2013	11/11/2013	02/13/2014
US	CERCLIS-NFRAP	CERCLIS No Further Remedial Action Planned	EPA	10/25/2013	11/11/2013	02/13/2014
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	07/01/2014	09/10/2014	10/20/2014
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	01/23/2015	02/13/2015	03/09/2015
US	CORRACTS	Corrective Action Report	EPA	12/09/2014	12/29/2014	01/29/2015
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DELISTED NPL	National Priority List Deletions	EPA	12/16/2014	01/08/2015	02/09/2015
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	07/31/2012	08/07/2012	09/18/2012
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EDR US Hist Auto Stat	EDR Exclusive Historic Gas Stations	EDR, Inc.			
US	EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	09/29/2014	09/30/2014	11/06/2014
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	07/21/2014	10/07/2014	10/20/2014
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
US	FEMA UST	Underground Storage Tank Listing	FEMA	01/01/2010	02/16/2010	04/12/2010
US	FINDS	Facility Index System/Facility Registry System	EPA	08/16/2014	09/10/2014	10/20/2014
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	06/06/2014	09/10/2014	09/18/2014
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	12/29/2014	12/30/2014	03/09/2015
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	01/23/2015	02/06/2015	03/09/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	02/01/2013	05/01/2013	11/01/2013

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	01/30/2015	02/05/2015	03/09/2015
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/10/2015	03/13/2015
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	01/28/2015	01/30/2015	03/13/2015
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	01/08/2015	01/08/2015	02/09/2015
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2005	12/08/2006	01/11/2007
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	02/01/2013	05/01/2013	01/27/2014
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	01/30/2015	02/05/2015	03/13/2015
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/13/2015	03/13/2015
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	01/29/2015	01/30/2015	03/13/2015
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	12/14/2014	02/13/2015	03/13/2015
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	09/29/2014	10/01/2014	11/06/2014
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	11/25/2014	11/26/2014	01/29/2015
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	02/18/2014	03/18/2014	04/24/2014
US	LUCIS	Land Use Control Information System	Department of the Navy	12/03/2014	12/12/2014	01/29/2015
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	12/29/2014	01/08/2015	01/29/2015
US	NPL	National Priority List	EPA	12/16/2014	01/08/2015	02/09/2015
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	07/01/2014	10/15/2014	11/17/2014
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	02/01/2011	10/19/2011	01/10/2012
US	PRP	Potentially Responsible Parties	EPA	10/25/2013	10/17/2014	10/20/2014
US	Proposed NPL	Proposed National Priority List Sites	EPA	12/16/2014	01/08/2015	02/09/2015
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	10/07/2014	10/08/2014	10/20/2014
US	RCRA NonGen / NLR	RCRA - Non Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RMP	Risk Management Plans	Environmental Protection Agency	08/01/2014	08/12/2014	11/06/2014
US	ROD	Records Of Decision	EPA	11/25/2013	12/12/2013	02/24/2014
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	03/07/2011	03/09/2011	05/02/2011
US	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2011	07/31/2013	09/13/2013
US	TSCA	Toxic Substances Control Act	EPA	12/31/2012	01/15/2015	01/29/2015
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	09/14/2010	10/07/2011	03/01/2012
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/16/2014	10/31/2014	11/17/2014
US	US AIRS MINOR	Air Facility System Data	EPA	10/16/2014	10/31/2014	11/17/2014

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	12/22/2014	12/22/2014	01/29/2015
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	11/19/2014	11/21/2014	01/29/2015
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	12/30/2014	12/31/2014	01/29/2015
US	Oil/Gas Pipelines	GeoData Digital Line Graphs from 1:100,000-Scale Maps	USGS			
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
US	USGS 7.5' Topographic Map	Scanned Digital USGS 7.5' Topographic Map (DRG)	USGS			

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

KALIHI VALLEY HOMES
2250 KALENA DR.
HONOLULU, HI 96819

TARGET PROPERTY COORDINATES

Latitude (North):	21.3484 - 21˚ 20' 54.24''
Longitude (West):	157.8658 - 157˚ 51' 56.88''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	617607.9
UTM Y (Meters):	2360991.5
Elevation:	237 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	21157-C7 HONOLULU, HI
Most Recent Revision:	Not reported
West Map:	21157-C8 PEARL HARBOR, HI
Most Recent Revision:	Not reported

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

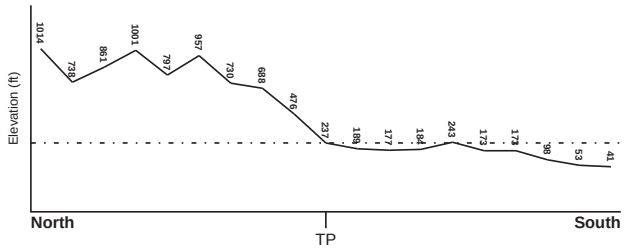
TOPOGRAPHIC INFORMATION

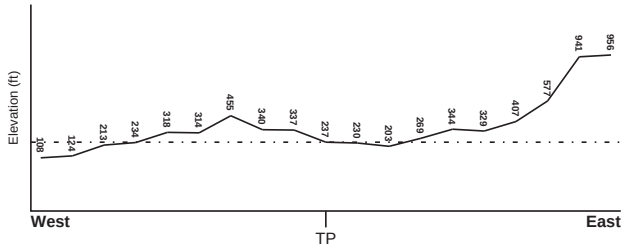
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SSE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 237 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
HONOLULU, HI	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 15003C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
HONOLULU	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

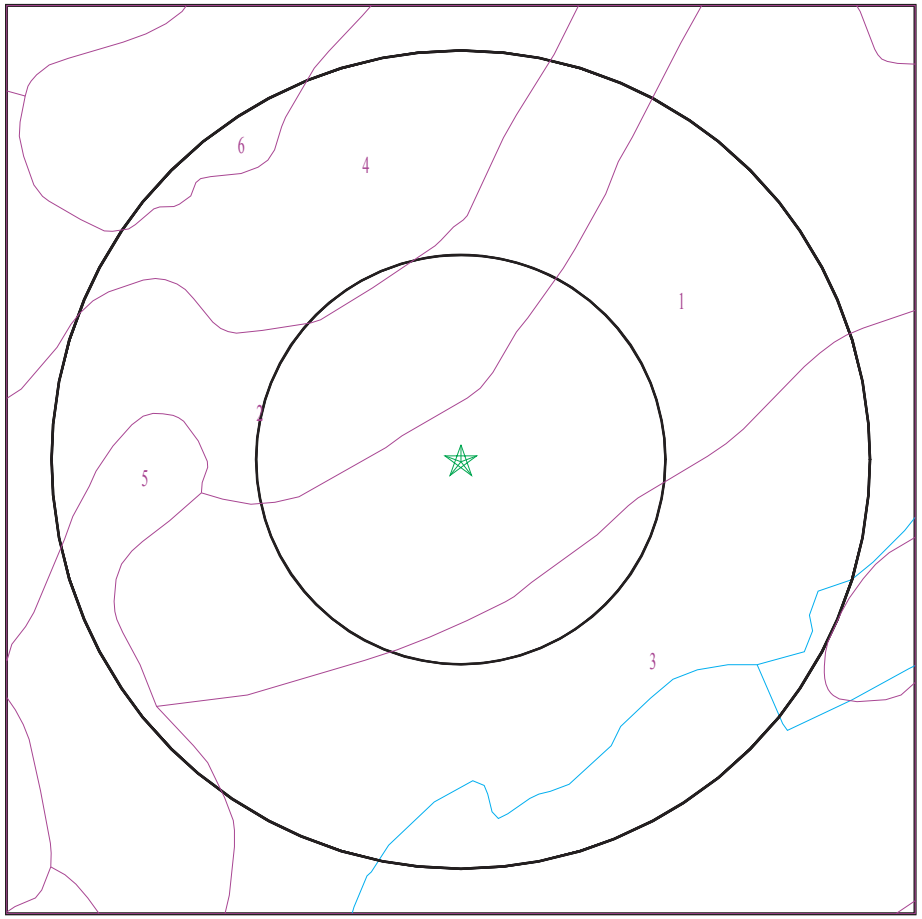
GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT		GEOLOGIC AGE IDENTIFICATION	
Era:	-	Category:	-
System:	-		
Series:	-		
Code:	N/A *(decoded above as Era, System & Series)*		

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4237094.22s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME: Kalihi Valley Homes ADDRESS: 2250 Kalena Dr. Honolulu HI 96819 LAT/LONG: 21.3484 / 157.8658	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.22s DATE: March 17, 2015 5:33 pm

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DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Kaena

Soil Surface Texture: stony clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Poorly drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 107 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	stony clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4.23 Min: 0.42	Max: 7.3 Min: 6.6
2	9 inches	37 inches	stony clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 7.3 Min: 6.6
3	37 inches	53 inches	stony clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 7.3 Min: 6.6

Soil Map ID: 2

Soil Component Name: Rock land

Soil Surface Texture: silty clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	3 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6
2	3 inches	7 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6
3	7 inches	20 inches	bedrock	Not reported	Not reported	Max: 0.42 Min: 0.02	Max: Min:

Soil Map ID: 3

Soil Component Name: Kaena

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Poorly drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 107 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4.23 Min: 0.42	Max: 7.3 Min: 6.6
2	9 inches	37 inches	stony clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 7.3 Min: 6.6
3	37 inches	53 inches	stony clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 7.3 Min: 6.6

Soil Map ID: 4

Soil Component Name: Manana

Soil Surface Texture: silty clay

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	14 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14.11 Min: 1.41	Max: 5.5 Min: 4.5
2	14 inches	59 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 5 Min: 3.6

Soil Map ID: 5

Soil Component Name: Kawaihapai

Soil Surface Texture: clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	22 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 42.34 Min: 4.23	Max: 7.3 Min: 6.6

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	22 inches	31 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.14 Min: 14.11	Max: 7.3 Min: 6.6
3	31 inches	53 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.14 Min: 14.11	Max: 7.3 Min: 6.6

Soil Map ID: 6

Soil Component Name: Manana

Soil Surface Texture: silty clay

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14.11 Min: 1.41	Max: 5.5 Min: 4.5

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	9 inches	59 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 1.41 Min: 0.01	Max: 5 Min: 3.6

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
C8	USGS40000269937	1/2 - 1 Mile South
C10	USGS40000269923	1/2 - 1 Mile South
D12	USGS40000269996	1/2 - 1 Mile ESE
C15	USGS40000269919	1/2 - 1 Mile South

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	HI0000331	1/2 - 1 Mile WSW

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

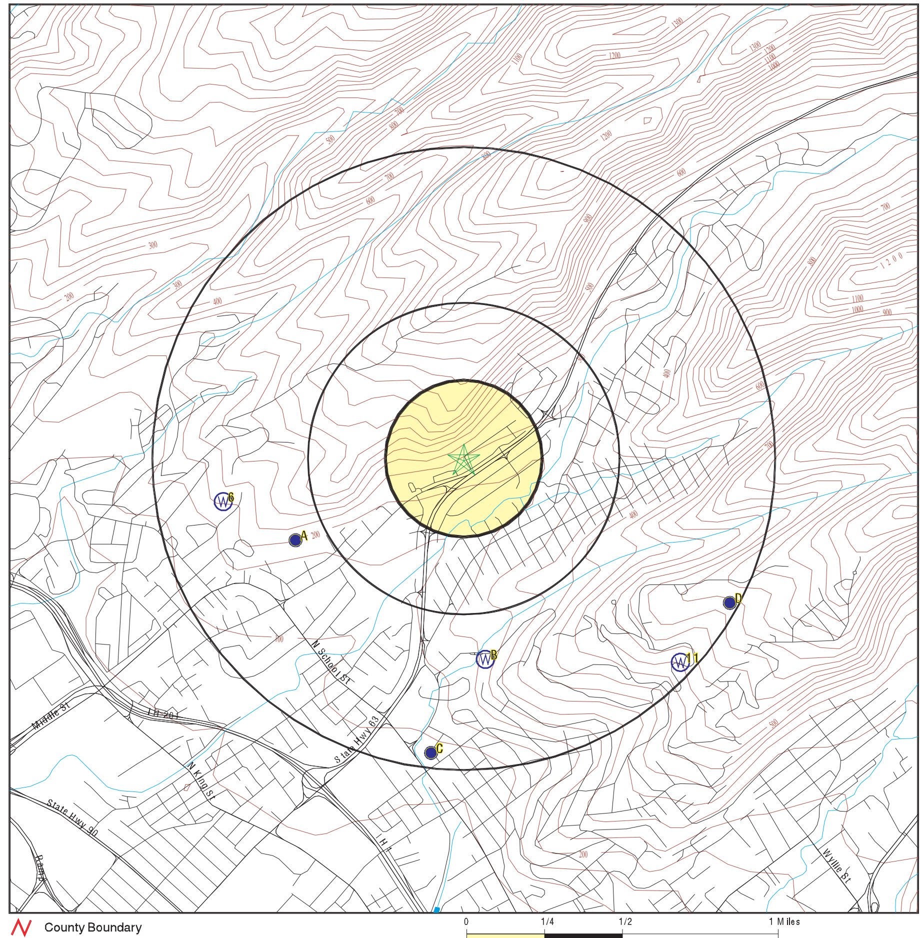
MAP ID	WELL ID	LOCATION FROM TP

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A2	HI8000000002622	1/2 - 1 Mile WSW
A3	HI8000000002625	1/2 - 1 Mile WSW
B4	HI8000000002579	1/2 - 1 Mile South
B5	HI8000000002565	1/2 - 1 Mile South
6	HI8000000002634	1/2 - 1 Mile West
C7	HI8000000002537	1/2 - 1 Mile South
C9	HI8000000002534	1/2 - 1 Mile South
11	HI8000000002566	1/2 - 1 Mile SE
C13	HI8000000002519	1/2 - 1 Mile South
D14	HI8000000002597	1/2 - 1 Mile ESE

PHYSICAL SETTING SOURCE MAP - 4237094.22s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location

SITE NAME: Kalihi Valley Homes	CLIENT: Helber , Hastert, and Fee Planners
ADDRESS: 2250 Kalena Dr.	CONTACT: Aaron Mann
Honolulu HI 96819	INQUIRY #: 4237094.22s
LAT/LONG: 21.3484 / 157.8658	DATE: March 17, 2015 5:33 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
A1 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FRDS PWS**	**HI0000331**
A2 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002622**
A3 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002625**
B4 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002579**
B5 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002565**
6 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002634**
C7 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002537**
C8 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269937**
C9 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002534**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
C10 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269923**
11 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002566**
D12 **ESE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269996**
C13 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002519**
D14 **ESE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002597**
C15 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269919**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for HONOLULU County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 96819

Number of sites tested: 4

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	-0.475 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	0.050 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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EXHIBIT C

Section 106 Consultation &

Architectural Inventory Survey Information

DAVID Y. IGE
GOVERNOR OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555
KAPOLEI, HAWAII 96707

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

KEKOA KALUHIWA
FIRST DEPUTY

JEFFREY T. PEARSON
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

November 30, 2015

IN REPLY REFER TO:
LOG: 2015.02939
DOC: 1509JLP40
Architecture, Archaeology,
History and Culture

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
P.O. Box 17907
Honolulu, HI 96817

Dear Mr. Ouansafi,

SUBJECT: **Chapter 6E-8 and National Historic Preservation Act (NHPA) Section 106 Consultation - Department of Housing and Urban Development (HUD)**
Department of Human Services, Hawaii Public Housing Authority
Kalihi Valley Homes Rehabilitation Project – 2250 Kalena Drive
Kalihi Ahupua‘a, Kona District, Island of O‘ahu
TMK: (1) 1-3-022:001

Thank you for your submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services (DHS), Hawaii Public Housing Authority (HPHA) consultation with SHPD in accordance with 36 CFR 800.3, and pursuant to Hawaii Revised Statutes (HRS), Chapter 6E. SHPD received another submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience.

The submittal indicates that the HPHA is requesting the State Historic Preservation Officer's (SHPO) concurrence with a determination of "no effect" for the proposed HUD repair and rehabilitation improvement projects involving 43 existing public housing developments located throughout the State over the next fivd5 (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 consultation on their behalf.

This letter addresses the Kalihi Valley Homes Project at 2250 Kalena Drive. The HPHA has identified the area of potential effects (APE) as the 24.53 acre area parcel owned by the State (HPHA) which is identified as TMK: (1) 1-3-022:001. DHS/HPHA have indicated at this stage of the planning process, they are unclear whether the subject 24.53-acres project area will require any ground disturbances.

Our records indicate that no archaeological inventory survey has been conducted within the subject parcel and that no historic properties have been identified. However, based on nearby studies potential exists to encounter subsurface traditional Hawaiian and/or historic properties within the subject parcel.

The SHPD has reviewed the undertaking at 2250 Kalena Drive, and the SHPO's determination is **no adverse effect** pursuant to NHPA Section 106 and **no historic properties affected** pursuant to HRS §6E-8 within the APE **provided the following conditions are met:**

- If ground disturbing activity is anticipated, DHS must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation;
- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;

- Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;
- Submit a TMK map showing the full extent of the project area within the affected parcel/s;
- Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Summary of land use history, such as previous intensive cultivation, grubbing or grading;
- Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions regarding archaeological resources or concerns please contact Susan Lebo at (808) 692-8019 or at Susan.A.Lebo@hawaii.gov. For any history and cultural concerns please contact Ka‘āhiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov. Please contact Jessica Puff at Jessica.L.Puff@hawaii.gov or at (808) 692-8023 for any questions regarding architectural concerns or this letter.

Sincerely,

Alan A. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

ARCHITECTURAL INVENTORY SURVEY
HAWAII PUBLIC HOUSING AUTHORITY
(FEDERAL PROJECTS)

Prepared by
Fung Associates, Inc.
1833 Kalakaua Avenue, Suite 1008
Honolulu, HI 96815

For

Hawaii Public Housing Authority
and
HHF Planners

July, 2015

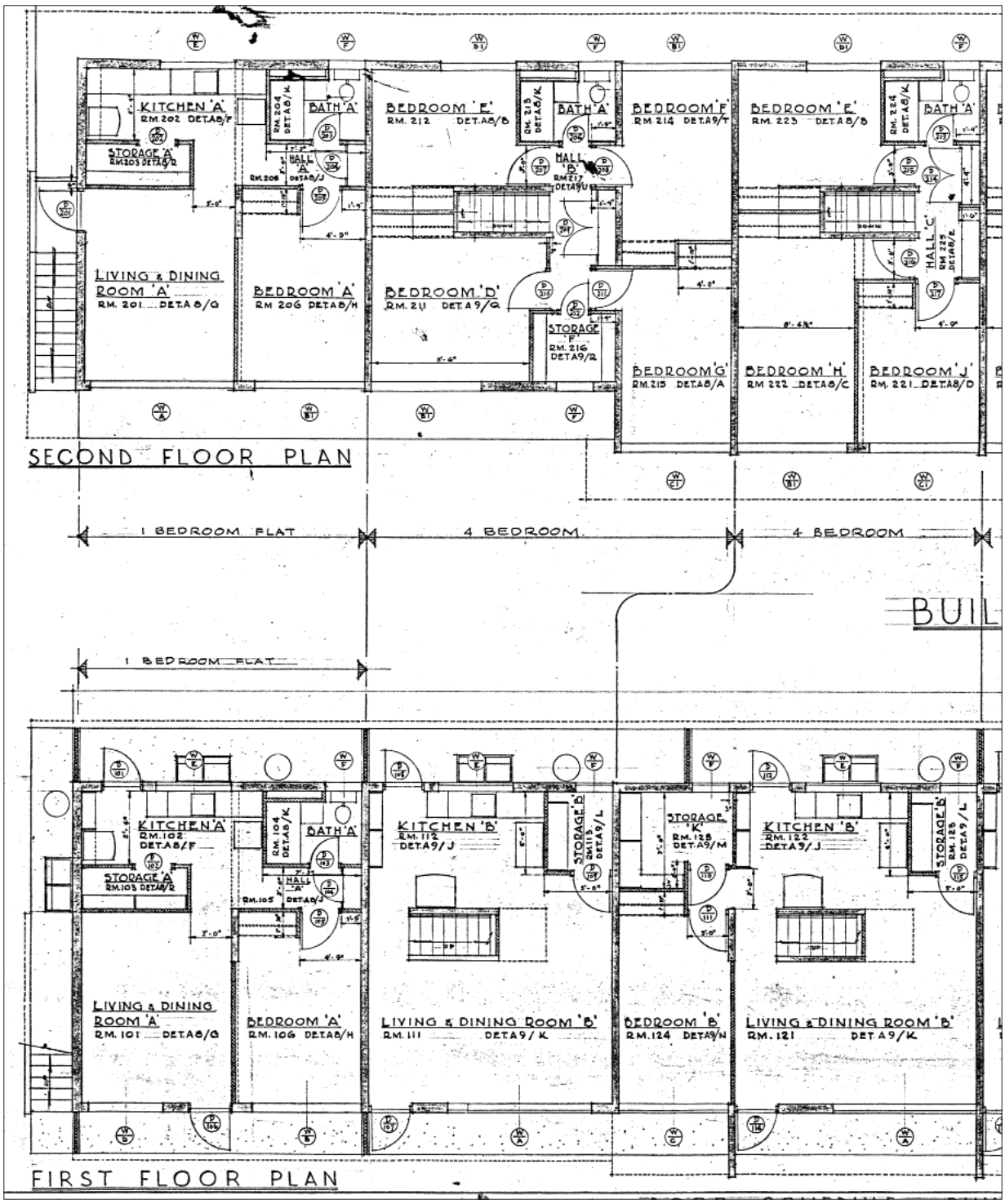
Recreation Center

Administration Building

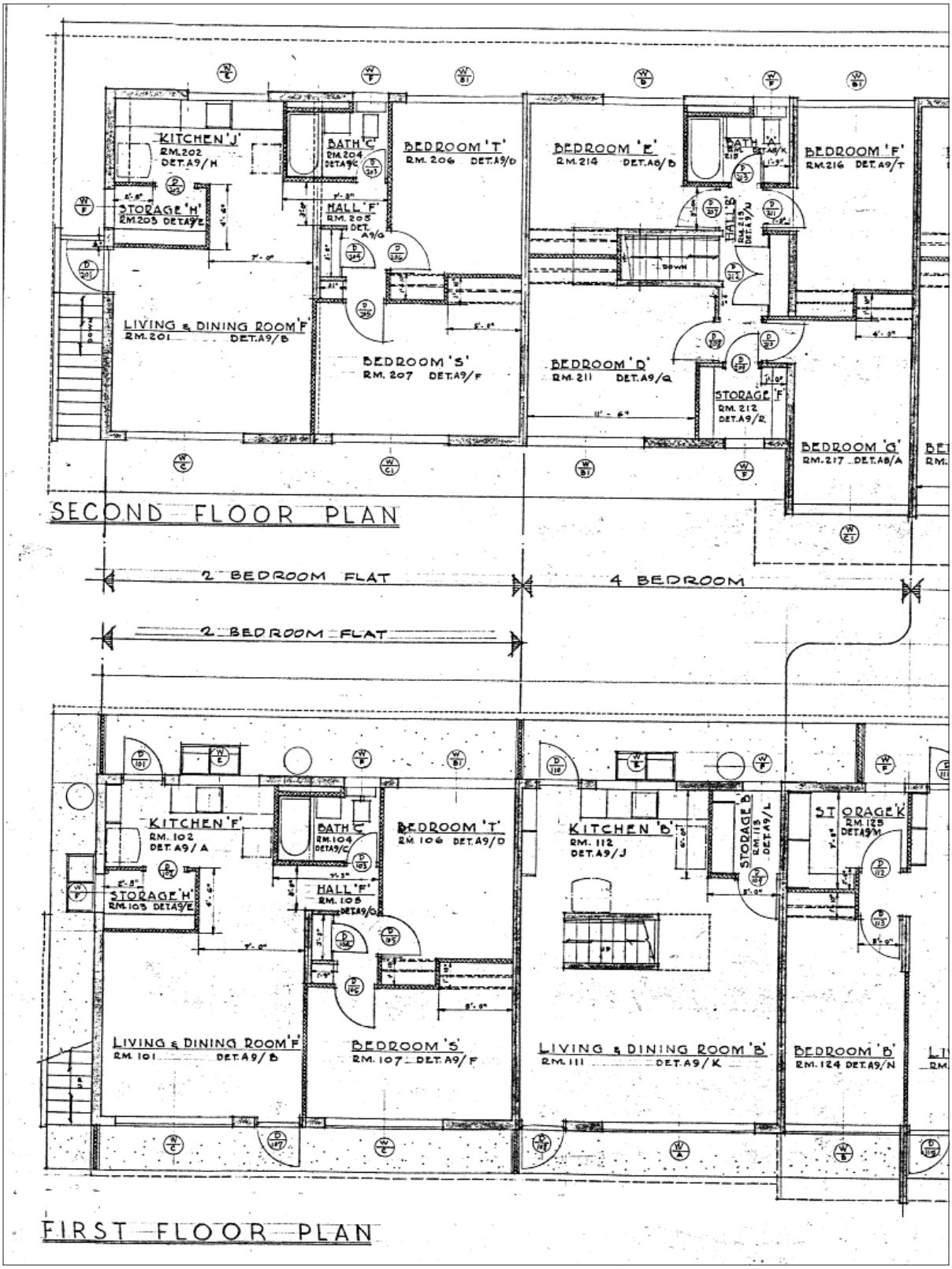
There are three type of building layouts. The 23 remaining Type A buildings (three originals have been demolished) contain nine units each – two one-bedroom, four three-bedroom, two four-bedroom and one five-bedroom apartment. The eighteen Type B buildings also have nine units each– four two-bedroom, one three-bedroom plus four four-bedroom apartments. Only one Type C building was constructed (Building 23), which has four three-bedroom apartments. The buildings essentially follow a rectangular floor plan, but Types A and B have a receded jog at one end. A canopy runs across the receded section to maintain the line of the façade. The Type A buildings have at the end of the jog a one bedroom apartment at both the first and second floors, with a straight run of concrete steps running up the side of the building to access the second story. The Type B buildings have similar sets of steps at both ends of the building, which access a second floor two bedroom unit. Walls for wind and rain protection have been added at the second-floor stair landings, but are historic in their own right.

Building Type A

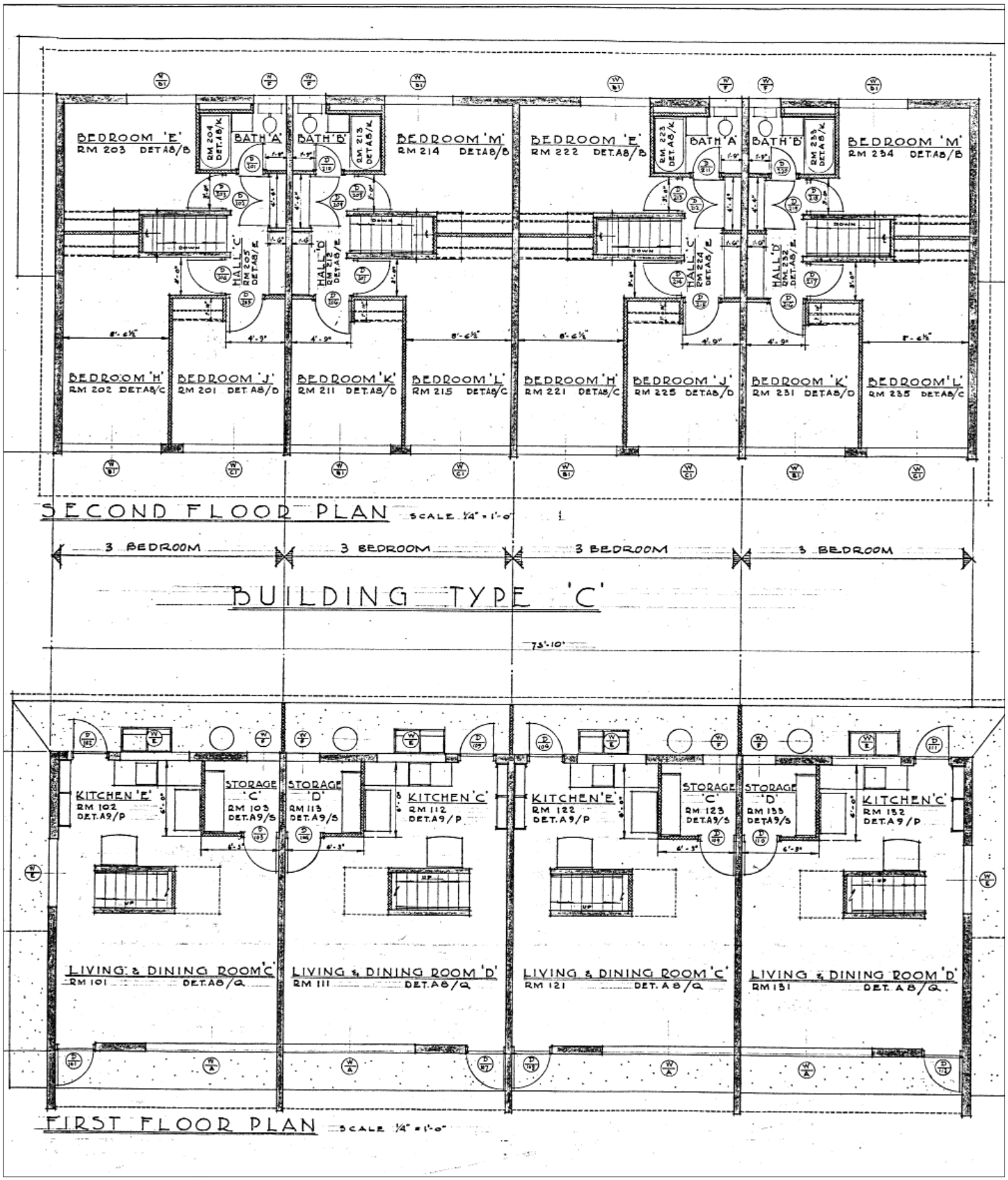
Building Type B



Building Type A Typical Floor Plan
Merrill Simms & Roehrig Architects, *Floor Plans - Building Type "A" (Kalihi Valley Homes)*, Sheet A-1, 1952, Hawaii Housing Authority.



Building Type B Typical Floor Plan
Merrill Simms & Roehrig Architects, *Floor Plans - Building Type "B" (Kalihi Valley Homes)*, Sheet A-2, 1952, Hawaii Housing Authority.



Building Type C Floor Plan
Merrill Simms & Roehrig Architects, *Floor Plans - Building "C" (Kalihi Valley Homes)*, Sheet A-3, 1952, Hawaii Housing Authority.

Two different remodelings have been completed at Kalihi Valley Homes, between 2001 and the present, and three buildings have been demolished. Twelve buildings have been altered by adding standing seam metal, hip-gablet roofs and porches, replacing the windows and doors, adding sliding glass doors at the rear of the kitchen, and renovating the kitchens. Another thirteen buildings, received most of the same changes; however, pitched roofs and porches were not added, leaving the flat roof profile and façade of the original buildings intact.

Renovated Buildings with Flat Roof

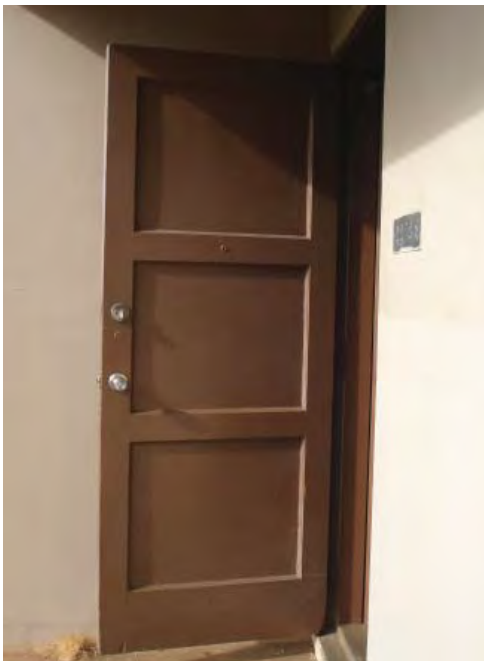
Building 19 to 22

The remaining fifteen residential buildings at Kalihi Valley Homes, comprised of eight Type A Buildings and seven Type B, are relatively unaltered, and remain next to each other, located above and below Kalaunu Street, with two terraced rows above and two below. A historic lava rock wall, approximately 8 feet high, retains the terrace immediately above the roadway in front of Buildings 28 and 33. Original wood-frame sliding windows with four horizontal panes remain, as do most original three panel entry doors. The sliding windows sit on a concrete block base, and a 3 feet wide concrete lanai runs the length of the façade of all the buildings, at both the front and rear. Neighboring units are separated by 3 inches wide CMU walls, with similar wing walls at the ends of the buildings.

Buildings above Kalaunu Street

Lava Rock Wall

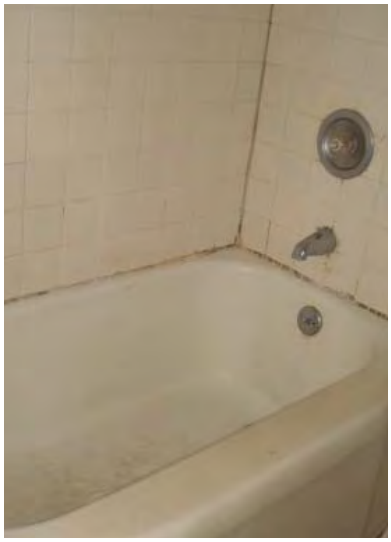
Original Sliding Windows with Concrete Block Base



Original Three Panel Entry Door

On the interiors, many original doors also remain, as well as most bathroom fixtures. Kitchens have been renovated, and an original storage room on the first floor appears to have been removed, or not constructed according to plans. The kitchens and bathrooms retain their original 1 pane over 1 pane double hung sash windows, while the living room and bedrooms feature sliding windows, in sets of either three or four windows. Most units are two floors, with kitchen and shared living/dining area at the lower level, and bedrooms and bath on the upper floor, though there are some one and two bedroom apartments that are on one level only. The rear of each apartment (except for the one-level apartments on the upper floor) includes a lanai laundry area, which is separated from neighboring units by 3 inches wide CMU walls. Metal, T-shaped poles with clothes lines are located in the back yards.

Original Interior Door



Original Tub

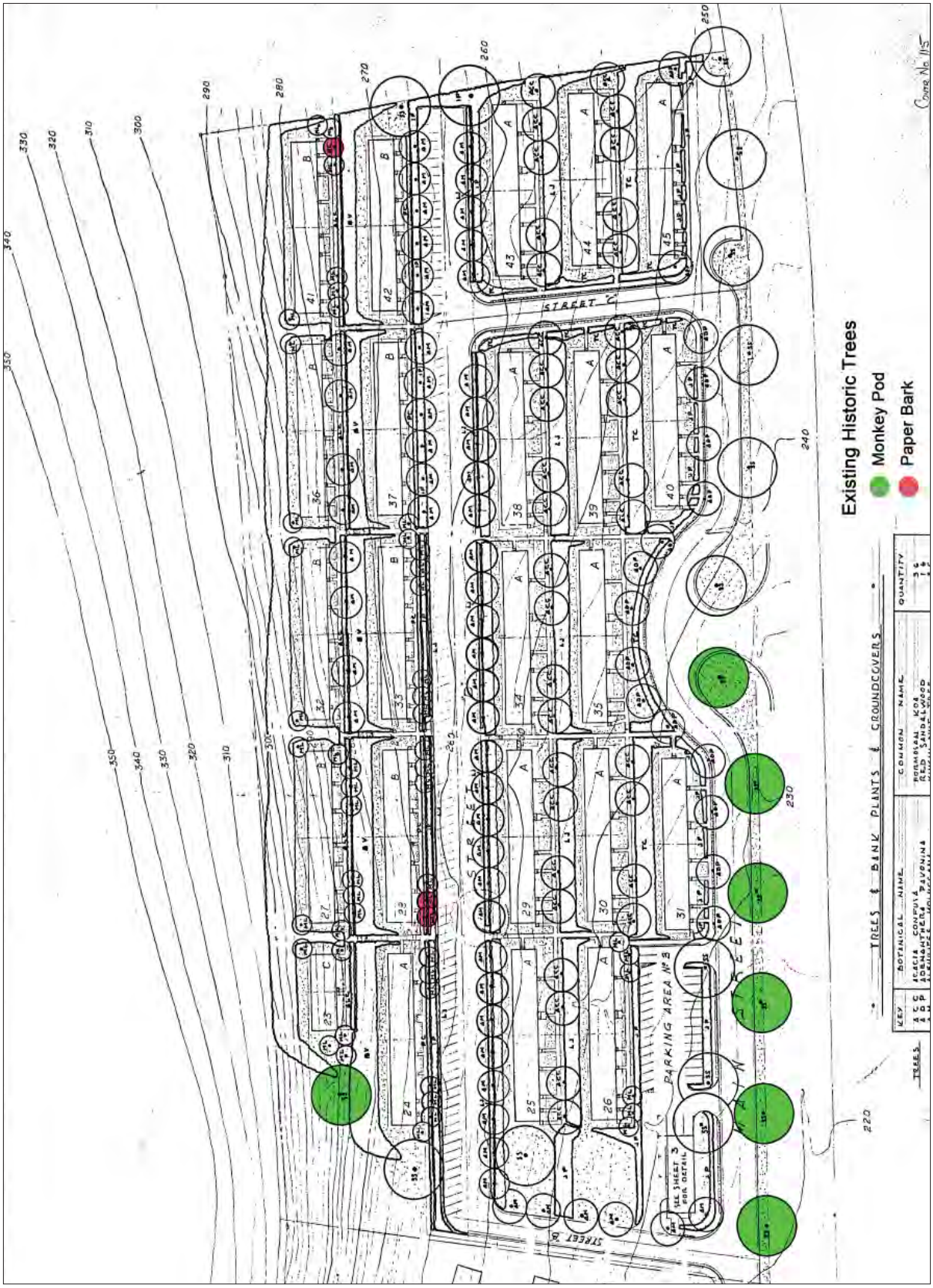
Renovated Kitchen

1 X 1 Double Hung Window at the Kitchen

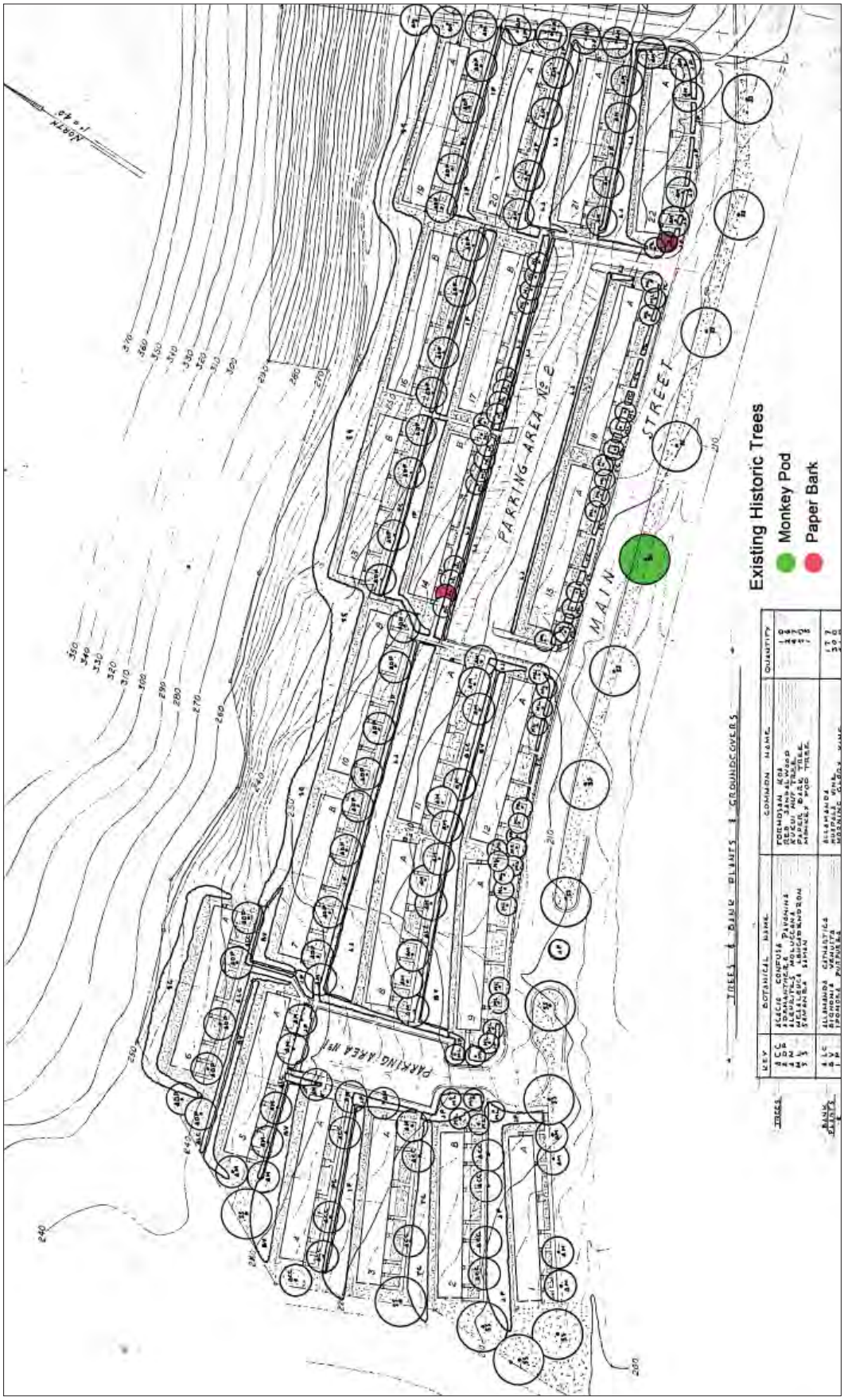
Original Building Numbers

Rear Elevation

Most of the historic landscaping in the housing area no longer exists; however, a few paperbark and monkey pod trees planted at the opening of the project still remain (see below and next page)



East Half Landscape Plan Shows Historic Trees
Merrill Simms & Roehrig Architects, Austin & Towill Civil Engineers, Lawns & Planting for East Half*(Kalihi Valley Homes)*, Sheet L-2, 1952, Hawaii Housing Authority.



West Half Landscape Plan Shows Historic Trees
Merrill Simms & Roehrig Architects, Austin & Towill Civil Engineers, Lawns & Planting for West Half*(Kalihi Valley Homes)*, Sheet L-1, 1952, Hawaii Housing Authority.

KALIHI VALLEY HOMES

History and Significance

Kalihi Valley Homes received federal approval for funding in 1951, however, due to a protracted land acquisition process, Hawaiian Dredging did not commence construction until 1952. Built on twenty eight acres, which included a former piggery and residential slum area, the project was designed by Merrill, Simms, & Roehrig and rendered in a modern style with flat roofs, and continued the already well established Zeilenbau layout, being terraced in parallel rows.

The project was completed in its entirety in November 1953 with an initial move-in date of August 25, 1953 for some units. The project consisted of 400 one- to five-bedroom units in 45 buildings. The structure of the buildings was referred to as “egg crate” by HHA, meaning, “reinforced concrete walls at the exterior and party walls act as beams and columns supporting the reinforced flat slabs that form the second floors and the roofs of the structure.”[23] The formal dedication of the project took place on February 26, 1954.

Family Moves into Home
(HHA Annual Report for 1963/1964)

The project was designed by one of the major architectural firms in Honolulu during the post-war period, Merrill, Simms & Roehrig. William Dickey Merrill was born in Honolulu and received a BA from the University of California at Berkeley and MA in architecture from Harvard in 1932. He worked for his uncle, architect C. W. Dickey, and following Dickey’s death continued the office as Merrill, Simms Roehrig. In 1959 the firm became Merrill, Roehrig, Onodera & Kinder. In 1964 Merrill retired from the firm and it became Roehrig, Onodera & Kinder with Ken Roehrig as president. The firm designed the Neal Blaisdell Center’s Concert Hall, Goddard Hall at the Hawaii State Hospital, and several buildings at Kamehameha Schools. Other buildings by Merrill, Simms & Roehrig or their successors included Leahi Hospital, Puumaile Hospital, Star of the Sea School, Mid-Pacific Institute’s administration building and auditorium, Hilo Library, Gateway Dorm at UH, and Hilton Hale at Kaanapali. The Kalihi Valley Homes project is a good example of the architect’s use of the international style of architecture within a tropical context, and is comparable to their work at Kamehameha Schools, Mid-Pacific Institute, and Leahi Hospital.

23 HHA, Annual Report for 1953.

Kalihi Valley Homes is significant at the state level for its associations with public housing and the general social history of Hawaii. The project represents the housing reform movement of the Territory and the State and is an intact, early example of concrete construction used for this purpose by the Territory, as well as the Territory's largest housing project at its date of completion.

The major projects in Honolulu undertaken by HHA during the 1950s were Mayor Wright Housing, Kalihi Valley Homes, Kuhio Homes, Puahala Housing, and Palolo Valley Homes. Previous inventory studies concluded that neither Mayor Wright Housing nor Kuhio Homes appeared to meet the criteria for listing in the National Register.[24] The initial increments of Puahala Housing have also been remodeled and have lost their integrity. As such buildings 25, 28, 29, 30, 32, 33, 34, 36, 37, 38, 39, 41, 42, 43 and 44 in Kalihi Valley Homes, are among the best examples of low income housing constructed in Honolulu during the 1950s and have strong associations with the history of public housing in Hawaii during this period (Criterion A).

The housing area is also significant under Criterion C as its architecture is typical for its period in its design, use of materials, and craftsmanship. Following the Bauhaus inspired Zeilenbau site plan the buildings are laid out in parallel rows with space in between to allow for ample light and ventilation. Also the two story, reinforced concrete buildings were constructed in a modern style typical of public housing of the period, as proclaimed by their flat roofs, horizontal lines accentuated by their flat roofed canopies, and minimal ornamentation. Their wood-frame sliding windows, and three-panel interior doors also bespeak the period in which they were constructed. Also, the bedroom closets were designed to not have doors, a common feature in public housing of the time.

Projects adhering to the Zeilenbau plan and the international style of architectural design included: Palolo Valley Homes, Kalihi Valley Homes. Certain buildings in Kalihi Valley Homes had been remodeled in a post-modern style and these were evaluated not significant for lack of design integrity. All the remaining buildings were considered to be good examples of their type and style. Kalihi Valley Homes still retain their original windows, original stainless steel sinks and counter tops. As a result, the non-remodeled buildings at Kalihi Valley Homes appear to best retain their historic integrity and were evaluated as meeting the criteria for listing in the National Register of Historic Places as excellent examples of public housing in Hawaii to follow the Zeilenbau plan.

Due to alterations, most buildings at Kalihi Valley Homes do not retain enough aspects of integrity to be considered eligible for the National Register; however buildings 25, 28, 29, 30, 32, 33, 34, 36, 37, 38, 39, 41, 42, 43 and 44 are very much intact and appears to meet the criteria for listing in the National Register of Historic Places as a historic district.

24 Mason, 2006, 2010.

HAWAII PUBLIC HOUSING AUTHORITY

ENVIRONMENTAL REVIEW

MAYOR WRIGHT HOMES

Honolulu, O`ahu

AMP 32
HPHA No. 1003

Prepared for:

State of Hawaii
Hawaii Public Housing Authority

Prepared by:

HHF PLANNERS
places for people

U.S. Department of Housing and Urban Development
451 Seventh Street, SW
Washington, DC 20410
www.hud.gov

espanol.hud.gov

Environmental Review for Activity/Project that is Categorically Excluded Subject to Section 58.5

Pursuant to 24 CFR 58.35(a)

Project Information

Project Name: Mayor Wright Homes (AMP 32)

Responsible Entity: Hawaii Public Housing Authority
1002 North School Street
Honolulu, HI 96817

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

State/Local Identifier: State of Hawai‘i

Preparer: Mr. Scott Ezer, Vice President
HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawai‘i 96813

Certifying Officer Name and Title: Mr. David Y. Ige
Governor, State of Hawai‘i

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

Consultant (if applicable): HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawai‘i 96813

Direct Comments to: Mr. Hakim Ouansafi, Executive Director
Hawaii Public Housing Authority
1002 North School Street
Honolulu, Hawai‘i 96817

Project Location: 521 North Kukui Street
Honolulu, Hawai‘i 96817

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]**:**

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a "major construction activity" and would involve one or a combination of several HUD designated categories of actions.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent;
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons;
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland;
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation;
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls);
7. Interior and exterior renovations and rehabilitation;
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site;
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Level of Environmental Review Determination:

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.5. Compliance with and completion of conformance determinations for other statute, executive order, or regulation has been completed and support the Categorical Exclusion.

Funding Information

Grant Number	HUD Program	Funding Amount
To be determined	Capital Fund	To be determined
To be determined	Economic Development Initiative Special Project Grant	To be determined
To be determined	Other Grants	To be determined

Estimated Total HUD Funded Amount:

To be determined by HUD using a formula and based upon federal budget.

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]**:**

Depends upon funds available.

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	*The project is not within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.*
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☒	*The State of Hawai'i does not have any designated coastal barrier resource units. (http://www.fws.gov/CBRA/Maps/Mapper.html)*
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes ☐ No ☒	*As indicated in the Flood Insurance Rate Map Panel 15003C0354G, the project site is located in Zone X and is determined to have minimal flood hazard and is outside the 500-year flood zone. Based on the project description the project includes no activities that would require further evaluation under this section. The project does not require flood insurance or is exempt from flood insurance. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with Flood Insurance Requirements.*

STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5		
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes ☐ No ☒	*The State of Hawai'i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. EPA's Green Book for currently designated "nonattainment areas" as of June 2015. Planned repair and rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.*
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes ☐ No ☒	*Documentation from the Office of Planning determined that projects receiving federal funds do not require review for consistency with Hawai'i's Coastal Zone Management (CZM) program.*
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☐ No ☒	*There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.*
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes ☒ No ☐	*The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices, while project-specific mitigation measures are identified in the following section.*
Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes ☐ No ☒	*There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.*

Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes ☐ No ☒	*The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.*
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes ☐ No ☒	*The project site is located in Zone X, an area of minimal flooding (i.e., 0.2% annual chance flood), and is located outside the 500-year flood zone. A field inspection and information obtained from the property manager confirmed no major flooding issues within the project site.*
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes ☒ No ☐	*Constructed in 1952, the project has reached a 50-year milestone, and could be eligible for listing on the State and National Register of Historic Places (NRHP). A historic property evaluation (HPE) report prepared by Mason Architects, Inc. (April 2006) determined that this project did not retain sufficient levels of integrity (defined as location, design, setting, materials, workmanship, feeling and association). All of the buildings did not meet NRHP eligibility criteria due to prior significant alterations and renovations. The building's integrity of setting, design, materials, workmanship, feeling, and association have been greatly compromised. In a letter dated December 2, 2015, the State Historic Preservation Officer determined that repair and rehabilitation improvements for this project would have "no adverse effect" on historic properties pursuant to NHPA Section 106 and subject to certain mitigative measures.*
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes ☐ No ☒	*The project site is situated along three major City roadways serving the downtown area along with the surrounding Kalihi business area. The HUD noise level calculator estimated noise levels at the project site from North King Street and North Vineyard Boulevard to each be about 58.5 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.*

Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes ☐ No ☒	*The housing project is located within the O'ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation.*
Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☐ No ☒	*There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.* *(http://www.fws.gov/wetlands/data/mapper.HTML)*
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes ☐ No ☒	*There are no Wild and Scenic Rivers in Hawai'i, which excludes this project from mitigation or formal consultation requirements (http://www.rivers.gov/map.php)*
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes ☐ No ☒	*Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, these improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects on minority populations and low-income populations. Improvements should benefit low-income and minority populations living within this housing project.*

Field Inspection (Date and completed by)**:** June 5, 2015
Joseph Tamburello, Planner
HHF Planners

Summary of Findings and Conclusions:

Repair and rehabilitation improvements implemented for this existing housing project by HPHA should not result in significant environmental impacts based upon research data collected, a field inspection, consultation with the site manager and maintenance staff, consultation with pertinent resource agencies, and prior HPHA experience implementing repair and rehabilitation improvements. Therefore, repair and rehabilitation improvements would comply and be consistent with the statutes, executive orders, and regulations addressed. Furthermore, HPHA would evaluate improvements planned to ensure the work is consistent with the designated categories of actions described under the project description section. Compliance with these factors evaluated are further addressed in the attached Source Documentation Statutory Worksheet along with relevant technical reports/assessments.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Law, Authority, or Factor	Mitigation Measure
Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	*Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.* *Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.* *Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.* *Newell's shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.* *Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if*

	the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season. *<u>Hawaiian Waterbirds</u>: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo'i, impoundments or other vegetated water bodies.* *1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols.* *2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.* *3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.* *In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.* *<u>Additional Measures</u>: The following additional measures would be implemented:* *1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.*
National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	*1. If ground disturbing activity is anticipated, HPHA must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation.* *a. Submit detailed plans, specifications and a detailed scope of work once the plans have been developed.* *b. Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be*

	submitted to SHPD for review, comment, and meaningful consultation. *c. Submit a TMK map showing the full extent of the project area within the affected parcel/s.* *d. Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area.* *e. Summary of land use history, such as previous intensive cultivation, grubbing or grading.* *f. Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.* *In addition to these mitigation measures, the HPHA would enter into a Programmatic Agreement with the SHPO to address the implementation of future repair and rehabilitation improvements to State housing projects after the current Section 106 review process is completed and prior to the next environmental review process in approximately five years. Furthermore, should subsurface human remains or other traces of human activity greater than 50 years old be encountered during construction, all work in the vicinity of the find would immediately stop and the SHPD would be promptly notified. The treatment of any human remains that are encountered would be conducted in accordance with applicable requirements of Chapter 6E, Hawai'i Revised Statutes (Historic Preservation) and Chapter 13-300, Hawai'i Administrative Rules (Rules of Practice and Procedure Relating to Burial Sites and Human Remains).*

Determination:

☒ This categorically excluded activity/project converts to **EXEMPT** per Section 58.34(a)(12), because it does not require any mitigation for compliance with any listed statutes or authorities, nor requires any formal permit or license; **Funds may be committed and drawn down after certification of this part** for this (now) EXEMPT project; OR

☐ This categorically excluded activity/project cannot convert to Exempt status because one or more statutes or authorities listed at Section 58.5 requires formal consultation or mitigation. Complete consultation/mitigation protocol requirements, **publish NOI/RROF and obtain "Authority to Use Grant Funds"** (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR

☐ This project is not categorically excluded OR, if originally categorically excluded, is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

Preparer Signature: Scott Ezer Date: 11-10-15

Name/Title/Organization: Mr. Scott Ezer, Vice President
HHF Planners

Responsible Entity Agency Official Signature:

David Y. Ige Date: APR 28 2016

Name/Title: Mr. David Y. Ige, Governor

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

MAYOR WRIGHT HOMES (HA # 1003)

TMK: (1) 1-07-029:003

Hawai‘i Public Housing Authority (HPHA) Environmental Review

SOURCE DOCUMENTATION (SD) STATUTORY WORKSHEET

Site Visit Date: June 5, 2015
Prepared By: Joseph Tamburello, Planner, HHF Planners

PROJECT DESCRIPTION

The Mayor Wright Homes housing project is located in the Liliha community of the Honolulu district on the island of O‘ahu. Liliha is located directly northwest of the Honolulu urban center and east of the Kalihi community.

The housing project site is bounded by North King Street, Liliha Street, Vineyard Boulevard, and Pua Lane. The property is located approximately a quarter mile east of Honolulu Community College. Mayor Wright Homes is the only project in HPHA’s Asset Management Project (AMP) 32.

Mayor Wright Homes was first occupied in 1952 and has a street address of 521 North Kukui Street. This property consists of 14.84 acres, and it is identified as Tax Map Key (TMK) Number (1) 1-07-029:003. The housing project is comprised of 35 two-story townhouse buildings providing a total of 364 housing units with one, two, three, four, or five bedrooms per unit, and a two-story common area building that houses a community center and administrative offices. The State land use designation for the property is the “Urban District,” and the City zoning for the site is A-2 Medium-Density Apartment.

The project site is not located within a tsunami evacuation zone, and the entire site is located in Flood Zone X, based upon the Flood Insurance Rate Map (Community Panel Number 15003C0354G, Revised January 19, 2011). Zone X is defined as areas determined to be outside the 0.2% annual chance floodplain.

The following figures in Exhibit A provide supporting information on this housing project:

Figure 1: Location Map
Figure 2: TMK Map
Figure 3: Site Map
Figure 4: Flood Map

COMPLIANCE FACTORS

I. AIRPORT CLEAR ZONES AND ACCIDENT POTENTIAL ZONES (24 CFR PART 51D)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable

The project is not within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: 24 CFR 51 (D).

Honolulu International Airport Master Plan - 2010 (August 1994), State Department of Transportation, Airports Division; and

*Hawai`i Airports and Flying Safety Guide (2012-13, Fifth Edition, Revision 1)* Hawai`i Department of Transportation, Airports Division and HDOT website at:

http://hidot.hawaii.gov/airports/files/2013/01/Airport-Safety-Guide-2012-2013-5rev1.pdf

II. COASTAL BARRIER RESOURCES (COASTAL BARRIER IMPROVEMENT ACT OF 1990 [16 USC 3501])

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable

The State of Hawai‘i does not have any designated coastal barrier resource units.

SUPPORTING DOCUMENTATION:

Printed: U.S. Fish and Wildlife Service website at:

http://www.fws.gov/CBRA/Maps/Mapper.html

III. FLOOD INSURANCE (FLOOD DISASTER PROTECTION ACT OF 1973 AND NATIONAL FLOOD INSURANCE REFORM ACT OF 1994 [42 USC 4001-4128 AND 42 USC 5154a])

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program.

Project site is located in Zone X and is determined to have minimal flood hazard and is outside the 500-year flood zone. A field inspection and information obtained from the site manager confirmed no major flooding issues with project site.

SUPPORTING DOCUMENTATION:

Field: A site visit of the project site did not visually show signs of prior flooding problems. Existing stormwater drainage systems appear to be working properly with the exception of a few drain inlets that appear to be higher than the surrounding grade, which can result in runoff ponding before entering the drainage system. An interview with the AMP Manager also determined that no major ponding or flooding issues have occurred on the project site.

Printed: Flood Insurance Rate Map, City and County of Honolulu, Hawai‘i Community Panel Number 15003C0354G, Revised January 19, 2011. A draft Physical Needs Assessment report (March 2015) for the project only identified one inlet grate near Building 15 should be replaced to improve stormwater drainage and indicated that some of the drain inlets should be adjusted to reduce potential ponding issues and trip hazards.

IV. CLEAN AIR ACT (40 CFR PARTS 6, 51, 93)

SUPPORTING DOCUMENTS	
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable

The State of Hawai‘i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. EPA's Green Book for currently designated "nonattainment areas" as of June 2015. Planned rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.

SUPPORTING DOCUMENTATION:

Printed: *State of Hawai‘i Annual Summary 2013 Air Quality Data*. State of Hawai'i, Department of Health, July 2014.

Web page: http://epa.gov/airquality/greenbk/. (Date accessed: 6/11/2015).

V. COASTAL ZONE MANAGEMENT ACT (16 USC 1451, SECTIONS 307 (C), (D))

CONTACT:

Mr. John Nakagawa
Office of Planning
Department of Business, Economic Development & Tourism
State of Hawai‘i
P.O. Box 2359
Honolulu, Hawai'i, 96804-2359

SUPPORTING DOCUMENTS

_____	Field
X	Contact
_____	Printed
X	Experience
_____	Study

DETERMINATION:

Status Category: Not Applicable.

Projects receiving federal funds from do not require review for consistency with Hawai‘i's Coastal Zone Management (CZM) program.

SUPPORTING DOCUMENTATION:

Contact: In an email to the Office of Planning (OP) dated July 27, 2015, the HPHA determined that the use of HUD funds for the implementation of repair and rehabilitation improvements does not require review for consistency with Hawai‘i's CZM program. The OP confirmed this determination in an email dated July 28, 2015 and it is included in the Appendices.

Experience: Previous reviews conducted by OP in 2003, 2005, and 2010 determined that projects receiving federal funds from HUD do not require CZM federal consistency review. OP's current determination confirms this condition is still applicable. Copies of these prior documentations are included in the Appendices.

VI. CONTAMINATION AND TOXIC SUBSTANCES (24 CFR PART 50.3 & 58.5(I)(2))

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Project Not Affected.

There are no known hazardous materials, contamination, toxic chemicals, gasses or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gasses, etc.

SUPPORTING DOCUMENTATION:

Field: A site visit and interview conducted with the maintenance supervisor indicated no toxic or radioactive materials warranting further concern. A storage area by the project's maintenance office is used for paints, gasoline, and other possible hazardous materials, and was observed to be in acceptable condition and labeled with signage.

Study: Environmental Data Resources, Inc. (EDR), Inquiry Number 4237094.26s, dated March 17, 2015 conducted a search of available environmental records. EDR reviewed more than 25 federal and state regulatory databases for information regarding the treatment, storage, disposal and release of toxic chemicals at the site and within specific radii (generally 1 mile) of the site. A Detail Map within the EDR report documents those sites identified within 0.25 miles of the project site. The EDR report in Exhibit B includes the results of their research findings.

The project site was identified as having several small quantity hazardous waste handlers within a category that generates less than 100 kilograms (kg) of hazardous waste during any month and accumulates less than 1,000 kg at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1,000 kg of hazardous waste at any time. No violations were found for these handlers.

The EDR detail maps also identified businesses and commercial and residential operations within 0.25 miles of the project site where there are large above ground or below ground storage tanks (1,000 – 10,000 gallons) for flammable materials (i.e. oil, gasoline, diesel, or propane). No violations or spills were noted in regards to these storage facilities (in-use or abandoned).

Approximately 0.22 miles southwest from the center of the Mayor Wright project site on Ka'aahi Street and Kaamahu Place off Dillingham Boulevard, soil contamination was discovered at the property occupied by Von Hamm Textiles. The Hawaii Department of Health instituted several requirements to ensure the containment of this hazardous material. Furthermore, this area of contamination is situated at a lower elevation than the

Mayor Wright project, further prohibiting the transference of contaminated particulates via storm water runoff/drainage.

VII. ENDANGERED SPECIES (50 CFR PART 402)

CONTACT:
Mr. Loyal Mehrhoff, Field Supervisor
Pacific Islands Administrator
Fish and Wildlife Services
U.S. Department of the Interior
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawai'i 96813
Tel. #: 792-9400

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Adverse Effect Subject to Mitigation

The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received by the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices.

SUPPORTING DOCUMENTATION:

Contact: A letter from the HPHA dated July 24, 2015 was submitted to the Pacific Island Administrator for the FWS determining that repair and rehabilitation improvements that may be implemented using HUD funds for this housing project would have no likelihood of effect on any listed species or proposed species, or existing or proposed designated critical habitat subject to certain measures. Concurrence with this determination along with proposed minimization and avoidance measures was received from the FWS in a letter dated September 28, 2015 which is included in the Appendices. This housing project is subject to the following minimization and avoidance measures.

Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.

Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.

Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.

Newell's shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only

be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.

Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.

Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo‘i, impoundments or other vegetated water bodies.

1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS’s recommended Hawaiian Waterbird Survey Protocols.
2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.
3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.

In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.

Additional Measures: The following additional measures would be implemented:

1. No vegetation or soil disturbance shall be conducted outside a project’s previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.

Experience: The FWS was previously consulted as part of environmental reviews that were completed in 2005 (39 housing projects) and 2010 (70 housing projects) which supported the determination that repair and rehabilitation improvements would either: 1) have no likelihood of effect for certain housing projects; or 2) not likely adversely affect federally listed species or critical habitat for certain housing projects subject to mitigative measures. A summary of these consultation efforts follows.

2005 Consultation: In a letter dated July 15, 2005, the Housing and Community Development Corporation of Hawai'i (predecessor to the HPHA), determined that the implementation of minor repair and rehabilitation improvements for 39 housing projects would not have an adverse effect on federally-listed species or critical habitat. In a letter dated August 11, 2005, the FWS concurred with the HCDCH determination.

2010 Consultation: In a letter dated May 17, 2010, the HPHA informed the FWS that HUD funds would be used to immediately implement repair and rehabilitation improvements for six housing projects on O'ahu and the island of Hawai`i. In a subsequent letter dated May 21, 2010, the FWS was informed that HPHA would be using HUD funds to implement minor repair and rehabilitation improvements for 64 projects throughout the State. In both letters, the HPHA determined that the repair and rehabilitation improvements were not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat. Based on further consultation and a meeting with FWS staff on June 24, 2010, the HPHA determined that repair and rehabilitation improvements for most of their housing projects would not likely adversely affect any listed or proposed species, or existing or proposed designated habitat, subject to various mitigative measures for certain housing projects.

VIII. EXPLOSIVE AND FLAMMABLE OPERATIONS (24 CFR PART 51C)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable

There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. Therefore, this project is located at an acceptable separation distance from above-ground explosive or flammable fuels or chemical containers. Furthermore, repair and rehabilitation improvements would not increase the number of people being exposed to hazardous operations, and thus do not meet the definition of a HUD-assisted project and are not subject to these regulations.

SUPPORTING DOCUMENTATION:

Field: Field inspection was limited to the exterior of residential buildings and associated structures for this housing project. No above-ground explosive or flammable material storage containers in excess of 100 gallons were observed at the site.

Printed: 24 CFR Part 51, Subpart C addresses acceptable separation distance from above-ground explosive or flammable fuels or chemical containers. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

IX. FARMLANDS PROTECTION (7 CFR PART 658)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable

The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by repair and rehabilitation improvements that may be implemented.

SUPPORTING DOCUMENTATION:

Field: The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. The property consists of an existing housing development within an urbanized area, and no farmlands would be impacted by repair and rehabilitation improvements that may be implemented.

Printed: The State land use designation for the property is the "Urban District," and the City zoning for the site is A-2 Medium-Density Apartment.

Web page: http://www.state.hi.us/dbedt/gis/miscmaps.htm (Date accessed: 6/11/2015). The State Land Use designation is Urban.

X. FLOODPLAIN MANAGEMENT (EXECUTIVE ORDER 11988, 24 CFR PART 55)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program

The project site is located in Zone X, an area of minimal flooding (i.e., 0.2% annual chance flood), and is located outside the 500-year flood zone. A field inspection and information obtained from AMP Manager confirmed no major flooding issues within the project site.

SUPPORTING DOCUMENTATION:

Field: A site visit of the project site did not visually show signs of prior flooding problems. An interview with the maintenance supervisor also determined that no major ponding or flooding issues have occurred on the project site.

Printed: Flood Insurance Rate Map, City and County of Honolulu, Hawai‘i Community Panel Number 15003C0354G, Revised January 19, 2011.

Hawai`i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/ (Date accessed7/21/15)

XI. HISTORIC PRESERVATION (NATIONAL HISTORIC PRESERVATION ACT OF 1966; SECTIONS 106 AND 110; 36 CFR, PART 800)

CONTACT:

Ms. Suzanne Case, Chairperson
Department of Land and Natural Resources
State of Hawai‘i
1151 Punchbowl Street
Honolulu, Hawai‘i 96813
Tel. #: 587-0400

SUPPORTING DOCUMENTS	
X	Field
X	Contact
X	Printed
X	Experience
X	Study

DETERMINATION:

Status Category: No Adverse Effect on Historic Properties with Mitigation

Constructed in 1952, the project has reached a 50-year milestone, and could be eligible for listing on the State and National Register of Historic Places (NRHP). A historic property evaluation (HPE) report prepared by Mason Architects, Inc. (April 2006) determined that this project did not retain sufficient levels of integrity (defined as location, design, setting, materials, workmanship, feeling and association). All of the buildings did not meet NRHP eligibility criteria due to prior significant alterations and renovations. The buildings' integrity of setting, design, materials, workmanship, feeling, and association have been greatly compromised. In a letter dated December 2, 2015, the State Historic Preservation Officer (SHPO) provided a determination and set forth conditions for ground-disturbing activities. In responding to this letter, the HPHA concurred with the conditions set forth by the SHPO.

SUPPORTING DOCUMENTATION:

Field: A site visit of the project's property did not identify any archaeological historic sites (e.g. heiau) or unique site features that could be distinguished as potential historic or archaeological sites. The property has been altered since its initial development with construction of buildings, driveways and parking lots, sidewalks, and other accessory facilities. An interview conducted with the maintenance supervisor indicated no known historic sites being present on the property.

Contact: Based on the findings and recommendations of the 2006 HPE, the HPHA submitted a letter to the SHPO dated August 20, 2015 regarding 28 housing projects, which is included in the Appendix. Of this total, 15 housing projects (including Ko‘olau Village) did not meet National Register eligibility criteria, therefore, a "no historic properties affected" determination was proposed for these repair and rehabilitation improvements.

Repair and rehabilitation improvements for the other 13 housing projects were determined to meet National Register eligibility criteria and were proposed to have "no adverse effect" on historic properties subject to certain mitigative measures.

In a letter dated December 2, 2015, the SHPO determined that repair and rehabilitation improvements for this housing project would have "no adverse effect" on historic properties instead of "no historic properties" pursuant to NHPA Section 106 and subject to the following mitigative measures. In responding to this letter, the HPHA concurred with the conditions set forth by the SHPO. A copy of these letters is included in Exhibit C.

1. If ground disturbing activity is anticipated, HPHA must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation.

    a. Submit detailed plans, specifications and a detailed scope of work once the plans have been developed.

    b. Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation.

    c. Submit a TMK map showing the full extent of the project area within the affected parcel/s.

    d. Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area.

    e. Summary of land use history, such as previous intensive cultivation, grubbing or grading.

    f. Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

In addition to these mitigation measures, the HPHA would enter into a Programmatic Agreement with the SHPO to address the implementation of future repair and rehabilitation improvements to State housing projects after the current Section 106 review process is completed and prior to the next environmental review process in approximately five years. Furthermore, should subsurface human remains or other traces of human activity greater than 50 years old be encountered during construction, all work in the vicinity of the find would immediately stop and the SHPD would be promptly notified. The treatment of any human remains that are encountered would be conducted in accordance with applicable requirements of Chapter 6E, Hawai'i Revised Statutes (Historic Preservation) and Chapter 13-300, Hawai'i Administrative Rules (Rules of Practice and Procedure Relating to Burial Sites and Human Remains).

Printed: A review of the U.S. National Parks Service website for the National Register of Historic Places did not identify any historic properties within the limits of this housing project. A similar review of the State DLNR website for the State Register of Historic Places revealed that there are no historic properties within the project site.

National Register: U.S. National Park Service website at: http://www.nps.gov/nr/research/ (Date accessed: 7/2/15).

State Register: Hawai`i Department of Land and Natural Resources website at: http://dlnr.hawaii.gov/shpd/state-register/ (Date accessed: 7/2/15).

Experience: In a letter to the SHPD dated July 15, 2005, the Housing and Community Development Corporation of Hawai`i (HCDCH), a predecessor to the HPHA, proposed minor repair and rehabilitation improvement at 39 public housing projects throughout Hawai`i (including Mayor Wright Homes) and believed the work would have "no effect" on significant historic sites. The HCDCH also asked the SHPD to: (1) define the area of potential effect for the housing projects; (2) identify and evaluate historic properties within the housing projects; and (3) assess and resolve any adverse effects of the housing projects per Section 106 of the National Historic Preservation Act of 1966.

In a letter to the HCDCH dated September 27, 2005, the SHPO responded by requesting that a programmatic agreement (PA) with the HCDCH be developed that would also address the recordation of housing projects that have not yet reached the 50-year milestone but may face possible adverse effects from the proposed work.

Based on follow up discussions with the SHPD, Mason Architects prepared a historic property evaluation (HPE) on behalf of the HCDCH in April 2006 for six public housing projects on Hawai`i Island and O'ahu (including Mayor Wright Homes). The six projects covered by the HPE met, or would soon meet, the 50-year age criteria to become eligible for listing in the NRHP. At the time, only two of the projects were over 50 years old and only two met NRHP eligibility criteria. The Mayor Wright Homes project was determined to not meet NRHP eligibility criteria. The HPE was submitted to the SHPD for review and comment on June 6, 2006. No comments or objections were received from the SHPO on the 2006 HPE findings.

Study: A historic property evaluation was conducted by Mason Architects, Inc. in 2006 on behalf of HCDCH that evaluated six public housing projects, which included Mayor Wright Homes. Constructed in 1952, the project has reached a 50-year milestone and could be eligible for listing on the State and National Register of Historic Places. However, this study determined that this project did not retain sufficient levels of integrity (defined as location, design, setting, materials, workmanship, feeling and association). All of the buildings did not meet NRHP eligibility criteria due to significant alterations and renovations. The buildings' integrity of setting, design, materials, workmanship, feeling, and association have been greatly compromised. A copy of the report section covering this project is included in Exhibit C, and the entire report is included in the Appendices.

Mayor Wright Homes has undergone several alterations over the years. The original open lawn and paved areas between the buildings have been converted to driveways and parking. The units in perimeter buildings of the housing complex have had their entries changed from the kitchen side of the apartment to the living room (opposite) side. Stairways to the upper floors of the three-story buildings were removed and new stairs were constructed on the living room (opposite) side of the building. The lanai (off the kitchens) were closed with concrete hollow tiles set on their sides to form a grille. The original stairways had metal mesh railings, but new stairs were built with concrete hollow tile half-walls and clay tile roofs. Also, the three-story buildings originally had one entry hallway serving a pair of units. These halls have been sealed at the stair landings, and the main entry changed to the kitchen door. Many of the original three-light steel sash

hopper windows have been replaced by jalousies, and most of the original doorways have been widened and replaced.

XII. NOISE ABATEMENT CONTROL (24 CFR PART 51B)

	SUPPORTING DOCUMENTS
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Within HUD Noise Standards

The project site is situated along three major City roadways serving the downtown area along with the surrounding Kalihi business area. The HUD noise level calculator estimated noise levels at the project site from North King Street and North Vineyard Boulevard to each be about 58.5 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

SUPPORTING DOCUMENTATION:

Field: The Mayor Wright Homes housing project is surrounded by three multi-lane roadways. These roads are North King Street to the south, Liliha Street to the east, North Vineyard Boulevard to the north. Two of three are four-lane collector roadways (North King Street, Liliha Street) with two-way traffic and the third is a six-lane roadway (North Vineyard Boulevard) with two-way traffic. North King Street and North Vineyard Boulevard are major roadways providing vehicular access through the downtown and Kalihi areas. Pua Lane, situated west of the project site, is a short two-lane road that serves residences along that route and also provides a connection between North Vineyard Boulevard and North King Street. Buildings within the housing project are generally set back between 10 to 25 feet from the property perimeter and adjacent streets. The project site is predominantly bordered with chain link fencing along these major roadways with the exception of periodic sections of six-foot-tall concrete walls along these roadways. These sections of concrete walls provide some mitigation of traffic noise, but most of the perimeter (chain link fenced sections) is subject to traffic noise. No significant noise generating sources were identified within the project site during the site inspection. Noise sources are predominantly associated with vehicular traffic along adjacent roadways and voices from surrounding activities.

Study: The HUD day/night noise level calculator was used to estimate approximate traffic noise levels at the project site. Using State Department of Transportation 2013 traffic data, North King Street has approximately 32,000 vehicles a day and North Vineyard Boulevard has around 27,000 vehicles a day. Liliha Street provides a vehicular connection between North King Street and North Vineyard Boulevard in this project area, but should have lower average daily traffic volumes than the other two major roadways. Given the distance of the center lines of these main roadways from the project site

(average of about 65 feet), the estimated noise levels at the project site from each road using this HUD calculator was about 58.5 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

XIII. SOLE SOURCE AQUIFER (40 CFR PART 149)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact on Sole Source Aquifer

The housing project is located within the O‘ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation. However, if exceptional circumstances require compliance steps with any of these authorities, such compliance must be established and documented prior to approving the site-specific loan or grant.

SUPPORTING DOCUMENTATION:

Printed: This determination was based upon review of the Sole Source Aquifer Memorandum of 4/30/90 (Sections II.B.1 and II.B.2) and consideration of the type of rehabilitation related improvements that would be conducted for this project.

XIV. WETLANDS PROTECTION (EXECUTIVE ORDER 11990)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable

There are no known wetlands within the housing project’s property, and therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: A site visit of the property did not identify any wetlands present.

Printed: Review of the U.S Fish and Wildlife data for wetlands:
http://www.fws.gov/wetlands/data/mapper.HTML (date accessed 6/11/2015)

XV. WILD AND SCENIC RIVERS ACT (16 USC 1271, SECTION 7 (B), (C))

	SUPPORTING DOCUMENTS
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable

There are no Wild and Scenic Rivers in Hawai‘i, which excludes this project from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: http://www.rivers.gov/map.php (Date accessed: 6/11/2015)

XVI. ENVIRONMENTAL JUSTICE (EXECUTIVE ORDER NO. 12898)

	SUPPORTING DOCUMENTS
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable

Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, repair and rehabilitation improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations. Repair and rehabilitation improvements should benefit low-income and minority populations living within this housing project.

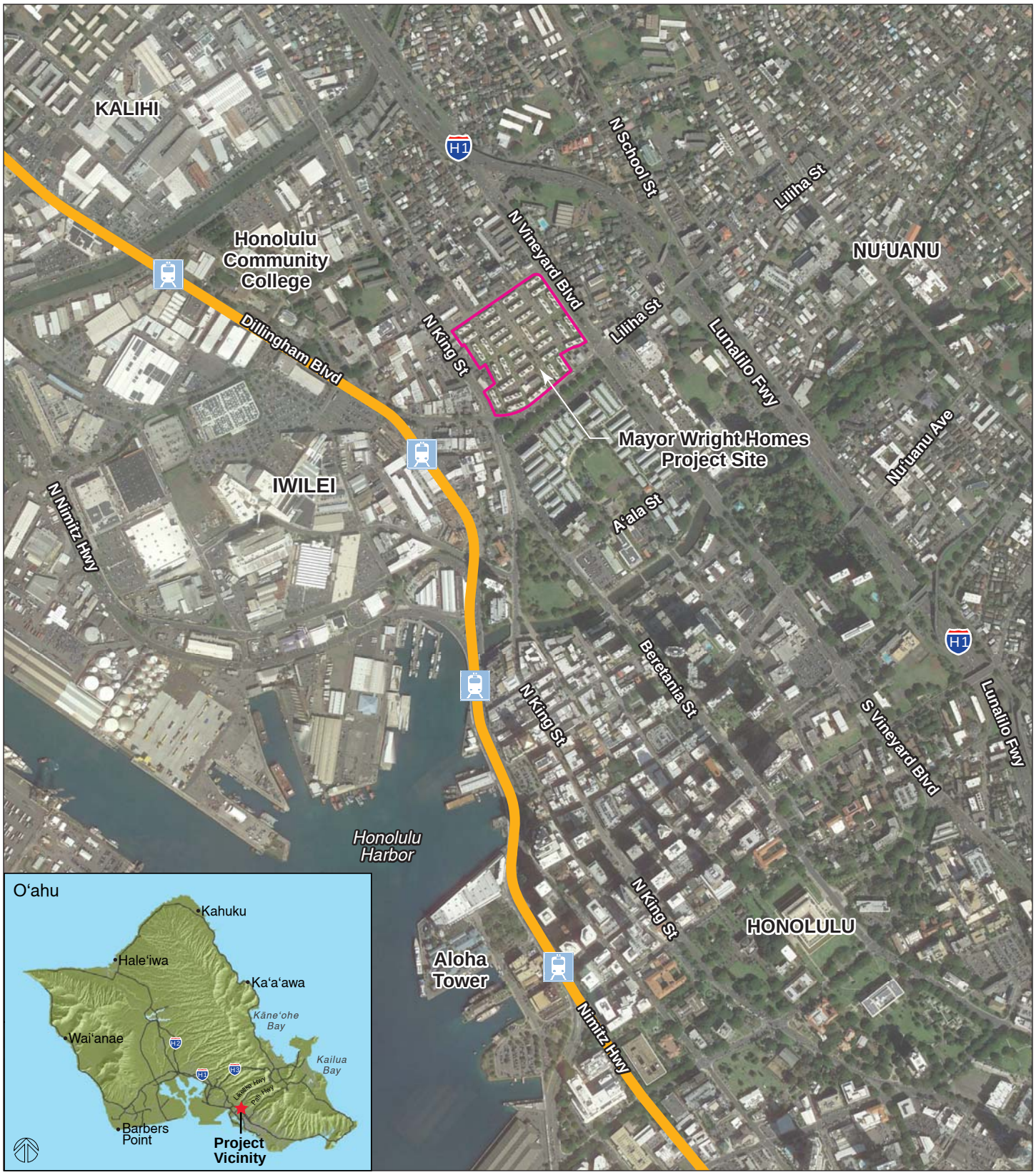
SUPPORTING DOCUMENTATION:

Printed: Executive Order 12898

Web page: https://www.hudexchange.info/environmental-review/environmental-justice/
(Date accessed: 6/11/2015)

EXHIBIT A

Location Map, TMK Map, Site Map, Flood Map, and Site Photos



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

HONOLULU RAIL TRANSIT

Transit Corridor

Transit Station

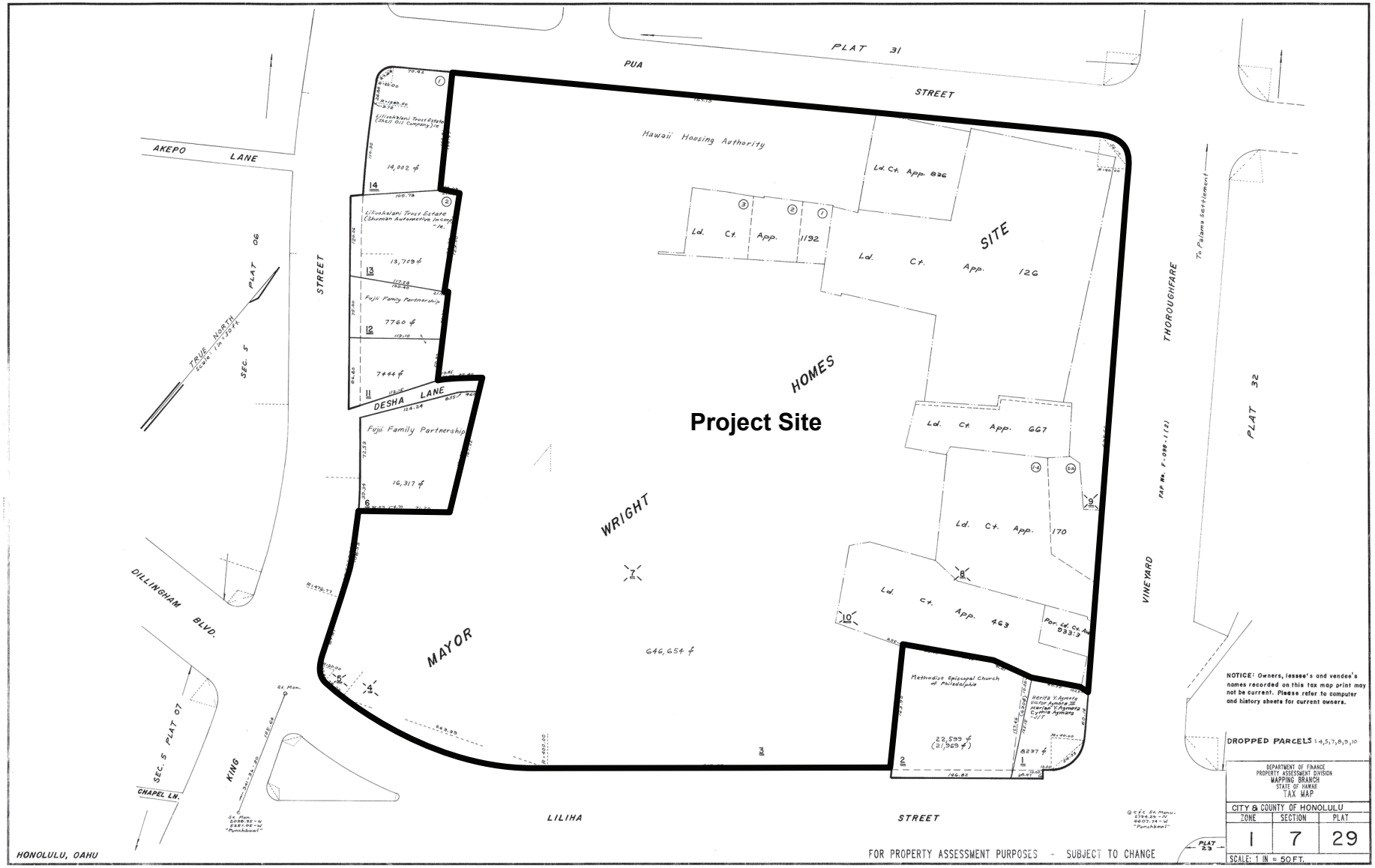
HPHA No. 1003 - Mayor Wright Homes (AMP 32)

Figure 1 - Project Location Map

Honolulu, O'ahu

1,000 FT

HHF PLANNERS
places for people



HPHA No. 1003 - Mayor Wright Homes (AMP 32)

Figure 2 - TMK Map

Honolulu, O'ahu

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

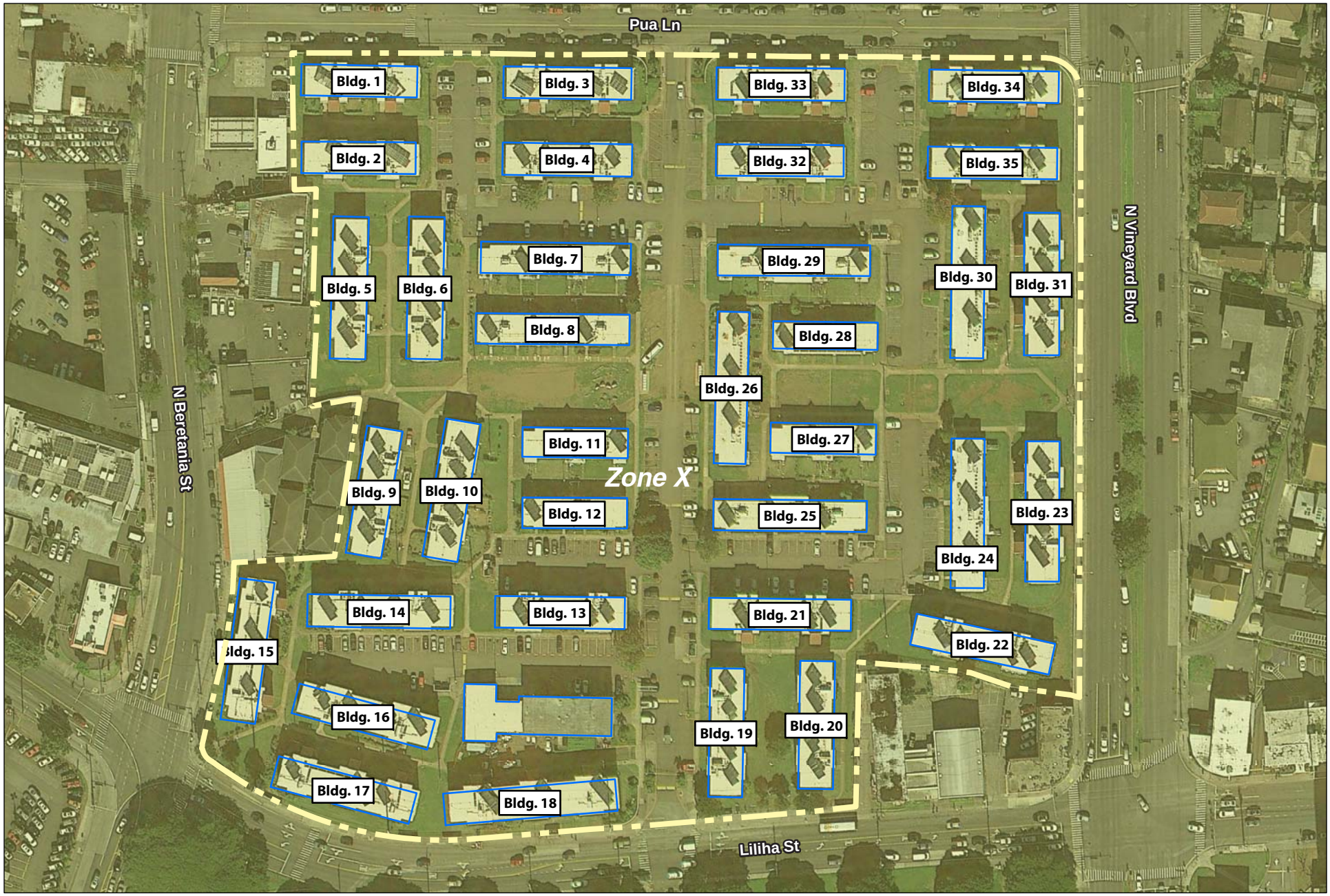
HPHA No. 1003 - Mayor Wright Homes (AMP 32)

Figure 3 - Site Map

Honolulu, O'ahu

100 FEET

HHF PLANNERS
places for people



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

LEGEND

Zone X - Outside the 0.2% Annual Chance of Flood

HPHA No. 1003 - Mayor Wright Homes (AMP 32)

Figure 4 - Flood Map

Honolulu, O'ahu

100 FEET

HHF PLANNERS
places for people

Hazardous material storage.

Hazardous material storage.

Bulk trash items are removed on a regular basis.

Construction area and hazards adjacent to Pu‘uwai Momi are secure and safeguarded, including this hole in the ground

Portion of the west property line (facing south) adjacent to North King Street.

West property line (facing south) along North King Street.

Portion of the west property line (facing west) adjacent to North King Street.

Portion of the west property line (facing west) adjacent to North King Street.

Entrance to project site off of Pua Lane.

North property line (facing east) along Pua Lane.

East property line (facing east) along Vineyard Boulevard

Construction areas are fenced off.

EXHIBIT B

EDR Radius Map Report

Mayor Wright Homes
521 N. Kukui St.
Honolulu, HI 96817

Inquiry Number: 4237094.26s
March 17, 2015

EDR Summary Radius Map Report

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

FORM-NULL-PVC

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

521 N. KUKUI ST.
HONOLULU County, HI 96817

COORDINATES

Latitude (North):	21.3202000 - 21' 19' 12.72''
Longitude (West):	157.8641000 - 157' 51' 50.76''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	617806.7
UTM Y (Meters):	2357871.5
Elevation:	10 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	USGS 7.5 min quad index

Target Property:	W
Source:	USGS 7.5 min quad index

MAPPED SITES SUMMARY

Target Property Address:
521 N. KUKUI ST.
, HI 96817

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
Reg	SAND ISLAND MILITARY		DOD	Same	2606, SSW
1		607 N KING ST	EDR US Hist Cleaners	Higher	532, SW
2		574 N VINEYARD BLVD	EDR US Hist Auto Stat	Higher	532, ENE
3	KUKUI GARDENS MAKAI	1103 LILIHA ST	RCRA-CESQG	Lower	552, SSE
A4	KING STREET SHELL	666 N KING ST	RCRA-CESQG	Higher	601, West
A5	KING SHELL FOODMART	666 N KING ST	HI LUST, HI UST, HI Financial Assurance	Higher	601, West
B6		555 N KING ST	EDR US Hist Auto Stat	Lower	637, SSW
B7	KINGSGATE PLAZA	516 DILLINGHAM BLVD	HI LUST, HI UST	Lower	725, SSW
C8	OLD WORLD PRODUCTS O	717 A NORTH KING ST	RCRA NonGen / NLR	Higher	743, West
9	BANYAN STREET MANOR	1122 BANYAN ST	RCRA-CESQG	Higher	753, NW
10	TOGUCHI SVC STATION	825 N VINEYARD BLVD	RCRA-CESQG, FINDS	Higher	783, North
C11		999 ROBELLO LN	EDR US Hist Auto Stat	Higher	784, WNW
C12	PIONEER VENTURES INC	999 ROBELLO LN	RCRA NonGen / NLR, FINDS	Higher	784, WNW
D13		743 N KING ST	EDR US Hist Auto Stat	Higher	884, WNW
C14	NAKAMURA INVESTMENT	979 ROBELLO LN	HI UST, HI Financial Assurance	Higher	896, West
D15	CHEVRON 99080	743 N KING ST	RCRA-CESQG	Higher	898, WNW
E16	TONY'S LIQUOR AND DE	581 DILLINGHAM BLVD	HI UST, HI Financial Assurance	Lower	917, SW
E17	YICK LUNG CO., INC.	580 DILLINGHAM BLVD	HI LUST, HI UST	Lower	942, SW
E18		580 DILLINGHAM BLVD	EDR US Hist Auto Stat	Lower	942, SW
F19		963 ROBELLO LN	EDR US Hist Auto Stat	Higher	991, West
F20	RICHARD TOM	963 ROBELLO LN	HI LUST, HI UST, HI Financial Assurance	Higher	991, West
E21	YICK LUNG CO., INC.	602 DILLINGHAM BLVD	HI LUST, HI UST	Lower	1028, SW
G22	HALL-MARK CLEANERS	1470 LILIHA ST	HI UST	Higher	1048, ENE
G23	HALL MARK DRY CLEANE	1470 LILIHA ST	HI SHWS	Higher	1048, ENE
H24		922 KAAMAHU PL	EDR US Hist Auto Stat	Lower	1121, SW
H25	NAKAOKA PAINTING INC	922 KAAMAHU PL	HI UST	Lower	1121, SW
I26		1311 PALAMA ST	EDR US Hist Auto Stat	Higher	1136, NNW
I27	TESORO 2GO #61022	1311 PALAMA ST	HI LUST, HI UST, HI Financial Assurance	Higher	1136, NNW
H28	VON HAMM TEXTILES	546 KAAAHI ST	HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST...	Lower	1150, SW
H29		545 KAAAHI ST	EDR US Hist Auto Stat	Lower	1164, SW
H30	NUUANU AUTO COMPANY	545 KAAAHI ST	HI SHWS	Lower	1164, SW
J31	MAUNAWILI PRODUCE, I	914 KAAAHI PL	RCRA NonGen / NLR, FINDS	Lower	1313, SSW
J32		914 KAAAHI PL	EDR US Hist Auto Stat	Lower	1313, SSW
J33	MAUNAWILI PRODUCE, I	914 KAAAHI PL	HI LUST, HI UST	Lower	1313, SSW
J34	ALOHA FENDER INC	915 KAAAHI PL	RCRA-CESQG, FINDS	Lower	1319, SSW
J35		915 KAAAHI PL	EDR US Hist Auto Stat	Lower	1319, SSW
J36	MAUNAWILI PRODUCE	906 KAAAHI PL	HI LUST, HI UST	Lower	1322, SSW
37	CUTTER DODGE AUTO SE	735 DILLINGHAM BLVD	HI LUST, HI UST	Higher	1357, WSW
38	HONOLULU COMMUNITY A	337 & 357 N KING ST	HI LUST, HI UST	Lower	1485, South

MAPPED SITES SUMMARY

Target Property Address:
521 N. KUKUI ST.
, HI 96817

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
39	LANCE GOYA CHEVRON	504 N SCHOOL ST	HI SHWS, HI LUST, HI UST, HI ENG CONTROLS, HI INST...	Higher	1487, ENE
40	HAWAIIAN GAS PRODUCT	516-520 KUWILI ST	EDR MGP	Lower	1535, SW
K41	DOLE IWILEI	801 DILLINGHAM BLVD	HI SHWS, HI SPILLS, HI INST CONTROL	Higher	1592, West
K42	DOLE IWILEI CANNERY	801 DILLINGHAM BLVD	HI LUST, HI UST	Higher	1592, West
K43	DOLE PACKAGED FOODS	801 DILLINGHAM BLVD.	CERC-NFRAP, RCRA NonGen / NLR	Higher	1592, West
44	ISLAND MOVERS, INC.	414 KUWILI STHONOLUL	HI LUST, HI UST, HI Financial Assurance	Lower	1670, SSW
45	LILIHA CIVIC CENTER	337 N KING ST	HI SHWS	Lower	1680, South
46	SNAPPY SERVICE	719 N SCHOOL ST	HI LUST, HI UST, HI SPILLS	Higher	1726, NNE
47	TRAVEL PLAZA TRANSPO	818 PINE ST	HI SHWS, HI LUST, HI UST, HI Financial Assurance	Lower	1784, SW
48	SENIOR RESIDENCES AT	888 IWILEI RD	HI SHWS, HI INST CONTROL	Lower	1802, SSW
49	IWILEI FRUIT AND VEG	920 IWILEI ROAD	HI SHWS, HI LUST, HI UST	Lower	1841, South
L50	STEELTECH INC	373 N NIMITZ HWY	HI LUST, HI UST	Lower	1897, SSW
L51	373 NORTH NIMITZ HIG	373 N NIMITZ HWY	HI SHWS, HI SPILLS	Lower	1897, SSW
52	IWILEI PROJECT SITE	IWILEI RD & N KING S	HI SHWS	Lower	1913, South
53	MAHALO NORTH KING AU	1010 N KING ST	HI LUST, HI UST, HI Financial Assurance	Higher	1944, NW
54	TOWN INN	248-258 N BERETANIA	HI SHWS, HI INST CONTROL, HI VCP	Lower	2022, SSE
M55	PIER 51 HONOLULU HAR	925 DILLINGHAM BLVD	FINDS, HI SHWS, HI ENG CONTROLS, HI INST CONTROL,...	Lower	2043, West
M56	SPRINT LOT	925 DILLINGHAM BLVD	HI LUST, HI UST	Lower	2043, West
57	PALAMA ELDERLY HOUSI	851 N SCHOOL ST	HI LUST, HI UST	Higher	2075, NNE
58	HONOLULU COMMUNITY C	DILLINGHAM BLVD	HI LUST, HI UST	Lower	2082, WNW
M59	THEO DAVIES CATERPIL	935 DILLINGHAM BLVD	HI SHWS, HI ENG CONTROLS, HI INST CONTROL	Lower	2088, West
60	IWILEI BUSINESS CENT	501 SUMNER ST	HI SHWS, HI SPILLS, HI INST CONTROL	Lower	2100, WSW
61	215 NORTH KING STREE	215 N KING ST	HI SHWS	Lower	2113, South
M62	HONOLULU COMMUNITY C	874 DILLINGHAM BLVD	HI SHWS	Lower	2153, West
63	KING'S SERVICE	1070 N KING ST	HI LUST, HI UST	Lower	2222, NW
N64	420 N. NIMITS HWY DE	420 N. NIMITZ HWY	HI LUST, HI UST	Lower	2360, SSW
N65	420-470 NORTH NIMITZ	420-470 N NIMITZ HWY	HI SHWS, HI ENG CONTROLS	Lower	2360, SSW
O66	JBL HAWAII LTD	905 KOKEA ST	HI LUST, HI UST	Lower	2384, NW
O67	JBL HAWAII, LTD	905 KOKEA ST	HI SHWS, HI ENG CONTROLS, HI INST CONTROL	Lower	2384, NW
68	AWA WASTEWATER PUMP	190 N NIMITZ HWY	HI SHWS, HI SPILLS	Lower	2403, South
P69	LILIHA CHEVRON	1748 LILIHA ST	HI LUST, HI UST	Higher	2424, ENE
P70	B & A AUTOMOTIVE	1739 LILIHA ST	HI LUST, HI UST	Higher	2430, ENE
Q71	7-11 KAPALAMA	1136 N KING ST.	HI LUST, HI UST, HI Financial Assurance	Lower	2524, NW
72	OAHU PLUMBING & SHEE	926 KOHOU ST	HI LUST, HI UST, HI Financial Assurance	Lower	2528, NW
73	KEKAULIKE DIAMOND HE	163 N HOTEL ST	HI SHWS, HI SPILLS	Higher	2610, South
Q74	GTE-HAWAIIAN TEL EMP	1138 N KING ST	HI SHWS, HI ENG CONTROLS, HI INST CONTROL	Lower	2618, NW
75	MID PAC PETROLEUM LL	540 N NIMITZ HWY	HI SHWS, HI LUST, HI UST, HI Financial Assurance	Lower	2698, SW
R76	COSTCO WAREHOUSE	525 ALAKAWA ST	HI SHWS, HI ENG CONTROLS, HI INST CONTROL, HI VCP	Lower	2772, West
R77	COSTCO GAS STATION	520 ALAKAWA ST	HI SHWS, HI ENG CONTROLS, HI INST CONTROL, HI VCP	Lower	2814, West

MAPPED SITES SUMMARY

Target Property Address:
521 N. KUKUI ST.
, HI 96817

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
78	KUAKINI MEDICAL DEVE	347 N KUAKINI ST	RCRA-SQG, FINDS, HI SHWS, HI LUST, HI UST, HI...	Higher	2837, ENE
S79	580 NORTH NIMITZ HIG	580 N NIMITZ HWY	HI SHWS, HI ENG CONTROLS	Lower	2945, SW
80	BHP GASCO BENZENE SI	616 IWILEI RD	HI SHWS, HI SPILLS, HI INST CONTROL, HI AIRS	Lower	2959, WSW
S81	CITY MILL	660 N NIMITZ HWY	HI SHWS, HI LUST, HI UST, HI INST CONTROL	Lower	3019, SW
T82	BHP GASCO	432 PACIFIC STREET	EDR MGP	Lower	3107, WSW
83	ZIPPY'S 634 N NIMITZ	634 N NIMITZ HWY	HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST...	Lower	3108, SW
T84	UNOCAL 76 HONOLULU L	411 PACIFIC ST	RCRA NonGen / NLR, FINDS, HI SHWS, HI UST, HI...	Lower	3120, WSW
U85	356 PACIFIC STREET B	356 PACIFIC ST	HI SHWS, HI SPILLS	Lower	3140, SW
U86	POLYNESIAN HOSPITALI	330 PACIFIC ST	RCRA-CESQG, FINDS, HI SHWS, HI LUST, HI UST, HI...	Lower	3142, SW
U87	BREWER ENVIRONMENTAL	311 PACIFIC ST	HI SHWS, HI SPILLS, HI VCP	Lower	3145, SW
88	YEE HOP BUILDING MAU	950 MAUNAKEA ST	HI SHWS	Higher	3161, South
89	TAKAMIYA PROPERTY	850 MOOWAA ST	HI SHWS, HI SPILLS	Lower	3251, NW
90	HOME DEPOT	421 ALAKAWA ST	HI SHWS, HI ENG CONTROLS, HI INST CONTROL	Lower	3254, WSW
91	CLASSIC BOWL	1190 DILLINGHAM BLVD	HI SHWS	Lower	3264, WNW
92	ROSS TRUSTS	819 MOOWAA ST	HI SHWS, HI VCP	Lower	3309, NW
V93	HAWAIIAN GRAIN CORPO	701 N NIMITZ HWY	HI SHWS, HI LUST, HI UST	Lower	3425, SW
94	700 N NIMITZ IDPP RE	700 N NIMITZ HWY	HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST...	Lower	3503, SW
V95	HAWAIIAN FLOUR MILL	703 N NIMITZ HWY	HI SHWS	Lower	3507, SW
V96	MOANA PAA KAI	705 N NIMITZ HWY	RCRA-CESQG, HI SHWS, HI SPILLS	Lower	3519, SW
97	BEST BUY	ALAKAWA ST & NIMITZ	HI SHWS, HI SPILLS	Lower	3546, WSW
98	SAUSE BROTHERS	ALAKEA ST	HI SHWS, HI SPILLS	Lower	3560, SW
W99	BHP PIER 29	739 N NIMITZ HWY	HI SHWS	Lower	3680, SW
W100	755 N NIMITZ HWY	755 N NIMITZ HWY	HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST...	Lower	3762, SW
101	KAMEHAMEHA SCHOOLS -	1336 DILLINGHAM BLVD	HI SHWS, HI SPILLS	Lower	3785, WNW
X102	775 NORTH NIMITZ HIG	775 N NIMITZ HWY	HI SHWS, HI ENG CONTROLS, HI INST CONTROL	Lower	3872, SW
Y103	WEYERHAEUSER	900 N NIMITZ HWY	HI SHWS, HI SPILLS	Lower	3900, WSW
X104	EQUILON ENTERPRISES	789 N NIMITZ HWY	HI SHWS	Lower	3924, SW
105	PAULEY PETROLEUM	795 N NIMITZ HWY	HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST...	Lower	3936, SW
Z106	CHEVRON HONOLULU TRA	933 N NIMITZ HWY	HI SHWS, HI ENG CONTROLS, HI Financial Assurance	Lower	3948, WSW
Z107	HAWAII STEVEDORES	965 N NIMITZ HWY	HI SHWS, HI SPILLS, HI ENG CONTROLS	Lower	3971, WSW
Y108	861-869 NORTH NIMITZ	861-869 N NIMITZ HWY	HI SHWS, HI ENG CONTROLS, HI INST CONTROL	Lower	3973, WSW
Y109	HAWAIIAN ELECTRIC CO	855 N NIMITZ HWY	HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST...	Lower	3974, WSW
110	GTE HAWAIIAN TEL - C	ALAKAWA ST & NIMITZ	HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST...	Lower	3983, WSW
AA111	MCCABE, HAMILTON, &	1130 N NIMITZ HWY	HI SHWS, HI SPILLS	Lower	3990, West
112	HART STREET WWPS	1031 N NIMITZ HWY	HI SHWS, HI UIC	Lower	4039, WSW
AA113	CHEVRON KAPALAMA TER	1105 N NIMITZ HWY	HI SHWS, HI SPILLS, HI INST CONTROL	Lower	4115, West
114	RICHARD'S CHEVRON	1909 NUUANU AVE	HI SHWS, HI SPILLS, HI INST CONTROL, HI Financial...	Higher	4121, East
115	PIER 30 TUG BOAT FUE	777 N NIMITZ HWY	HI SHWS, HI SPILLS	Lower	4197, SW
116	DOMESTIC COMMERCIAL	1133 N NIMITZ HWY	HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST...	Lower	4203, West

MAPPED SITES SUMMARY

Target Property Address:
521 N. KUKUI ST.
, HI 96817

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
117	HARBOR COURT	66 QUEEN ST	HI SHWS	Lower	4217, South
118	CAPITOL PLACE DEVELO	1212 QUEEN EMMA ST	HI SHWS	Higher	4223, SSE
AB119	1385 COLBURN STREET	1385 COLBURN ST	HI SHWS, HI SPILLS	Higher	4234, WNW
AB120	GENERAL TIRE	505 WAIAKAMILO RD	HI SHWS, HI SPILLS	Higher	4354, WNW
121	1305 HART STREET	1305 HART ST	HI SHWS, HI SPILLS, HI INST CONTROL	Lower	4752, West
122	YOUNG BROTHERS REFRI	1331 N NIMITZ HWY	HI SHWS, HI SPILLS	Lower	4967, West
123	FARRINGTON HIGH SCHO	1564 N KING ST	FTTS, HIST FTTS, HI SHWS, HI SPILLS	Higher	5029, NW
124	SAINT FRANCIS HOSPIT	2230 LILIHA ST	HI SHWS, HI LUST, HI UST, HI SPILLS	Higher	5045, NE
125	HAWAIIAN ELECTRIC -	170 ALA MOANA BOULEV	RCRA-TSDF, CERC-NFRAP, CORRACTS, RCRA-CESQG, HI...	Lower	5209, South
126	SAKE BREWERY & ICE C		FUDS	Higher	5220, ENE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal CERCLIS NFRAP site List

CERC-NFRAP: A review of the CERC-NFRAP list, as provided by EDR, and dated 10/25/2013 has revealed that there is 1 CERC-NFRAP site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DOLE PACKAGED FOODS	***801 DILLINGHAM BLVD.***	***W 1/4 - 1/2 (0.302 mi.)***	***K43***	***16***

Federal RCRA CORRACTS facilities list

CORRACTS: A review of the CORRACTS list, as provided by EDR, and dated 12/09/2014 has revealed that there is 1 CORRACTS site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
HAWAIIAN ELECTRIC -	***170 ALA MOANA BOULEV***	***S 1/2 - 1 (0.987 mi.)***	***125***	***34***

Federal RCRA generators list

RCRA-CESQG: A review of the RCRA-CESQG list, as provided by EDR, and dated 12/09/2014 has revealed that there are 6 RCRA-CESQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
KING STREET SHELL	666 N KING ST	W 0 - 1/8 (0.114 mi.)	A4	7
BANYAN STREET MANOR	1122 BANYAN ST	NW 1/8 - 1/4 (0.143 mi.)	9	9
TOGUCHI SVC STATION	***825 N VINEYARD BLVD***	***N 1/8 - 1/4 (0.148 mi.)***	***10***	***9***

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CHEVRON 99080	743 N KING ST	WNW 1/8 - 1/4 (0.170 mi.)	D15	10

Lower Elevation	Address	Direction / Distance	Map ID	Page
KUKUI GARDENS MAKAI	1103 LILIHA ST	SSE 0 - 1/8 (0.105 mi.)	3	7
ALOHA FENDER INC	***915 KAAAHI PL***	***SSW 1/8 - 1/4 (0.250 mi.)***	***J34***	***14***

State- and tribal - equivalent CERCLIS

HI SHWS: A review of the HI SHWS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 72 HI SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HALL MARK DRY CLEANE	1470 LILIHA ST	ENE 1/8 - 1/4 (0.198 mi.)	G23	12
LANCE GOYA CHEVRON	***504 N SCHOOL ST***	***ENE 1/4 - 1/2 (0.282 mi.)***	***39***	***15***
DOLE IWILEI	***801 DILLINGHAM BLVD***	***W 1/4 - 1/2 (0.302 mi.)***	***K41***	***16***
KEKAULIKE DIAMOND HE	***163 N HOTEL ST***	***S 1/4 - 1/2 (0.494 mi.)***	***73***	***24***
KUAKINI MEDICAL DEVE	***347 N KUAKINI ST***	***ENE 1/2 - 1 (0.537 mi.)***	***78***	***25***
YEE HOP BUILDING MAU	950 MAUNAKEA ST	S 1/2 - 1 (0.599 mi.)	88	27
RICHARD'S CHEVRON	***1909 NUUANU AVE***	***E 1/2 - 1 (0.780 mi.)***	***114***	***32***
CAPITOL PLACE DEVELO	1212 QUEEN EMMA ST	SSE 1/2 - 1 (0.800 mi.)	118	32
1385 COLBURN STREET	***1385 COLBURN ST***	***WNW 1/2 - 1 (0.802 mi.)***	***AB119***	***33***
GENERAL TIRE	***505 WAIAKAMILO RD***	***WNW 1/2 - 1 (0.825 mi.)***	***AB120***	***33***
FARRINGTON HIGH SCHO	***1564 N KING ST***	***NW 1/2 - 1 (0.952 mi.)***	***123***	***33***
SAINT FRANCIS HOSPIT	***2230 LILIHA ST***	***NE 1/2 - 1 (0.955 mi.)***	***124***	***33***

Lower Elevation	Address	Direction / Distance	Map ID	Page
VON HAMM TEXTILES	***546 KAAAHI ST***	***SW 1/8 - 1/4 (0.218 mi.)***	***H28***	***13***
NUUANU AUTO COMPANY	545 KAAAHI ST	SW 1/8 - 1/4 (0.220 mi.)	H30	13
LILIHA CIVIC CENTER	337 N KING ST	S 1/4 - 1/2 (0.318 mi.)	45	17
TRAVEL PLAZA TRANSPO	***818 PINE ST***	***SW 1/4 - 1/2 (0.338 mi.)***	***47***	***17***
SENIOR RESIDENCES AT	***888 IWILEI RD***	***SSW 1/4 - 1/2 (0.341 mi.)***	***48***	***18***
IWILEI FRUIT AND VEG	***920 IWILEI ROAD***	***S 1/4 - 1/2 (0.349 mi.)***	***49***	***18***
373 NORTH NIMITZ HIG	***373 N NIMITZ HWY***	***SSW 1/4 - 1/2 (0.359 mi.)***	***L51***	***18***
IWILEI PROJECT SITE	IWILEI RD & N KING S	S 1/4 - 1/2 (0.362 mi.)	52	19
TOWN INN	***248-258 N BERETANIA***	***SSE 1/4 - 1/2 (0.383 mi.)***	***54***	***19***
PIER 51 HONOLULU HAR	***925 DILLINGHAM BLVD***	***W 1/4 - 1/2 (0.387 mi.)***	***M55***	***19***
THEO DAVIES CATERPIL	***935 DILLINGHAM BLVD***	***W 1/4 - 1/2 (0.395 mi.)***	***M59***	***20***
IWILEI BUSINESS CENT	***501 SUMNER ST***	***WSW 1/4 - 1/2 (0.398 mi.)***	***60***	***20***
215 NORTH KING STREE	215 N KING ST	S 1/4 - 1/2 (0.400 mi.)	61	21
HONOLULU COMMUNITY C	874 DILLINGHAM BLVD	W 1/4 - 1/2 (0.408 mi.)	M62	21
420-470 NORTH NIMITZ	***420-470 N NIMITZ HWY***	***SSW 1/4 - 1/2 (0.447 mi.)***	***N65***	***22***
JBL HAWAII, LTD	***905 KOKEA ST***	***NW 1/4 - 1/2 (0.452 mi.)***	***O67***	***22***
AWA WASTEWATER PUMP	***190 N NIMITZ HWY***	***S 1/4 - 1/2 (0.455 mi.)***	***68***	***22***
GTE-HAWAIIAN TEL EMP	***1138 N KING ST***	***NW 1/4 - 1/2 (0.496 mi.)***	***Q74***	***24***
MID PAC PETROLEUM LL	***540 N NIMITZ HWY***	***SW 1/2 - 1 (0.511 mi.)***	***75***	***24***
COSTCO WAREHOUSE	***525 ALAKAWA ST***	***W 1/2 - 1 (0.525 mi.)***	***R76***	***24***
COSTCO GAS STATION	***520 ALAKAWA ST***	***W 1/2 - 1 (0.533 mi.)***	***R77***	***24***
580 NORTH NIMITZ HIG	***580 N NIMITZ HWY***	***SW 1/2 - 1 (0.558 mi.)***	***S79***	***25***
BHP GASCO BENZENE SI	***616 IWILEI RD***	***WSW 1/2 - 1 (0.560 mi.)***	***80***	***25***
CITY MILL	***660 N NIMITZ HWY***	***SW 1/2 - 1 (0.572 mi.)***	***S81***	***25***

Lower Elevation	Address	Direction / Distance	Map ID	Page
ZIPPY'S 634 N NIMITZ	***634 N NIMITZ HWY***	***SW 1/2 - 1 (0.589 mi.)***	***83***	***26***
UNOCAL 76 HONOLULU L	***411 PACIFIC ST***	***WSW 1/2 - 1 (0.591 mi.)***	***T84***	***26***
356 PACIFIC STREET B	***356 PACIFIC ST***	***SW 1/2 - 1 (0.595 mi.)***	***U85***	***26***
POLYNESIAN HOSPITALI	***330 PACIFIC ST***	***SW 1/2 - 1 (0.595 mi.)***	***U86***	***27***
BREWER ENVIRONMENTAL	***311 PACIFIC ST***	***SW 1/2 - 1 (0.596 mi.)***	***U87***	***27***
TAKAMIYA PROPERTY	***850 MOOWAA ST***	***NW 1/2 - 1 (0.616 mi.)***	***89***	***27***
HOME DEPOT	***421 ALAKAWA ST***	***WSW 1/2 - 1 (0.616 mi.)***	***90***	***28***
CLASSIC BOWL	1190 DILLINGHAM BLVD	WNW 1/2 - 1 (0.618 mi.)	91	28
ROSS TRUSTS	***819 MOOWAA ST***	***NW 1/2 - 1 (0.627 mi.)***	***92***	***28***
HAWAIIAN GRAIN CORPO	***701 N NIMITZ HWY***	***SW 1/2 - 1 (0.649 mi.)***	***V93***	***28***
700 N NIMITZ IDPP RE	***700 N NIMITZ HWY***	***SW 1/2 - 1 (0.663 mi.)***	***94***	***28***
HAWAIIAN FLOUR MILL	703 N NIMITZ HWY	SW 1/2 - 1 (0.664 mi.)	V95	29
MOANA PAA KAI	***705 N NIMITZ HWY***	***SW 1/2 - 1 (0.666 mi.)***	***V96***	***29***
BEST BUY	***ALAKAWA ST & NIMITZ***	***WSW 1/2 - 1 (0.672 mi.)***	***97***	***29***
SAUSE BROTHERS	***ALAKEA ST***	***SW 1/2 - 1 (0.674 mi.)***	***98***	***29***
BHP PIER 29	739 N NIMITZ HWY	SW 1/2 - 1 (0.697 mi.)	W99	29
755 N NIMITZ HWY	***755 N NIMITZ HWY***	***SW 1/2 - 1 (0.712 mi.)***	***W100***	***29***
KAMEHAMEHA SCHOOLS -	***1336 DILLINGHAM BLVD***	***WNW 1/2 - 1 (0.717 mi.)***	***101***	***30***
775 NORTH NIMITZ HIG	***775 N NIMITZ HWY***	***SW 1/2 - 1 (0.733 mi.)***	***X102***	***30***
WEYERHAEUSER	***900 N NIMITZ HWY***	***WSW 1/2 - 1 (0.739 mi.)***	***Y103***	***30***
EQUILON ENTERPRISES	789 N NIMITZ HWY	SW 1/2 - 1 (0.743 mi.)	X104	30
PAULEY PETROLEUM	***795 N NIMITZ HWY***	***SW 1/2 - 1 (0.745 mi.)***	***105***	***30***
CHEVRON HONOLULU TRA	***933 N NIMITZ HWY***	***WSW 1/2 - 1 (0.748 mi.)***	***Z106***	***30***
HAWAII STEVEDORES	***965 N NIMITZ HWY***	***WSW 1/2 - 1 (0.752 mi.)***	***Z107***	***31***
861-869 NORTH NIMITZ	***861-869 N NIMITZ HWY***	***WSW 1/2 - 1 (0.752 mi.)***	***Y108***	***31***
HAWAIIAN ELECTRIC CO	***855 N NIMITZ HWY***	***WSW 1/2 - 1 (0.753 mi.)***	***Y109***	***31***
GTE HAWAIIAN TEL - C	***ALAKAWA ST & NIMITZ***	***WSW 1/2 - 1 (0.754 mi.)***	***110***	***31***
MCCABE, HAMILTON, &	***1130 N NIMITZ HWY***	***W 1/2 - 1 (0.756 mi.)***	***AA111***	***31***
HART STREET WWPS	***1031 N NIMITZ HWY***	***WSW 1/2 - 1 (0.765 mi.)***	***112***	***31***
CHEVRON KAPALAMA TER	***1105 N NIMITZ HWY***	***W 1/2 - 1 (0.779 mi.)***	***AA113***	***32***
PIER 30 TUG BOAT FUE	***777 N NIMITZ HWY***	***SW 1/2 - 1 (0.795 mi.)***	***115***	***32***
DOMESTIC COMMERCIAL	***1133 N NIMITZ HWY***	***W 1/2 - 1 (0.796 mi.)***	***116***	***32***
HARBOR COURT	66 QUEEN ST	S 1/2 - 1 (0.799 mi.)	117	32
1305 HART STREET	***1305 HART ST***	***W 1/2 - 1 (0.900 mi.)***	***121***	***33***
YOUNG BROTHERS REFRI	***1331 N NIMITZ HWY***	***W 1/2 - 1 (0.941 mi.)***	***122***	***33***
HAWAIIAN ELECTRIC -	***170 ALA MOANA BOULEV***	***S 1/2 - 1 (0.987 mi.)***	***125***	***34***

State and tribal leaking storage tank lists

HI LUST: A review of the HI LUST list, as provided by EDR, and dated 12/16/2014 has revealed that there are 28 HI LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
KING SHELL FOODMART	***666 N KING ST***	***W 0 - 1/8 (0.114 mi.)***	***A5***	***8***
Facility Status: Site Cleanup Completed (NFA)				
RICHARD TOM	***963 ROBELLO LN***	***W 1/8 - 1/4 (0.188 mi.)***	***F20***	***11***
Facility Status: Site Cleanup Completed (NFA)				
TESORO 2GO #61022	***1311 PALAMA ST***	***NNW 1/8 - 1/4 (0.215 mi.)***	***I27***	***13***
Facility Status: Site Cleanup Completed (NFA)				
CUTTER DODGE AUTO SE	***735 DILLINGHAM BLVD***	***WSW 1/4 - 1/2 (0.257 mi.)***	***37***	***15***
Facility Status: Site Cleanup Completed (NFA)				

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LANCE GOYA CHEVRON	***504 N SCHOOL ST***	***ENE 1/4 - 1/2 (0.282 mi.)***	***39***	***15***
Facility Status: Site Cleanup Completed with EHMP				
Facility Status: Site Cleanup Completed (NFA)				
DOLE IWILEI CANNERY	***801 DILLINGHAM BLVD***	***W 1/4 - 1/2 (0.302 mi.)***	***K42***	***16***
Facility Status: Site Cleanup Completed (NFA)				
SNAPPY SERVICE	***719 N SCHOOL ST***	***NNE 1/4 - 1/2 (0.327 mi.)***	***46***	***17***
Facility Status: Monitored Natural Attenuation				
MAHALO NORTH KING AU	***1010 N KING ST***	***NW 1/4 - 1/2 (0.368 mi.)***	***53***	***19***
Facility Status: Site Cleanup Completed (NFA)				
Facility Status: Site Cleanup Completed with EHMP				
PALAMA ELDERLY HOUSI	***851 N SCHOOL ST***	***NNE 1/4 - 1/2 (0.393 mi.)***	***57***	***20***
Facility Status: Site Cleanup Completed (NFA)				
LILIHA CHEVRON	***1748 LILIHA ST***	***ENE 1/4 - 1/2 (0.459 mi.)***	***P69***	***22***
Facility Status: Site Cleanup Completed (NFA)				
B & A AUTOMOTIVE	***1739 LILIHA ST***	***ENE 1/4 - 1/2 (0.460 mi.)***	***P70***	***23***
Facility Status: Site Cleanup Completed (NFA)				

Lower Elevation	Address	Direction / Distance	Map ID	Page
KINGSGATE PLAZA	***516 DILLINGHAM BLVD***	***SSW 1/8 - 1/4 (0.137 mi.)***	***B7***	***8***
Facility Status: Site Cleanup Completed (NFA)				
YICK LUNG CO., INC.	***580 DILLINGHAM BLVD***	***SW 1/8 - 1/4 (0.178 mi.)***	***E17***	***10***
Facility Status: Site Cleanup Completed (NFA)				
YICK LUNG CO., INC.	***602 DILLINGHAM BLVD***	***SW 1/8 - 1/4 (0.195 mi.)***	***E21***	***11***
Facility Status: Site Cleanup Completed (NFA)				
MAUNAWILI PRODUCE, I	***914 KAAAHI PL***	***SSW 1/8 - 1/4 (0.249 mi.)***	***J33***	***14***
Facility Status: Site Cleanup Completed (NFA)				
MAUNAWILI PRODUCE	***906 KAAAHI PL***	***SSW 1/4 - 1/2 (0.250 mi.)***	***J36***	***14***
Facility Status: Site Cleanup Completed (NFA)				
HONOLULU COMMUNITY A	***337 & 357 N KING ST***	***S 1/4 - 1/2 (0.281 mi.)***	***38***	***15***
Facility Status: Site Cleanup Completed (NFA)				
ISLAND MOVERS, INC.	***414 KUWILI STHONOLUL***	***SSW 1/4 - 1/2 (0.316 mi.)***	***44***	***17***
Facility Status: Site Cleanup Completed (NFA)				
TRAVEL PLAZA TRANSPO	***818 PINE ST***	***SW 1/4 - 1/2 (0.338 mi.)***	***47***	***17***
Facility Status: Site Cleanup Completed (NFA)				
IWILEI FRUIT AND VEG	***920 IWILEI ROAD***	***S 1/4 - 1/2 (0.349 mi.)***	***49***	***18***
Facility Status: Site Cleanup Completed (NFA)				
STEELTECH INC	***373 N NIMITZ HWY***	***SSW 1/4 - 1/2 (0.359 mi.)***	***L50***	***18***
Facility Status: Site Cleanup Completed (NFA)				
SPRINT LOT	***925 DILLINGHAM BLVD***	***W 1/4 - 1/2 (0.387 mi.)***	***M56***	***19***
Facility Status: Site Cleanup Completed (NFA)				
HONOLULU COMMUNITY C	***DILLINGHAM BLVD***	***WNW 1/4 - 1/2 (0.394 mi.)***	***58***	***20***
Facility Status: Site Cleanup Completed (NFA)				
KING'S SERVICE	***1070 N KING ST***	***NW 1/4 - 1/2 (0.421 mi.)***	***63***	***21***
Facility Status: Site Cleanup Completed (NFA)				
420 N. NIMITS HWY DE	***420 N. NIMITZ HWY***	***SSW 1/4 - 1/2 (0.447 mi.)***	***N64***	***21***
Facility Status: Site Cleanup Completed (NFA)				

Lower Elevation	Address	Direction / Distance	Map ID	Page
JBL HAWAII LTD	***905 KOKEA ST***	***NW 1/4 - 1/2 (0.452 mi.)***	***O66***	***22***
Facility Status: Site Cleanup Completed (NFA)				
7-11 KAPALAMA	***1136 N KING ST.***	***NW 1/4 - 1/2 (0.478 mi.)***	***Q71***	***23***
Facility Status: Site Cleanup Completed (NFA)				
OAHU PLUMBING & SHEE	***926 KOHOU ST***	***NW 1/4 - 1/2 (0.479 mi.)***	***72***	***23***
Facility Status: Site Cleanup Completed (NFA)				

State and tribal registered storage tank lists

HI UST: A review of the HI UST list, as provided by EDR, and dated 12/18/2014 has revealed that there are 11 HI UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
KING SHELL FOODMART	***666 N KING ST***	***W 0 - 1/8 (0.114 mi.)***	***A5***	***8***
NAKAMURA INVESTMENT	***979 ROBELLO LN***	***W 1/8 - 1/4 (0.170 mi.)***	***C14***	***10***
RICHARD TOM	***963 ROBELLO LN***	***W 1/8 - 1/4 (0.188 mi.)***	***F20***	***11***
HALL-MARK CLEANERS	1470 LILIHA ST	ENE 1/8 - 1/4 (0.198 mi.)	G22	12
TESORO 2GO #61022	***1311 PALAMA ST***	***NNW 1/8 - 1/4 (0.215 mi.)***	***I27***	***13***

Lower Elevation	Address	Direction / Distance	Map ID	Page
KINGSGATE PLAZA	***516 DILLINGHAM BLVD***	***SSW 1/8 - 1/4 (0.137 mi.)***	***B7***	***8***
TONY'S LIQUOR AND DE	***581 DILLINGHAM BLVD***	***SW 1/8 - 1/4 (0.174 mi.)***	***E16***	***10***
YICK LUNG CO., INC.	***580 DILLINGHAM BLVD***	***SW 1/8 - 1/4 (0.178 mi.)***	***E17***	***10***
YICK LUNG CO., INC.	***602 DILLINGHAM BLVD***	***SW 1/8 - 1/4 (0.195 mi.)***	***E21***	***11***
NAKAOKA PAINTING INC	922 KAAMAHU PL	SW 1/8 - 1/4 (0.212 mi.)	H25	12
MAUNAWILI PRODUCE, I	***914 KAAAHI PL***	***SSW 1/8 - 1/4 (0.249 mi.)***	***J33***	***14***

State and tribal institutional control / engineering control registries

HI ENG CONTROLS: A review of the HI ENG CONTROLS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 7 HI ENG CONTROLS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LANCE GOYA CHEVRON	***504 N SCHOOL ST***	***ENE 1/4 - 1/2 (0.282 mi.)***	***39***	***15***

Lower Elevation	Address	Direction / Distance	Map ID	Page
VON HAMM TEXTILES	***546 KAAAHI ST***	***SW 1/8 - 1/4 (0.218 mi.)***	***H28***	***13***
PIER 51 HONOLULU HAR	***925 DILLINGHAM BLVD***	***W 1/4 - 1/2 (0.387 mi.)***	***M55***	***19***
THEO DAVIES CATERPIL	***935 DILLINGHAM BLVD***	***W 1/4 - 1/2 (0.395 mi.)***	***M59***	***20***
420-470 NORTH NIMITZ	***420-470 N NIMITZ HWY***	***SSW 1/4 - 1/2 (0.447 mi.)***	***N65***	***22***
JBL HAWAII, LTD	***905 KOKEA ST***	***NW 1/4 - 1/2 (0.452 mi.)***	***O67***	***22***
GTE-HAWAIIAN TEL EMP	***1138 N KING ST***	***NW 1/4 - 1/2 (0.496 mi.)***	***Q74***	***24***

HI INST CONTROL: A review of the HI INST CONTROL list, as provided by EDR, and dated 12/02/2014 has revealed that there are 10 HI INST CONTROL sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LANCE GOYA CHEVRON	*504 N SCHOOL ST*	*ENE 1/4 - 1/2 (0.282 mi.)*	*39*	*15*
DOLE IWILEI	*801 DILLINGHAM BLVD*	*W 1/4 - 1/2 (0.302 mi.)*	*K41*	*16*

Lower Elevation	Address	Direction / Distance	Map ID	Page
VON HAMM TEXTILES	*546 KAAAHI ST*	*SW 1/8 - 1/4 (0.218 mi.)*	*H28*	*13*
SENIOR RESIDENCES AT	*888 IWILEI RD*	*SSW 1/4 - 1/2 (0.341 mi.)*	*48*	*18*
TOWN INN	*248-258 N BERETANIA*	*SSE 1/4 - 1/2 (0.383 mi.)*	*54*	*19*
PIER 51 HONOLULU HAR	*925 DILLINGHAM BLVD*	*W 1/4 - 1/2 (0.387 mi.)*	*M55*	*19*
THEO DAVIES CATERPIL	*935 DILLINGHAM BLVD*	*W 1/4 - 1/2 (0.395 mi.)*	*M59*	*20*
IWILEI BUSINESS CENT	*501 SUMNER ST*	*WSW 1/4 - 1/2 (0.398 mi.)*	*60*	*20*
JBL HAWAII, LTD	*905 KOKEA ST*	*NW 1/4 - 1/2 (0.452 mi.)*	*O67*	*22*
GTE-HAWAIIAN TEL EMP	*1138 N KING ST*	*NW 1/4 - 1/2 (0.496 mi.)*	*Q74*	*24*

State and tribal voluntary cleanup sites

HI VCP: A review of the HI VCP list, as provided by EDR, and dated 12/02/2014 has revealed that there are 2 HI VCP sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
TOWN INN	*248-258 N BERETANIA*	*SSE 1/4 - 1/2 (0.383 mi.)*	*54*	*19*
PIER 51 HONOLULU HAR	*925 DILLINGHAM BLVD*	*W 1/4 - 1/2 (0.387 mi.)*	*M55*	*19*

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

RCRA NonGen / NLR: A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 12/09/2014 has revealed that there are 3 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
OLD WORLD PRODUCTS O	717 A NORTH KING ST	W 1/8 - 1/4 (0.141 mi.)	C8	8
PIONEER VENTURES INC	*999 ROBELLO LN*	*WNW 1/8 - 1/4 (0.148 mi.)*	*C12*	*9*

Lower Elevation	Address	Direction / Distance	Map ID	Page
MAUNAWILI PRODUCE, I	*914 KAAAHI PL*	*SSW 1/8 - 1/4 (0.249 mi.)*	*J31*	*13*

DOD: A review of the DOD list, as provided by EDR, and dated 12/31/2005 has revealed that there is 1 DOD site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAND ISLAND MILITARY		SSW 1/4 - 1/2 (0.494 mi.)	0	7

FUDS: A review of the FUDS list, as provided by EDR, and dated 06/06/2014 has revealed that there is 1 FUDS site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAKE BREWERY & ICE C		ENE 1/2 - 1 (0.989 mi.)	126	34

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: A review of the EDR MGP list, as provided by EDR, has revealed that there are 2 EDR MGP sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
HAWAIIAN GAS PRODUCT	516-520 KUWILI ST	SW 1/4 - 1/2 (0.291 mi.)	40	16
BHP GASCO	432 PACIFIC STREET	WSW 1/2 - 1 (0.588 mi.)	T82	26

EDR US Hist Auto Stat: A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there are 11 EDR US Hist Auto Stat sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	574 N VINEYARD BLVD	ENE 0 - 1/8 (0.101 mi.)	2	7
Not reported	999 ROBELLO LN	WNW 1/8 - 1/4 (0.148 mi.)	C11	9
Not reported	743 N KING ST	WNW 1/8 - 1/4 (0.167 mi.)	D13	9
Not reported	963 ROBELLO LN	W 1/8 - 1/4 (0.188 mi.)	F19	11
Not reported	1311 PALAMA ST	NNW 1/8 - 1/4 (0.215 mi.)	I26	12

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	555 N KING ST	SSW 0 - 1/8 (0.121 mi.)	B6	8
Not reported	580 DILLINGHAM BLVD	SW 1/8 - 1/4 (0.178 mi.)	E18	11
Not reported	922 KAAMAHU PL	SW 1/8 - 1/4 (0.212 mi.)	H24	12
Not reported	545 KAAAHI ST	SW 1/8 - 1/4 (0.220 mi.)	H29	13
Not reported	914 KAAAHI PL	SSW 1/8 - 1/4 (0.249 mi.)	J32	14
Not reported	915 KAAAHI PL	SSW 1/8 - 1/4 (0.250 mi.)	J35	14

EXECUTIVE SUMMARY

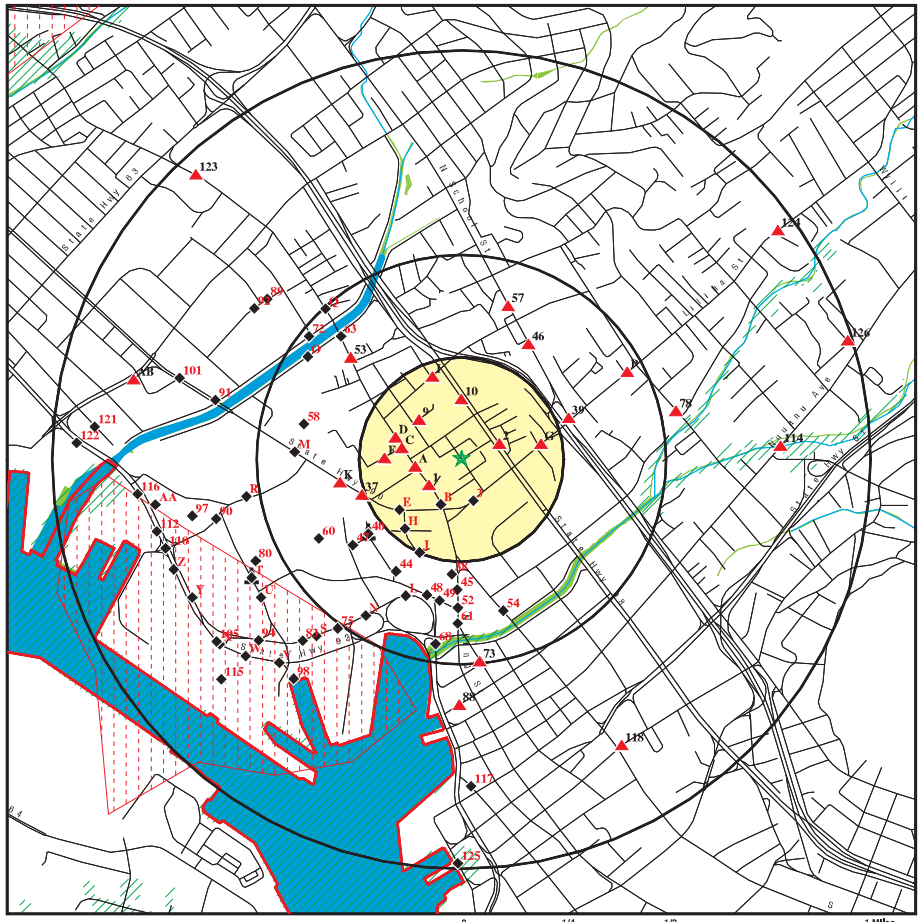
EDR US Hist Cleaners: A review of the EDR US Hist Cleaners list, as provided by EDR, has revealed that there is 1 EDR US Hist Cleaners site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	607 N KING ST	SW 0 - 1/8 (0.101 mi.)	1	7

Count: 9 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
HONOLULU	S117391417	1339 SCHOOL STREET	1339, 1341, 1343 N SCHOOL ST		HI SHWS, HI ENG CONTROLS, HI INST CONTROL
HONOLULU	S111704669	ALA WAI HARBOR BOAT REPAIR YARD	ALA MOANA BLVD		HI SHWS
HONOLULU	S106708609	CANNON CLUB	DIAMOND HEAD RD		HI SHWS, HI BROWNFIELDS
HONOLULU	S108008549	KALANI, HART, MOKUAEA STREET, HONO	HART ST & KALANI ST & MOKUAEA		HI SHWS
HONOLULU	1003879469	PACIFIC RESOURCES, INCORPORATED (G	IWILEI RD	96817	CERC-NFRAP
HONOLULU	1006820337	ABC DISPOSAL COMPANY	2760 KAMEHAMEHA HWY	96819	HI SHWS
HONOLULU	S111704706	FORMER KAPALAMA MILITARY RESERVATI	N NIMITZ HWY		HI SHWS
HONOLULU	S108008765	CITIZENS ENERGY SERVICES PIER 38	NIMITZ HWY		HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST CONTROL
HONOLULU	S106819311	NIMITZ HIGHWAY WATER IMPROVEMENT P	N NIMITZ HWY	96817	HI SHWS

OVERVIEW MAP - 4237094.26S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

0 1/4 1/2 1 Miles

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Mayor Wright Homes ADDRESS: 521 N. Kukui St. Honolulu HI 96817 LAT/LONG: 21.3202 / 157.8641	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.26s DATE: March 17, 2015 5:33 pm

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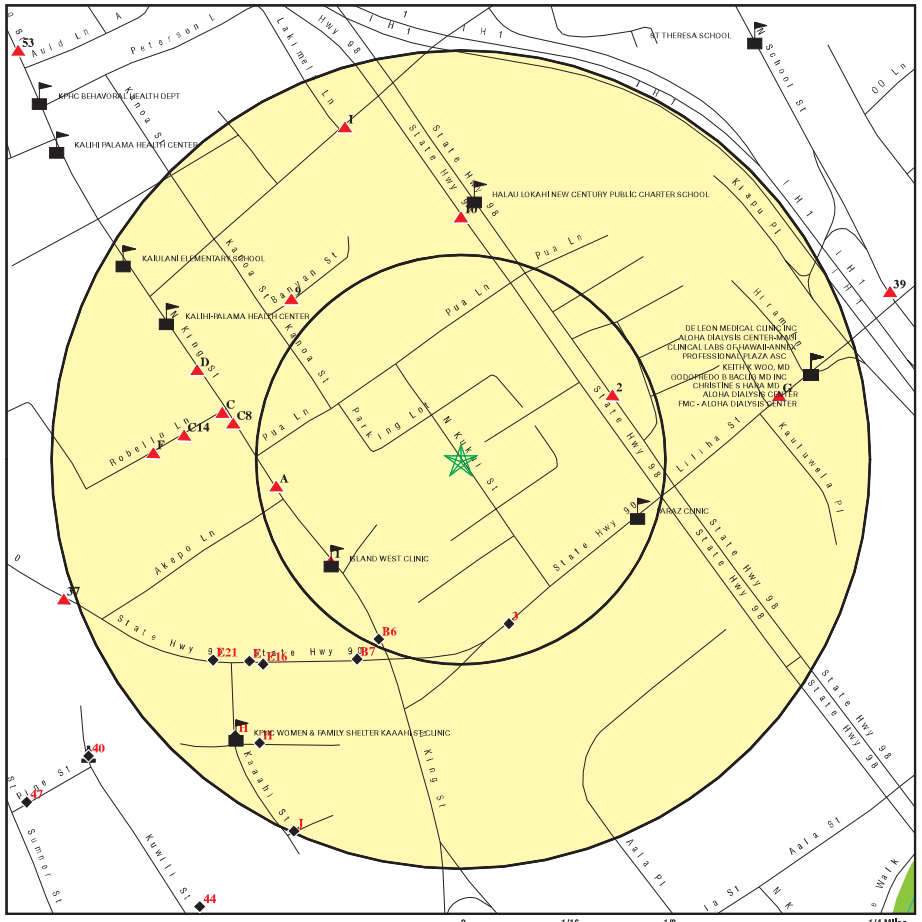
DETAIL MAP - 4237094.26S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

0 1/16 1/8 1/4 Miles

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Mayor Wright Homes ADDRESS: 521 N. Kukui St. Honolulu HI 96817 LAT/LONG: 21.3202 / 157.8641	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.26s DATE: March 17, 2015 5:33 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	1	NR	NR	1
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	1	NR	1
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		2	4	NR	NR	NR	6
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
HI SHWS	1.000		0	3	19	50	NR	72
State and tribal landfill and/or solid waste disposal site lists								
HI SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
HI LUST	0.500		1	6	21	NR	NR	28
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
HI UST	0.250		1	10	NR	NR	NR	11

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
HI ENG CONTROLS	0.500		0	1	6	NR	NR	7
HI INST CONTROL	0.500		0	1	9	NR	NR	10
State and tribal voluntary cleanup sites								
HI VCP	0.500		0	0	2	NR	NR	2
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
HI BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
HI CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
HI SPILLS	TP		NR	NR	NR	NR	NR	0
HI SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	3	NR	NR	NR	3
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	1	0	NR	1
FUDS	1.000		0	0	0	1	NR	1
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
HI UIC	TP		NR	NR	NR	NR	NR	0
HI DRYCLEANERS	0.250		0	0	NR	NR	NR	0
CA HAZNET	TP		NR	NR	NR	NR	NR	0
HI AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
HI Financial Assurance	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	1	1	NR	2
EDR US Hist Auto Stat	0.250		2	9	NR	NR	NR	11
EDR US Hist Cleaners	0.250		1	0	NR	NR	NR	1
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
HI RGA LF	TP		NR	NR	NR	NR	NR	0
HI RGA LUST	TP		NR	NR	NR	NR	NR	0
HI RGA HWS	TP		NR	NR	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
DOD Region SSW 1/4-1/2 2606 ft.	**SAND ISLAND MILITARY RESERVATION** **SAND ISLAND MILITARY RESE (County), HI** Click here for full text details	**DOD**	**CUSA147757 N/A**
1 SW < 1/8 0.101 mi. 532 ft. Relative: Higher	**607 N KING ST** **HONOLULU, HI 96817** Click here for full text details	**EDR US Hist Cleaners**	**1015080184 N/A**
2 ENE < 1/8 0.101 mi. 532 ft. Relative: Higher	**574 N VINEYARD BLVD** **HONOLULU, HI 96817** Click here for full text details	**EDR US Hist Auto Stat**	**1015558450 N/A**
3 SSE < 1/8 0.105 mi. 552 ft. Relative: Lower	**KUKUI GARDENS MAKAI** **1103 LILIHA ST** **HONOLULU, HI 96817** Click here for full text details **RCRA-CESQG** EPA Id: HIR000139048	**RCRA-CESQG**	**1012178249 HIR000139048**
A4 West < 1/8 0.114 mi. 601 ft. Relative: Higher	**KING STREET SHELL** **666 N KING ST** **HONOLULU, HI 96817** Click here for full text details **RCRA-CESQG** EPA Id: HIR000137398	**RCRA-CESQG**	**1009398532 HIR000137398**

A5
West
< 1/8
0.114 mi.
601 ft.

Relative: Higher

KING SHELL FOODMART
666 N KING ST
HONOLULU, HI 96817

HI LUST **U001235340**
HI UST **N/A**
HI Financial Assurance

Click here for full text details

HI LUST
Facility Id: 9-101026
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-101026
Tank Status: Currently In Use

B6
SSW
< 1/8
0.121 mi.
637 ft.

Relative: Lower

555 N KING ST
HONOLULU, HI 96817

EDR US Hist Auto Stat **1015552125**
N/A

Click here for full text details

B7
SSW
1/8-1/4
0.137 mi.
725 ft.

Relative: Lower

KINGSGATE PLAZA
516 DILLINGHAM BLVD
HONOLULU, HI 96817

HI LUST **U001235760**
HI UST **N/A**

Click here for full text details

HI LUST
Facility Id: 9-102172
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-102172
Tank Status: Permanently Out of Use

C8
West
1/8-1/4
0.141 mi.
743 ft.

Relative: Higher

OLD WORLD PRODUCTS OF HI INC
717 A NORTH KING ST
HONOLULU, HI 96817

RCRA NonGen / NLR **1000136677**
HID982320301

Click here for full text details

RCRA NonGen / NLR
EPA Id: HID982320301

9
NW
1/8-1/4
0.143 mi.
753 ft.

Relative: Higher

BANYAN STREET MANOR
1122 BANYAN ST
HONOLULU, HI 96817

RCRA-CESQG **1014389636**
HIR000139733

Click here for full text details

RCRA-CESQG
EPA Id: HIR000139733

10
North
1/8-1/4
0.148 mi.
783 ft.

Relative: Higher

TOGUCHI SVC STATION LTD
825 N VINEYARD BLVD
HONOLULU, HI 96817

RCRA-CESQG **1004688810**
FINDS **HID981665466**

Click here for full text details

RCRA-CESQG
EPA Id: HID981665466

C11
WNW
1/8-1/4
0.148 mi.
784 ft.

Relative: Higher

999 ROBELLO LN
HONOLULU, HI 96817

EDR US Hist Auto Stat **1015690957**
N/A

Click here for full text details

C12
WNW
1/8-1/4
0.148 mi.
784 ft.

Relative: Higher

PIONEER VENTURES INC
999 ROBELLO LN
HONOLULU, HI 96817

RCRA NonGen / NLR **1000688451**
FINDS **HID984468330**

Click here for full text details

RCRA NonGen / NLR
EPA Id: HID984468330

D13
WNW
1/8-1/4
0.167 mi.
884 ft.

Relative: Higher

743 N KING ST
HONOLULU, HI 96817

EDR US Hist Auto Stat **1015623029**
N/A

Click here for full text details

C14 **West** **1/8-1/4** **0.170 mi.** **896 ft.** **Relative:** **Higher**	**NAKAMURA INVESTMENT GROUP** **979 ROBELLO LN** **HONOLULU, HI 96800** Click here for full text details **HI UST** Facility Id: 9-102798 Tank Status: Permanently Out of Use	**HI UST** **HI Financial Assurance**	**U003221795** **N/A**
D15 **WNW** **1/8-1/4** **0.170 mi.** **898 ft.** **Relative:** **Higher**	**CHEVRON 99080** **743 N KING ST** **HONOLULU, HI 96817** Click here for full text details **RCRA-CESQG** EPA Id: HIR000137000	**RCRA-CESQG**	**1008880423** **HIR000137000**
E16 **SW** **1/8-1/4** **0.174 mi.** **917 ft.** **Relative:** **Lower**	**TONY'S LIQUOR AND DELI** **581 DILLINGHAM BLVD** **HONOLULU, HI 96817** Click here for full text details **HI UST** Facility Id: 9-101873 Tank Status: Currently In Use Tank Status: Permanently Out of Use	**HI UST** **HI Financial Assurance**	**U001235611** **N/A**
E17 **SW** **1/8-1/4** **0.178 mi.** **942 ft.** **Relative:** **Lower**	**YICK LUNG CO., INC.** **580 DILLINGHAM BLVD** **HONOLULU, HI 96817** Click here for full text details **HI LUST** Facility Id: 9-101500 Facility Status: Site Cleanup Completed (NFA) **HI UST** Facility Id: 9-101500 Tank Status: Permanently Out of Use	**HI LUST** **HI UST**	**U001235520** **N/A**

E18 **SW** **1/8-1/4** **0.178 mi.** **942 ft.** **Relative:** **Lower**	**580 DILLINGHAM BLVD** **HONOLULU, HI 96817** Click here for full text details	**EDR US Hist Auto Stat**	**1015560067** **N/A**
F19 **West** **1/8-1/4** **0.188 mi.** **991 ft.** **Relative:** **Higher**	**963 ROBELLO LN** **HONOLULU, HI 96817** Click here for full text details	**EDR US Hist Auto Stat**	**1015685260** **N/A**
F20 **West** **1/8-1/4** **0.188 mi.** **991 ft.** **Relative:** **Higher**	**RICHARD TOM** **963 ROBELLO LN** **HONOLULU, HI 96817** Click here for full text details **HI LUST** Facility Id: 9-101574 Facility Status: Site Cleanup Completed (NFA) **HI UST** Facility Id: 9-101574 Tank Status: Permanently Out of Use	**HI LUST** **HI UST** **HI Financial Assurance**	**U003221678** **N/A**
E21 **SW** **1/8-1/4** **0.195 mi.** **1028 ft.** **Relative:** **Lower**	**YICK LUNG CO., INC.** **602 DILLINGHAM BLVD** **HONOLULU, HI 96817** Click here for full text details **HI LUST** Facility Id: 9-101499 Facility Status: Site Cleanup Completed (NFA) **HI UST** Facility Id: 9-101499 Tank Status: Permanently Out of Use	**HI LUST** **HI UST**	**U001235519** **N/A**

G22
ENE
1/8-1/4
0.198 mi.
1048 ft.
Relative: Higher

HALL-MARK CLEANERS — **HI UST** — **U001235461**, **N/A**
1470 LILIHA ST
HONOLULU, HI 96817

Click here for full text details

HI UST
Facility Id: 9-101378
Tank Status: Permanently Out of Use

G23
ENE
1/8-1/4
0.198 mi.
1048 ft.
Relative: Higher

HALL MARK DRY CLEANERS — **HI SHWS** — **S104534167**, **N/A**
1470 LILIHA ST
HONOLULU, HI 96814

Click here for full text details

H24
SW
1/8-1/4
0.212 mi.
1121 ft.
Relative: Lower

EDR US Hist Auto Stat — **1015676017**, **N/A**
922 KAAMAHU PL
HONOLULU, HI 96817

Click here for full text details

H25
SW
1/8-1/4
0.212 mi.
1121 ft.
Relative: Lower

NAKAOKA PAINTING INC — **HI UST** — **U001235134**, **N/A**
922 KAAMAHU PL
HONOLULU, HI 96817

Click here for full text details

HI UST
Facility Id: 9-100280
Tank Status: Permanently Out of Use

I26
NNW
1/8-1/4
0.215 mi.
1136 ft.
Relative: Higher

EDR US Hist Auto Stat — **1015205068**, **N/A**
1311 PALAMA ST
HONOLULU, HI 96817

Click here for full text details

I27
NNW
1/8-1/4
0.215 mi.
1136 ft.
Relative: Higher

TESORO 2GO #61022 — **HI LUST**, **HI UST**, **HI Financial Assurance** — **U003221598**, **N/A**
1311 PALAMA ST
HONOLULU, HI 96817

Click here for full text details

HI LUST
Facility Id: 9-100348
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-100348
Tank Status: Permanently Out of Use
Tank Status: Currently In Use

H28
SW
1/8-1/4
0.218 mi.
1150 ft.
Relative: Lower

VON HAMM TEXTILES — **HI SHWS**, **HI SPILLS**, **HI ENG CONTROLS**, **HI INST CONTROL** — **S106820929**, **N/A**
546 KAAAHI ST
HONOLULU, HI 96817

Click here for full text details

H29
SW
1/8-1/4
0.220 mi.
1164 ft.
Relative: Lower

EDR US Hist Auto Stat — **1015548104**, **N/A**
545 KAAAHI ST
HONOLULU, HI 96817

Click here for full text details

H30
SW
1/8-1/4
0.220 mi.
1164 ft.
Relative: Lower

NUUANU AUTO COMPANY LTD — **HI SHWS** — **S111704825**, **N/A**
545 KAAAHI ST
HONOLULU, HI 96817

Click here for full text details

J31
SSW
1/8-1/4
0.249 mi.
1313 ft.
Relative: Lower

MAUNAWILI PRODUCE, INC. — **RCRA NonGen / NLR**, **FINDS** — **1000823298**, **HID984469627**
914 KAAAHI PL
HONOLULU, HI 96817

Click here for full text details

RCRA NonGen / NLR
EPA Id: HID984469627

J32
SSW
1/8-1/4
0.249 mi.
1313 ft.

914 KAAAHI PL
HONOLULU, HI 96817

EDR US Hist Auto Stat — **1015673162** / **N/A**

Click here for full text details

Relative: Lower

J33
SSW
1/8-1/4
0.249 mi.
1313 ft.

MAUNAWILI PRODUCE, INC.
914 KAAAHI PL
HONOLULU, HI 96817

HI LUST — **U001235127**
HI UST — **N/A**

Click here for full text details

Relative: Lower

HI LUST
Facility Id: 9-100272
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-100272
Tank Status: Permanently Out of Use

J34
SSW
1/8-1/4
0.250 mi.
1319 ft.

ALOHA FENDER INC
915 KAAAHI PL
HONOLULU, HI 96817

RCRA-CESQG — **1000823317**
FINDS — **HID984469817**

Click here for full text details

Relative: Lower

RCRA-CESQG
EPA Id: HID984469817

J35
SSW
1/8-1/4
0.250 mi.
1319 ft.

915 KAAAHI PL
HONOLULU, HI 96817

EDR US Hist Auto Stat — **1015673481** / **N/A**

Click here for full text details

Relative: Lower

J36
SSW
1/4-1/2
0.250 mi.
1322 ft.

MAUNAWILI PRODUCE
906 KAAAHI PL
HONOLULU, HI 96817

HI LUST — **U001235527**
HI UST — **N/A**

Click here for full text details

Relative: Lower

HI LUST
Facility Id: 9-101518
Facility Status: Site Cleanup Completed (NFA)

HI UST

MAUNAWILI PRODUCE (Continued) — **U001235527**

Facility Id: 9-101518
Tank Status: Permanently Out of Use

37
WSW
1/4-1/2
0.257 mi.
1357 ft.

CUTTER DODGE AUTO SERVICE CENTER
735 DILLINGHAM BLVD
HONOLULU, HI 96817

HI LUST — **U001235565**
HI UST — **N/A**

Click here for full text details

Relative: Higher

HI LUST
Facility Id: 9-101718
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-101718
Tank Status: Permanently Out of Use

38
South
1/4-1/2
0.281 mi.
1485 ft.

HONOLULU COMMUNITY ACTION PROGRAM
337 & 357 N KING ST
HONOLULU, HI 96817

HI LUST — **U001235598**
HI UST — **N/A**

Click here for full text details

Relative: Lower

HI LUST
Facility Id: 9-101814
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-101814
Tank Status: Permanently Out of Use

39
ENE
1/4-1/2
0.282 mi.
1487 ft.

LANCE GOYA CHEVRON
504 N SCHOOL ST
HONOLULU, HI 96817

HI SHWS — **U003402822**
HI LUST — **N/A**
HI UST
HI ENG CONTROLS
HI INST CONTROL
HI Financial Assurance

Click here for full text details

Relative: Higher

HI LUST
Facility Id: 9-101259
Facility Status: Site Cleanup Completed with EHMP
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-101259
Tank Status: Permanently Out of Use

40 SW 1/4-1/2 0.291 mi. 1535 ft. Relative: Lower

HAWAIIAN GAS PRODUCTS LTD — **EDR MGP** — **1008409006**
516-520 KUWILI ST — **N/A**
HONOLULU, HI 96817

Click here for full text details

K41 West 1/4-1/2 0.302 mi. 1592 ft. Relative: Higher

DOLE IWILEI — **HI SHWS, HI SPILLS, HI INST CONTROL** — **S106816902**
801 DILLINGHAM BLVD — **N/A**
HONOLULU, HI 96817

Click here for full text details

K42 West 1/4-1/2 0.302 mi. 1592 ft. Relative: Higher

DOLE IWILEI CANNERY — **HI LUST, HI UST** — **U001235209**
801 DILLINGHAM BLVD — **N/A**
HONOLULU, HI 96817

Click here for full text details

HI LUST
Facility Id: 9-100746
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-100746
Tank Status: Permanently Out of Use

K43 West 1/4-1/2 0.302 mi. 1592 ft. Relative: Higher

DOLE PACKAGED FOODS CO — **CERC-NFRAP, RCRA NonGen / NLR** — **1000197948**
801 DILLINGHAM BLVD. — **HID981424385**
HONOLULU, HI 96817

Click here for full text details

CERC-NFRAP
EPA Id: HID981424385

RCRA NonGen / NLR
EPA Id: HID981424385

44 SSW 1/4-1/2 0.316 mi. 1670 ft. Relative: Lower

ISLAND MOVERS, INC. — **HI LUST, HI UST, HI Financial Assurance** — **U003221626**
414 KUWILI STHONOLULU HARBOR PIER 42 — **N/A**
HONOLULU, HI 96817

Click here for full text details

HI LUST
Facility Id: 9-100936
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-100936
Tank Status: Permanently Out of Use

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45 South 1/4-1/2 0.318 mi. 1680 ft. Relative: Lower

LILIHA CIVIC CENTER — **HI SHWS** — **1006819345**
337 N KING ST — **N/A**
HONOLULU, HI 96817

Click here for full text details

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46 NNE 1/4-1/2 0.327 mi. 1726 ft. Relative: Higher

SNAPPY SERVICE — **HI LUST, HI UST, HI SPILLS** — **U001235264**
719 N SCHOOL ST — **N/A**
HONOLULU, HI 96817

Click here for full text details

HI LUST
Facility Id: 9-100858
Facility Status: Monitored Natural Attenuation

HI UST
Facility Id: 9-100858
Tank Status: Permanently Out of Use

---

47 SW 1/4-1/2 0.338 mi. 1784 ft. Relative: Lower

TRAVEL PLAZA TRANSPORTATION, LLC — **HI SHWS, HI LUST, HI UST, HI Financial Assurance** — **U003154753**
818 PINE ST — **N/A**
HONOLULU, HI 96817

Click here for full text details

HI LUST
Facility Id: 9-102991
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-102991
Tank Status: Currently In Use
Tank Status: Permanently Out of Use

48 SSW 1/4-1/2 0.341 mi. 1802 ft. Relative: Lower

SENIOR RESIDENCES AT IWILEI — HI SHWS — S111704855
888 IWILEI RD — HI INST CONTROL — N/A
HONOLULU, HI 96813

Click here for full text details

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49 South 1/4-1/2 0.349 mi. 1841 ft. Relative: Lower

IWILEI FRUIT AND VEGETABLE WAREHOUSE — HI SHWS — U003858603
920 IWILEI ROAD — HI LUST — N/A
HONOLULU, HI 96813 — HI UST

Click here for full text details

HI LUST
Facility Id: 9-103747
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-103747
Tank Status: Permanently Out of Use

L50 SSW 1/4-1/2 0.359 mi. 1897 ft. Relative: Lower

STEELTECH INC — HI LUST — U003154735
373 N NIMITZ HWY — HI UST — N/A
HONOLULU, HI 96817

Click here for full text details

HI LUST
Facility Id: 9-102947
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-102947
Tank Status: Permanently Out of Use

L51 SSW 1/4-1/2 0.359 mi. 1897 ft. Relative: Lower

373 NORTH NIMITZ HIGHWAY — HI SHWS — S106815507
373 N NIMITZ HWY — HI SPILLS — N/A
HONOLULU, HI 96817

Click here for full text details

52 South 1/4-1/2 0.362 mi. 1913 ft. Relative: Lower

IWILEI PROJECT SITE (IWILEI BROWNFIELDS) — HI SHWS — S107022564
IWILEI RD & N KING ST — N/A
HONOLULU, HI 96817

Click here for full text details

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53 NW 1/4-1/2 0.368 mi. 1944 ft. Relative: Higher

MAHALO NORTH KING AUTO — HI LUST — U001235167
1010 N KING ST — HI UST — N/A
HONOLULU, HI 96817 — HI Financial Assurance

Click here for full text details

HI LUST
Facility Id: 9-100339
Facility Status: Site Cleanup Completed (NFA)
Facility Status: Site Cleanup Completed with EHMP

HI UST
Facility Id: 9-100339
Tank Status: Permanently out of Use
Tank Status: Permanently Out of Use

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54 SSE 1/4-1/2 0.383 mi. 2022 ft. Relative: Lower

TOWN INN — HI SHWS — 1006819555
248-258 N BERETANIA ST — HI INST CONTROL — N/A
HONOLULU, HI 96817 — HI VCP

Click here for full text details

M55 West 1/4-1/2 0.387 mi. 2043 ft. Relative: Lower

PIER 51 HONOLULU HARBOR, OIL/DIESEL LEAK TO OCEAN — FINDS — 1006819934
925 DILLINGHAM BLVD — HI SHWS — N/A
HONOLULU, HI 96817 — HI ENG CONTROLS
HI INST CONTROL
HI VCP

Click here for full text details

M56 West 1/4-1/2 0.387 mi. 2043 ft. Relative: Lower

SPRINT LOT — HI LUST — U003914036
925 DILLINGHAM BLVD — HI UST — N/A
HONOLULU, HI 96817

Click here for full text details

HI LUST
Facility Id: 9-103769
Facility Status: Site Cleanup Completed (NFA)

HI UST

SPRINT LOT (Continued) — **U003914036**

Facility Id: 9-103769
Tank Status: Permanently Out of Use

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57 NNE 1/4-1/2 0.393 mi. 2075 ft. Relative: Higher

PALAMA ELDERLY HOUSING — **HI LUST, HI UST** — **U003154703, N/A**
851 N SCHOOL ST
HONOLULU, HI 96814

Click here for full text details

HI LUST
Facility Id: 9-102887
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-102887
Tank Status: Permanently Out of Use

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58 WNW 1/4-1/2 0.394 mi. 2082 ft. Relative: Lower

HONOLULU COMMUNITY COLLEGE — **HI LUST, HI UST** — **U004109517, N/A**
DILLINGHAM BLVD
HONOLULU, HI 96817

Click here for full text details

HI LUST
Facility Id: 9-103285
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-103285
Tank Status: Permanently Out of Use

M59 West 1/4-1/2 0.395 mi. 2088 ft. Relative: Lower

THEO DAVIES CATERPILLAR REPAIR SITE — **HI SHWS, HI ENG CONTROLS, HI INST CONTROL** — **S109096031, N/A**
935 DILLINGHAM BLVD
HONOLULU, HI 96817

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60 WSW 1/4-1/2 0.398 mi. 2100 ft. Relative: Lower

IWILEI BUSINESS CENTER — **HI SHWS, HI SPILLS, HI INST CONTROL** — **S106817968, N/A**
501 SUMNER ST
HONOLULU, HI 96814

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61 South 1/4-1/2 0.400 mi. 2113 ft. Relative: Lower

215 NORTH KING STREET CONSTRUCTION SITE, TANKS 1 & 2 — **HI SHWS** — **S106815334, N/A**
215 N KING ST
HONOLULU, HI 96814

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M62 West 1/4-1/2 0.408 mi. 2153 ft. Relative: Lower

HONOLULU COMMUNITY COLLEGE GAS STATION — **HI SHWS** — **1006820629, N/A**
874 DILLINGHAM BLVD
HONOLULU, HI 96817

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63 NW 1/4-1/2 0.421 mi. 2222 ft. Relative: Lower

KING'S SERVICE — **HI LUST, HI UST** — **U003541723, N/A**
1070 N KING ST
HONOLULU, HI 96817

Click here for full text details

HI LUST
Facility Id: 9-101111
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-101111
Tank Status: Permanently Out of Use

N64 SSW 1/4-1/2 0.447 mi. 2360 ft. Relative: Lower

420 N. NIMITS HWY DEMOLOTION PROJECT — **HI LUST, HI UST** — **U004155570, N/A**
420 N. NIMITZ HWY
HONOLULU, HI 96819

Click here for full text details

HI LUST
Facility Id: 9-103898
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-103898
Tank Status: Permanently out of Use

N65 SSW 1/4-1/2 0.447 mi. 2360 ft. — Relative: Lower

420-470 NORTH NIMITZ HIGHWAY — HI SHWS — S106815536
420-470 N NIMITZ HWY — HI ENG CONTROLS — N/A
HONOLULU, HI 96817

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O66 NW 1/4-1/2 0.452 mi. 2384 ft. — Relative: Lower

JBL HAWAII LTD — HI LUST, HI UST — U001235921
905 KOKEA ST — N/A
HONOLULU, HI 96817

Click here for full text details

HI LUST
Facility Id: 9-102462
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-102462
Tank Status: Permanently Out of Use

O67 NW 1/4-1/2 0.452 mi. 2384 ft. — Relative: Lower

JBL HAWAII, LTD — HI SHWS — 1006820832
905 KOKEA ST — HI ENG CONTROLS — N/A
HONOLULU, HI 96817 — HI INST CONTROL

Click here for full text details

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68 South 1/4-1/2 0.455 mi. 2403 ft. — Relative: Lower

AWA WASTEWATER PUMP STATION — HI SHWS — S105262868
190 N NIMITZ HWY — HI SPILLS — N/A
HONOLULU, HI 96817

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P69 ENE 1/4-1/2 0.459 mi. 2424 ft. — Relative: Higher

LILIHA CHEVRON — HI LUST, HI UST — U001235687
1748 LILIHA ST — N/A
HONOLULU, HI 96817

Click here for full text details

HI LUST
Facility Id: 9-102069
Facility Status: Site Cleanup Completed (NFA)

HI UST

LILIHA CHEVRON (Continued) — U001235687

Facility Id: 9-102069
Tank Status: Permanently Out of Use

P70 ENE 1/4-1/2 0.460 mi. 2430 ft. — Relative: Higher

B & A AUTOMOTIVE — HI LUST, HI UST — U001235479
1739 LILIHA ST — N/A
HONOLULU, HI 96817

Click here for full text details

HI LUST
Facility Id: 9-101426
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-101426
Tank Status: Permanently Out of Use

Q71 NW 1/4-1/2 0.478 mi. 2524 ft. — Relative: Lower

7-11 KAPALAMA — HI LUST, HI UST, HI Financial Assurance — U003154444
1136 N KING ST. — N/A
HONOLULU, HI 96817

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HI LUST
Facility Id: 9-100028
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-100028
Tank Status: Permanently Out of Use
Tank Status: Currently In Use

---

72 NW 1/4-1/2 0.479 mi. 2528 ft. — Relative: Lower

OAHU PLUMBING & SHEET METAL, LTD — HI LUST, HI UST, HI Financial Assurance — U001235455
926 KOHOU ST — N/A
HONOLULU, HI 96817

Click here for full text details

HI LUST
Facility Id: 9-101367
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-101367
Tank Status: Permanently Out of Use

73 South 1/4-1/2 0.494 mi. 2610 ft. Relative: Higher

KEKAULIKE DIAMOND HEAD BLOCK REVITALIZATION
163 N HOTEL ST
HONOLULU, HI 96817

HI SHWS — **1006819184**
HI SPILLS — **N/A**

Click here for full text details

Q74 NW 1/4-1/2 0.496 mi. 2618 ft. Relative: Lower

GTE-HAWAIIAN TEL EMPLOYEES FEDERAL CREDIT UNION (HTEFCU)
1138 N KING ST
HONOLULU, HI 96817

HI SHWS — **1006820922**
HI ENG CONTROLS — **N/A**
HI INST CONTROL

Click here for full text details

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75 SW 1/2-1 0.511 mi. 2698 ft. Relative: Lower

MID PAC PETROLEUM LLC 2705958
540 N NIMITZ HWY
HONOLULU, HI 96817

HI SHWS — **U001235004**
HI LUST — **N/A**
HI UST
HI Financial Assurance

Click here for full text details

HI LUST
Facility Id: 9-100017
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-100017
Tank Status: Permanently out of Use
Tank Status: Permanently Out of Use

R76 West 1/2-1 0.525 mi. 2772 ft. Relative: Lower

COSTCO WAREHOUSE
525 ALAKAWA ST
HONOLULU, HI 96817

HI SHWS — **S108008497**
HI ENG CONTROLS — **N/A**
HI INST CONTROL
HI VCP

Click here for full text details

R77 West 1/2-1 0.533 mi. 2814 ft. Relative: Lower

COSTCO GAS STATION
520 ALAKAWA ST
HONOLULU, HI 96817

HI SHWS — **S108859910**
HI ENG CONTROLS — **N/A**
HI INST CONTROL
HI VCP

Click here for full text details

78 ENE 1/2-1 0.537 mi. 2837 ft. Relative: Higher

KUAKINI MEDICAL DEVELOPMENT CORP
347 N KUAKINI ST
HONOLULU, HI 96817

RCRA-SQG — **1000270690**
FINDS — **HID077701613**
HI SHWS
HI LUST
HI UST
HI SPILLS
HI Financial Assurance

Click here for full text details

RCRA-SQG
EPA Id: HID077701613

HI LUST
Facility Id: 9-100264
Facility Status: Site Cleanup Completed (NFA)
Facility Status: Site Cleanup Completed with EHE/EHMP

HI UST
Facility Id: 9-100264
Tank Status: Permanently Out of Use
Tank Status: Currently In Use

S79 SW 1/2-1 0.558 mi. 2945 ft. Relative: Lower

580 NORTH NIMITZ HIGHWAY
580 N NIMITZ HWY
HONOLULU, HI 96817

HI SHWS — **S109096040**
HI ENG CONTROLS — **N/A**

Click here for full text details

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80 WSW 1/2-1 0.560 mi. 2959 ft. Relative: Lower

BHP GASCO BENZENE SITE
616 IWILEI RD
HONOLULU, HI 96817

HI SHWS — **S110277531**
HI SPILLS — **N/A**
HI INST CONTROL
HI AIRS

Click here for full text details

HI AIRS
Facility Id: 0551-01-N

S81 SW 1/2-1 0.572 mi. 3019 ft. Relative: Lower

CITY MILL
660 N NIMITZ HWY
HONOLULU, HI 96817

HI SHWS — **U001235472**
HI LUST — **N/A**
HI UST
HI INST CONTROL

Click here for full text details

HI LUST
Facility Id: 9-101398
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-101398

CITY MILL (Continued) — **U001235472**

Tank Status: Permanently Out of Use

T82 WSW 1/2-1 0.588 mi. 3107 ft. Relative: Lower

BHP GASCO
432 PACIFIC STREET
HONOLULU, HI 96817

Click here for full text details

Database(s): EDR MGP
EDR ID Number: 1008409005
EPA ID Number: N/A

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83 SW 1/2-1 0.589 mi. 3108 ft. Relative: Lower

ZIPPY'S 634 N NIMITZ HIGHWAY
634 N NIMITZ HWY
HONOLULU, HI 96781

Click here for full text details

Database(s): HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST CONTROL
EDR ID Number: S110061866
EPA ID Number: N/A

T84 WSW 1/2-1 0.591 mi. 3120 ft. Relative: Lower

UNOCAL 76 HONOLULU LRNG CTR
411 PACIFIC ST
HONOLULU, HI 96817

Click here for full text details

Database(s): RCRA NonGen / NLR, FINDS, HI SHWS, HI UST, HI SPILLS, HI VCP, HI Financial Assurance
EDR ID Number: 1000167494
EPA ID Number: HID981652696

RCRA NonGen / NLR
EPA Id: HID981652696

HI UST
Facility Id: 9-100108
Tank Status: Permanently Out of Use

U85 SW 1/2-1 0.595 mi. 3140 ft. Relative: Lower

356 PACIFIC STREET BWS TRENCHING SHEEN
356 PACIFIC ST
HONOLULU, HI

Click here for full text details

Database(s): HI SHWS, HI SPILLS
EDR ID Number: S110169069
EPA ID Number: N/A

U86 SW 1/2-1 0.595 mi. 3142 ft. Relative: Lower

POLYNESIAN HOSPITALITY
330 PACIFIC ST
HONOLULU, HI 96817

Click here for full text details

Database(s): RCRA-CESQG, FINDS, HI SHWS, HI LUST, HI UST, HI SPILLS, HI Financial Assurance
EDR ID Number: 1000906758
EPA ID Number: HI0000589812

RCRA-CESQG
EPA Id: HI0000589812

HI LUST
Facility Id: 9-101379
Facility Status: Active Remediation

HI UST
Facility Id: 9-101379
Tank Status: Permanently Out of Use
Tank Status: Currently in Use

U87 SW 1/2-1 0.596 mi. 3145 ft. Relative: Lower

BREWER ENVIRONMENTAL INDUSTRIES-PACIFIC STREET
311 PACIFIC ST
HONOLULU, HI 96817

Click here for full text details

Database(s): HI SHWS, HI SPILLS, HI VCP
EDR ID Number: 1000436248
EPA ID Number: N/A

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88 South 1/2-1 0.599 mi. 3161 ft. Relative: Higher

YEE HOP BUILDING MAUNAKEA STREET
950 MAUNAKEA ST
HONOLULU, HI

Click here for full text details

Database(s): HI SHWS
EDR ID Number: S106821168
EPA ID Number: N/A

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89 NW 1/2-1 0.616 mi. 3251 ft. Relative: Lower

TAKAMIYA PROPERTY
850 MOOWAA ST
HONOLULU, HI 96817

Click here for full text details

Database(s): HI SHWS, HI SPILLS
EDR ID Number: S106820561
EPA ID Number: N/A

90 WSW 1/2-1 0.616 mi. 3254 ft. Relative: Lower
HOME DEPOT
421 ALAKAWA ST
HONOLULU, HI 96817
HI SHWS, HI ENG CONTROLS, HI INST CONTROL
S105887731 / N/A

Click here for full text details

91 WNW 1/2-1 0.618 mi. 3264 ft. Relative: Lower
CLASSIC BOWL
1190 DILLINGHAM BLVD
HONOLULU, HI
HI SHWS
S117391422 / N/A

Click here for full text details

92 NW 1/2-1 0.627 mi. 3309 ft. Relative: Lower
ROSS TRUSTS
819 MOOWAA ST
HONOLULU, HI 96817
HI SHWS, HI VCP
S103290154 / N/A

Click here for full text details

V93 SW 1/2-1 0.649 mi. 3425 ft. Relative: Lower
HAWAIIAN GRAIN CORPORATION
701 N NIMITZ HWY
HONOLULU, HI 96817
HI SHWS, HI LUST, HI UST
U003402808 / N/A

Click here for full text details

HI LUST
Facility Id: 9-100852
Facility Status: Case Transferred to HEER (regulated)

HI UST
Facility Id: 9-100852
Tank Status: Permanently Out of Use

94 SW 1/2-1 0.663 mi. 3503 ft. Relative: Lower
700 N NIMITZ IDPP RELEASE
700 N NIMITZ HWY
HONOLULU, HI
HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST CONTROL
S110061245 / N/A

Click here for full text details

V95 SW 1/2-1 0.664 mi. 3507 ft. Relative: Lower
HAWAIIAN FLOUR MILL
703 N NIMITZ HWY
HONOLULU, HI 96808
HI SHWS
S106817404 / N/A

Click here for full text details

V96 SW 1/2-1 0.666 mi. 3519 ft. Relative: Lower
MOANA PAA KAI
705 N NIMITZ HWY
HONOLULU, HI 96817
RCRA-CESQG, HI SHWS, HI SPILLS
1000146699 / HID982411357

Click here for full text details

RCRA-CESQG
EPA Id: HID982411357

97 WSW 1/2-1 0.672 mi. 3546 ft. Relative: Lower
BEST BUY
ALAKAWA ST & NIMITZ HWY
HONOLULU, HI 96817
HI SHWS, HI SPILLS
S108008729 / N/A

Click here for full text details

98 SW 1/2-1 0.674 mi. 3560 ft. Relative: Lower
SAUSE BROTHERS
ALAKEA ST
HONOLULU, HI 96817
HI SHWS, HI SPILLS
S107024013 / N/A

Click here for full text details

W99 SW 1/2-1 0.697 mi. 3680 ft. Relative: Lower
BHP PIER 29
739 N NIMITZ HWY
HONOLULU, HI 96817
HI SHWS
S106816192 / N/A

Click here for full text details

W100 SW 1/2-1 0.712 mi. 3762 ft. Relative: Lower
755 N NIMITZ HWY
755 N NIMITZ HWY
HONOLULU, HI
HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST CONTROL
S110061246 / N/A

Click here for full text details

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
101 WNW 1/2-1 0.717 mi. 3785 ft. Relative: Lower	KAMEHAMEHA SCHOOLS - 1336 DILLINGHAM BOULEVARD 1336 DILLINGHAM BLVD HONOLULU, HI 96813 Click here for full text details	HI SHWS HI SPILLS	S110061575 N/A
X102 SW 1/2-1 0.733 mi. 3872 ft. Relative: Lower	775 NORTH NIMITZ HIGHWAY 775 N NIMITZ HWY HONOLULU, HI Click here for full text details	HI SHWS HI ENG CONTROLS HI INST CONTROL	S110061247 N/A
Y103 WSW 1/2-1 0.739 mi. 3900 ft. Relative: Lower	WEYERHAEUSER 900 N NIMITZ HWY HONOLULU, HI 96817 Click here for full text details	HI SHWS HI SPILLS	S106821137 N/A
X104 SW 1/2-1 0.743 mi. 3924 ft. Relative: Lower	EQUILON ENTERPRISES LLC HONOLULU TERMINAL 789 N NIMITZ HWY HONOLULU, HI 96817 Click here for full text details	HI SHWS	S115488694 N/A
105 SW 1/2-1 0.745 mi. 3936 ft. Relative: Lower	PAULEY PETROLEUM 795 N NIMITZ HWY HONOLULU, HI 96817 Click here for full text details	HI SHWS HI SPILLS HI ENG CONTROLS HI INST CONTROL	S108009116 N/A
Z106 WSW 1/2-1 0.748 mi. 3948 ft. Relative: Lower	CHEVRON HONOLULU TRANSPORTATION TERMINAL 933 N NIMITZ HWY HONOLULU, HI 96817 Click here for full text details	HI SHWS HI ENG CONTROLS HI Financial Assurance	U003154454 N/A

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
Z107 WSW 1/2-1 0.752 mi. 3971 ft. Relative: Lower	HAWAII STEVEDORES 965 N NIMITZ HWY HONOLULU, HI 96817 Click here for full text details	HI SHWS HI SPILLS HI ENG CONTROLS	S106817380 N/A
Y108 WSW 1/2-1 0.752 mi. 3973 ft. Relative: Lower	861-869 NORTH NIMITZ HIGHWAY 861-869 N NIMITZ HWY HONOLULU, HI 96817 Click here for full text details	HI SHWS HI ENG CONTROLS HI INST CONTROL	S108859941 N/A
Y109 WSW 1/2-1 0.753 mi. 3974 ft. Relative: Lower	HAWAIIAN ELECTRIC COMPANY (HECO) - IWILEI TANK YARD 855 N NIMITZ HWY HONOLULU, HI 96818 Click here for full text details	HI SHWS HI SPILLS HI ENG CONTROLS HI INST CONTROL	U001235311 N/A
110 WSW 1/2-1 0.754 mi. 3983 ft. Relative: Lower	GTE HAWAIIAN TEL - CONTAMINATED SOIL ALAKAWA ST & NIMITZ HWY HONOLULU, HI 96817 Click here for full text details	HI SHWS HI SPILLS HI ENG CONTROLS HI INST CONTROL	S106817210 N/A
AA111 West 1/2-1 0.756 mi. 3990 ft. Relative: Lower	MCCABE, HAMILTON, & RENNY COMPANY, LTD 1130 N NIMITZ HWY HONOLULU, HI 96817 Click here for full text details	HI SHWS HI SPILLS	1006818946 N/A
112 WSW 1/2-1 0.765 mi. 4039 ft. Relative: Lower	HART STREET WWPS 1031 N NIMITZ HWY HONOLULU, HI 96817 Click here for full text details HI UIC Facility Id/Lat Long Min Coord: 3-1952.05.1-2	HI SHWS HI UIC	U003154453 N/A

AA113
West
1/2-1
0.779 mi.
4115 ft.
Relative: Lower

CHEVRON KAPALAMA TERMINAL
1105 N NIMITZ HWY
HONOLULU, HI 96817

Click here for full text details

HI SHWS — **S108008763**
HI SPILLS — **N/A**
HI INST CONTROL

114
East
1/2-1
0.780 mi.
4121 ft.
Relative: Higher

RICHARD'S CHEVRON
1909 NUUANU AVE
HONOLULU, HI 96817

Click here for full text details

HI SHWS — **1000601437**
HI SPILLS — **N/A**
HI INST CONTROL
HI Financial Assurance

115
SW
1/2-1
0.795 mi.
4197 ft.
Relative: Lower

PIER 30 TUG BOAT FUEL SPILL
777 N NIMITZ HWY
HONOLULU, HI 96817

Click here for full text details

HI SHWS — **U001235369**
HI SPILLS — **N/A**

116
West
1/2-1
0.796 mi.
4203 ft.
Relative: Lower

DOMESTIC COMMERCIAL FISHING VILLAGE
1133 N NIMITZ HWY
HONOLULU, HI 96817

Click here for full text details

HI SHWS — **S111677154**
HI SPILLS — **N/A**
HI ENG CONTROLS
HI INST CONTROL

117
South
1/2-1
0.799 mi.
4217 ft.
Relative: Lower

HARBOR COURT
66 QUEEN ST
HONOLULU, HI 96813

Click here for full text details

HI SHWS — **1006820894**
N/A

118
SSE
1/2-1
0.800 mi.
4223 ft.
Relative: Higher

CAPITOL PLACE DEVELOPMENT PROJECT
1212 QUEEN EMMA ST
HONOLULU, HI 96813

Click here for full text details

HI SHWS — **S108008488**
N/A

AB119
WNW
1/2-1
0.802 mi.
4234 ft.
Relative: Higher

1385 COLBURN STREET
1385 COLBURN ST
KAPALAMA, HI 96817

Click here for full text details

HI SHWS — **S115488666**
HI SPILLS — **N/A**

AB120
WNW
1/2-1
0.825 mi.
4354 ft.
Relative: Higher

GENERAL TIRE
505 WAIAKAMILO RD
HONOLULU, HI 96817

Click here for full text details

HI SHWS — **S106817180**
HI SPILLS — **N/A**

121
West
1/2-1
0.900 mi.
4752 ft.
Relative: Lower

1305 HART STREET
1305 HART ST
HONOLULU, HI 96814

Click here for full text details

HI SHWS — **S106815169**
HI SPILLS — **N/A**
HI INST CONTROL

122
West
1/2-1
0.941 mi.
4967 ft.
Relative: Lower

YOUNG BROTHERS REFRIGERATE RELEASE
1331 N NIMITZ HWY
HONOLULU, HI 96817

Click here for full text details

HI SHWS — **S108009312**
HI SPILLS — **N/A**

123
NW
1/2-1
0.952 mi.
5029 ft.
Relative: Higher

FARRINGTON HIGH SCHOOL
1564 N KING ST
HONOLULU, HI 96817

Click here for full text details

FTTS — **1007277849**
HIST FTTS — **N/A**
HI SHWS
HI SPILLS

124
NE
1/2-1
0.955 mi.
5045 ft.
Relative: Higher

SAINT FRANCIS HOSPITAL
2230 LILIHA ST
HONOLULU, HI 96817

Click here for full text details

HI LUST
Facility Id: 9-100785
Facility Status: Site Cleanup Completed (NFA)

HI SHWS — **U001235227**
HI LUST — **N/A**
HI UST
HI SPILLS

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
	SAINT FRANCIS HOSPITAL (Continued)		**U001235227**
	HI UST Facility Id: 9-100785 Tank Status: Permanently Out of Use		
125 **South** **1/2-1** **0.987 mi.** **5209 ft.** **Relative:** **Lower**	**HAWAIIAN ELECTRIC - HONOLULU GENERATING STATION** **170 ALA MOANA BOULEVARD** **HONOLULU, HI 96813** Click here for full text details	**RCRA-TSDF** **CERC-NFRAP** **CORRACTS** **RCRA-CESQG** **HI SHWS** **HI SPILLS** **CA HAZNET** **HI AIRS** **2020 COR ACTION**	**1000146691** **HID000150680**
	RCRA-TSDF EPA Id: HID000150680		
	CERC-NFRAP EPA Id: HID000150680		
	RCRA-CESQG EPA Id: HID000150680		
	HI AIRS Facility Id: 0238-01-C		
126 **ENE** **1/2-1** **0.989 mi.** **5220 ft.** **Relative:** **Higher**	**SAKE BREWERY & ICE CO** **HONOLULU, HI** Click here for full text details	**FUDS**	**1012129410** **N/A**

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
HI	AIRS	List of Permitted Facilities	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	BROWNFIELDS	Brownfields Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	CDL	Clandestine Drug Lab Listing	Department of Health	08/04/2010	09/10/2010	10/22/2010
HI	DRYCLEANERS	Permitted Drycleaner Facility Listing	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	ENG CONTROLS	Engineering Control Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	Financial Assurance	Financial Assurance Information Listing	Department of Health	12/01/2014	12/19/2014	01/28/2015
HI	INST CONTROL	Sites with Institutional Controls	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	LUST	Leaking Underground Storage Tank Database	Department of Health	12/16/2014	12/19/2014	01/28/2015
HI	RGA HWS	Recovered Government Archive State Hazardous Waste Facilitie	Department of Health		07/01/2013	01/08/2014
HI	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Health		07/01/2013	01/17/2014
HI	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	Department of Health		07/01/2013	01/03/2014
HI	SHWS	Sites List	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	SPILLS	Release Notifications	Department of Health	12/02/2014	12/22/2014	01/28/2015
HI	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	03/10/2012	01/03/2013	02/11/2013
HI	SWF/LF	Permitted Landfills in the State of Hawaii	Department of Health	09/17/2012	04/03/2013	05/10/2013
HI	UIC	Underground Injection Wells Listing	Department of Health	02/07/2013	02/12/2013	04/09/2013
HI	UST	Underground Storage Tank Database	Department of Health	12/18/2014	12/19/2014	01/28/2015
HI	VCP	Voluntary Response Program Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	04/22/2013	03/03/2015	03/09/2015
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2011	02/26/2013	04/19/2013
US	CERCLIS	Comprehensive Environmental Response, Compensation, and Liab	EPA	10/25/2013	11/11/2013	02/13/2014
US	CERCLIS-NFRAP	CERCLIS No Further Remedial Action Planned	EPA	10/25/2013	11/11/2013	02/13/2014
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	07/01/2014	09/10/2014	10/20/2014
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	01/23/2015	02/13/2015	03/09/2015
US	CORRACTS	Corrective Action Report	EPA	12/09/2014	12/29/2014	01/29/2015
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DELISTED NPL	National Priority List Deletions	EPA	12/16/2014	01/08/2015	02/09/2015
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	07/31/2012	08/07/2012	09/18/2012
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EDR US Hist Auto Stat	EDR Exclusive Historic Gas Stations	EDR, Inc.			
US	EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	09/29/2014	09/30/2014	11/06/2014
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	07/21/2014	10/07/2014	10/20/2014
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
US	FEMA UST	Underground Storage Tank Listing	FEMA	01/01/2010	02/16/2010	04/12/2010
US	FINDS	Facility Index System/Facility Registry System	EPA	08/16/2014	09/10/2014	10/20/2014
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	06/06/2014	09/10/2014	09/18/2014
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	12/29/2014	12/30/2014	03/09/2015
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	01/23/2015	02/06/2015	03/09/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	02/01/2013	05/01/2013	11/01/2013

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	01/30/2015	02/05/2015	03/09/2015
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/10/2015	03/13/2015
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	01/28/2015	01/30/2015	03/13/2015
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	01/08/2015	01/08/2015	02/09/2015
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2005	12/08/2006	01/11/2007
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	02/01/2013	05/01/2013	01/27/2014
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	01/30/2015	02/05/2015	03/13/2015
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/13/2015	03/13/2015
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	01/29/2015	01/30/2015	03/13/2015
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	12/14/2014	02/13/2015	03/13/2015
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	09/29/2014	10/01/2014	11/06/2014
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	11/25/2014	11/26/2014	01/29/2015
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	02/18/2014	03/18/2014	04/24/2014
US	LUCIS	Land Use Control Information System	Department of the Navy	12/03/2014	12/12/2014	01/29/2015
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	12/29/2014	01/08/2015	01/29/2015
US	NPL	National Priority List	EPA	12/16/2014	01/08/2015	02/09/2015
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	07/01/2014	10/15/2014	11/17/2014
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	02/01/2011	10/19/2011	01/10/2012
US	PRP	Potentially Responsible Parties	EPA	10/25/2013	10/17/2014	10/20/2014
US	Proposed NPL	Proposed National Priority List Sites	EPA	12/16/2014	01/08/2015	02/09/2015
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	10/07/2014	10/08/2014	10/20/2014
US	RCRA NonGen / NLR	RCRA - Non Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RMP	Risk Management Plans	Environmental Protection Agency	08/01/2014	08/12/2014	11/06/2014
US	ROD	Records Of Decision	EPA	11/25/2013	12/12/2013	02/24/2014
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	03/07/2011	03/09/2011	05/02/2011
US	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2011	07/31/2013	09/13/2013
US	TSCA	Toxic Substances Control Act	EPA	12/31/2012	01/15/2015	01/29/2015
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	09/14/2010	10/07/2011	03/01/2012
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/16/2014	10/31/2014	11/17/2014
US	US AIRS MINOR	Air Facility System Data	EPA	10/16/2014	10/31/2014	11/17/2014

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	12/22/2014	12/22/2014	01/29/2015
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	11/19/2014	11/21/2014	01/29/2015
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	12/30/2014	12/31/2014	01/29/2015
US	Oil/Gas Pipelines	GeoData Digital Line Graphs from 1:100,000-Scale Maps	USGS			
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
US	USGS 7.5' Topographic Map	Scanned Digital USGS 7.5' Topographic Map (DRG)	USGS			

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

MAYOR WRIGHT HOMES
521 N. KUKUI ST.
HONOLULU, HI 96817

TARGET PROPERTY COORDINATES

Latitude (North):	21.3202 - 21˚ 19' 12.72''
Longitude (West):	157.8641 - 157˚ 51' 50.76''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	617806.7
UTM Y (Meters):	2357871.5
Elevation:	10 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	21157-C7 HONOLULU, HI
Most Recent Revision:	Not reported
West Map:	21157-C8 PEARL HARBOR, HI
Most Recent Revision:	Not reported

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

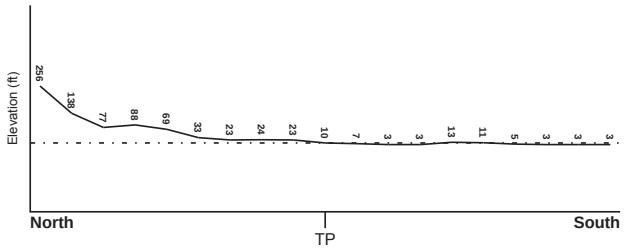
TOPOGRAPHIC INFORMATION

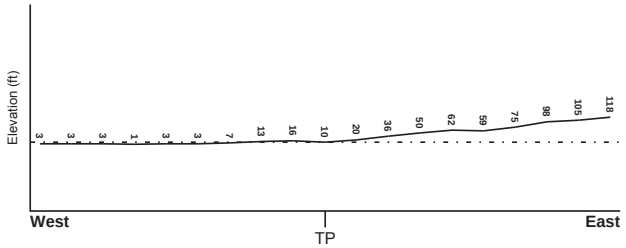
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General WSW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 10 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
HONOLULU, HI	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 15003C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
HONOLULU	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

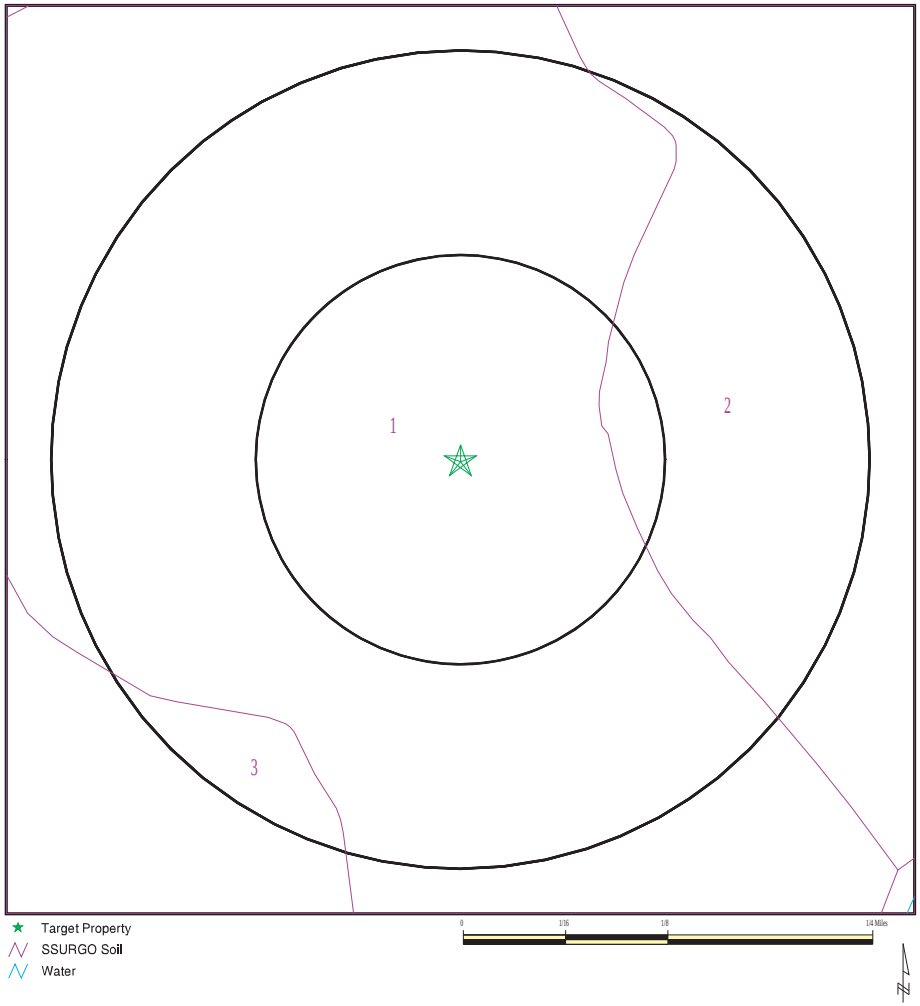
Era: -
System: -
Series: -
Code: N/A *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: -

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4237094.26s



SITE NAME: Mayor Wright Homes ADDRESS: 521 N. Kukui St. Honolulu HI 96817 LAT/LONG: 21.3202 / 157.8641	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.26s DATE: March 17, 2015 5:34 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Ewa

Soil Surface Texture: silty clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		Soil Reaction (pH)
1	0 inches	7 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	ML-K (proposed)	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6
2	7 inches	29 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	ML-K (proposed)	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6
3	29 inches	38 inches	bedrock	Not reported	Not reported	Max: 42 Min: 1	Max: Min:

Soil Map ID: 2

Soil Component Name: Kaena

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Poorly drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 107 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4.23 Min: 0.42	Max: 7.3 Min: 6.6
2	9 inches	37 inches	stony clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 7.3 Min: 6.6
3	37 inches	53 inches	stony clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 7.3 Min: 6.6

Soil Map ID: 3

Soil Component Name: Fill land, mixed

Soil Surface Texture: gravelly sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 152 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	gravelly sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 1.41	Max: 7.3 Min: 6.1
2	5 inches	59 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 1.41	Max: 7.3 Min: 6.1
3	59 inches	70 inches	bedrock	Not reported	Not reported	Max: 0.42 Min: 0.02	Max: Min:

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A2	USGS40000269794	1/8 - 1/4 Mile SSW
B3	USGS40000269810	1/8 - 1/4 Mile NW

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
C6	USGS40000269805	1/8 - 1/4 Mile ESE
D7	USGS40000269822	1/8 - 1/4 Mile North
E10	USGS40000269795	1/4 - 1/2 Mile SW
F13	USGS40000269799	1/4 - 1/2 Mile WSW
F14	USGS40000269800	1/4 - 1/2 Mile WSW
F16	USGS40000269801	1/4 - 1/2 Mile WSW
F18	USGS40000269796	1/4 - 1/2 Mile WSW
G21	USGS40000269813	1/4 - 1/2 Mile WNW
F22	USGS40000269802	1/4 - 1/2 Mile WSW
F23	USGS40000269790	1/4 - 1/2 Mile WSW
G24	USGS40000269815	1/4 - 1/2 Mile WNW
G25	USGS40000269816	1/4 - 1/2 Mile WNW
G26	USGS40000269817	1/4 - 1/2 Mile WNW
G35	USGS40000269811	1/4 - 1/2 Mile WNW
G36	USGS40000269812	1/4 - 1/2 Mile WNW
G37	USGS40000269814	1/4 - 1/2 Mile WNW
H42	USGS40000269778	1/4 - 1/2 Mile SW
H43	USGS40000269779	1/4 - 1/2 Mile SW
H44	USGS40000269780	1/4 - 1/2 Mile SW
I46	USGS40000269785	1/4 - 1/2 Mile ESE
H48	USGS40000269768	1/4 - 1/2 Mile SW
H49	USGS40000269771	1/4 - 1/2 Mile SW
J50	USGS40000269850	1/4 - 1/2 Mile North
H53	USGS40000269763	1/2 - 1 Mile SW
K56	USGS40000269751	1/2 - 1 Mile SSW
L57	USGS40000269772	1/2 - 1 Mile SW
J58	USGS40000269853	1/2 - 1 Mile North
J59	USGS40000269854	1/2 - 1 Mile North
M60	USGS40000269852	1/2 - 1 Mile NNE
62	USGS40000269742	1/2 - 1 Mile SSE
N63	USGS40000269788	1/2 - 1 Mile WSW
L68	USGS40000269786	1/2 - 1 Mile WSW
J69	USGS40000269863	1/2 - 1 Mile North
L71	USGS40000269781	1/2 - 1 Mile WSW
N75	USGS40000269789	1/2 - 1 Mile WSW
O76	USGS40000269731	1/2 - 1 Mile South
L77	USGS40000269773	1/2 - 1 Mile WSW
P81	USGS40000269784	1/2 - 1 Mile ESE
Q83	USGS40000269729	1/2 - 1 Mile SSE
Q85	USGS40000269728	1/2 - 1 Mile SSE
R87	USGS40000269888	1/2 - 1 Mile North
S88	USGS40000269855	1/2 - 1 Mile NW
S89	USGS40000269864	1/2 - 1 Mile NW
T91	USGS40000269733	1/2 - 1 Mile SE
S92	USGS40000269867	1/2 - 1 Mile NW
S93	USGS40000269866	1/2 - 1 Mile NW
S94	USGS40000269865	1/2 - 1 Mile NW
S95	USGS40000269868	1/2 - 1 Mile NW
S96	USGS40000269871	1/2 - 1 Mile NW
S97	USGS40000269870	1/2 - 1 Mile NW
S98	USGS40000269869	1/2 - 1 Mile NW
U109	USGS40000269718	1/2 - 1 Mile South

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
V110	USGS40000269719	1/2 - 1 Mile SSE
U112	USGS40000269713	1/2 - 1 Mile South
W115	USGS40000269711	1/2 - 1 Mile South
R116	USGS40000269899	1/2 - 1 Mile North
118	USGS40000269791	1/2 - 1 Mile WSW
X120	USGS40000269893	1/2 - 1 Mile NNW
U121	USGS40000269708	1/2 - 1 Mile South
V123	USGS40000269717	1/2 - 1 Mile SSE
U125	USGS40000269706	1/2 - 1 Mile South
U126	USGS40000269707	1/2 - 1 Mile South
U127	USGS40000269705	1/2 - 1 Mile South
Z131	USGS40000269715	1/2 - 1 Mile SSE
Z132	USGS40000269716	1/2 - 1 Mile SSE
Y135	USGS40000269704	1/2 - 1 Mile SSE
W137	USGS40000269700	1/2 - 1 Mile South
W138	USGS40000269701	1/2 - 1 Mile South
Z139	USGS40000269712	1/2 - 1 Mile SSE
AA143	USGS40000269894	1/2 - 1 Mile NNW
AB146	USGS40000269697	1/2 - 1 Mile South
AC147	USGS40000269764	1/2 - 1 Mile WSW
AC148	USGS40000269754	1/2 - 1 Mile WSW
149	USGS40000269730	1/2 - 1 Mile SW
AA150	USGS40000269900	1/2 - 1 Mile NNW
AB152	USGS40000269692	1/2 - 1 Mile South
AB158	USGS40000269690	1/2 - 1 Mile South
AB159	USGS40000269691	1/2 - 1 Mile South
AD160	USGS40000269721	1/2 - 1 Mile SE
AE163	USGS40000269693	1/2 - 1 Mile South
AF164	USGS40000269703	1/2 - 1 Mile SSE
AF165	USGS40000269699	1/2 - 1 Mile SSE
AG168	USGS40000269688	1/2 - 1 Mile South
AG169	USGS40000269689	1/2 - 1 Mile South
AE171	USGS40000269684	1/2 - 1 Mile South
AG174	USGS40000269682	1/2 - 1 Mile SSE
AG175	USGS40000269683	1/2 - 1 Mile SSE
AH177	USGS40000269695	1/2 - 1 Mile SSE
AG179	USGS40000269679	1/2 - 1 Mile South
AJ183	USGS40000269819	1/2 - 1 Mile West
AJ184	USGS40000269820	1/2 - 1 Mile West
AI185	USGS40000269674	1/2 - 1 Mile South
AJ187	USGS40000269821	1/2 - 1 Mile West

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
F12	HI0000301	1/4 - 1/2 Mile WSW

Note: PWS System location is not always the same as well location.

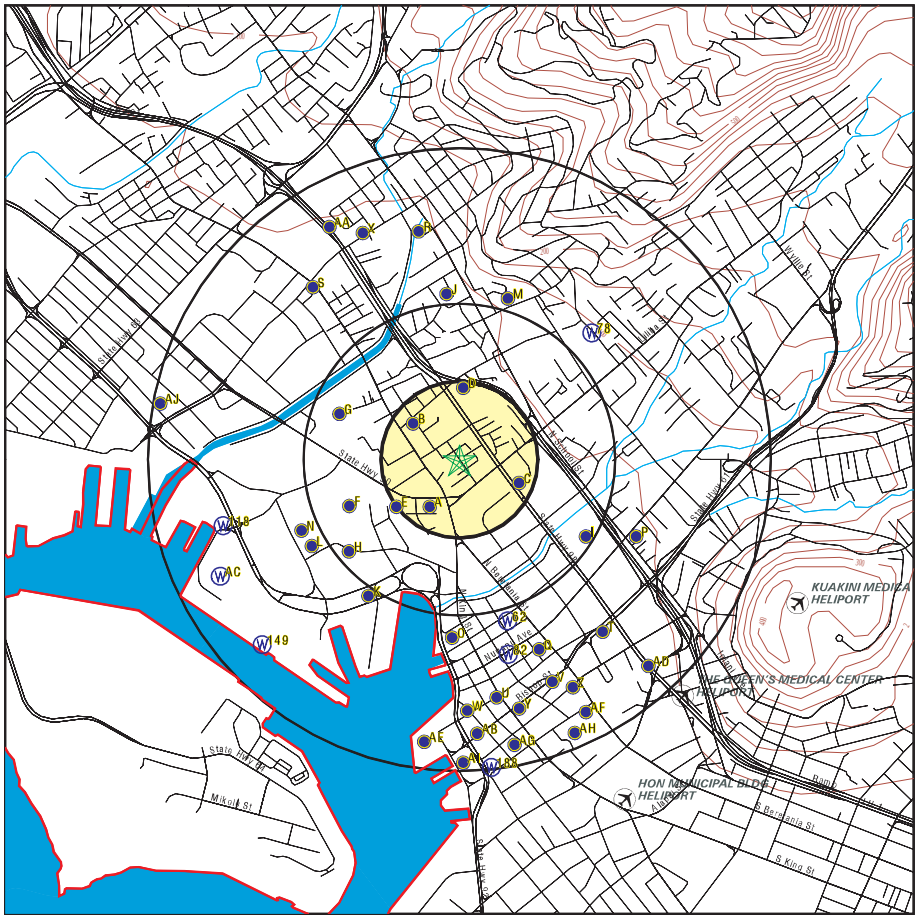
STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	HI8000000002359	1/8 - 1/4 Mile SSW
B4	HI8000000002375	1/8 - 1/4 Mile NW
C5	HI8000000002369	1/8 - 1/4 Mile ESE
D8	HI8000000002389	1/8 - 1/4 Mile North
E9	HI8000000002358	1/8 - 1/4 Mile SW
F11	HI8000000002364	1/4 - 1/2 Mile WSW
F15	HI8000000002363	1/4 - 1/2 Mile WSW
F17	HI8000000002357	1/4 - 1/2 Mile WSW
F19	HI8000000002354	1/4 - 1/2 Mile WSW
F20	HI8000000002362	1/4 - 1/2 Mile WSW
G27	HI8000000002379	1/4 - 1/2 Mile WNW
G28	HI8000000002380	1/4 - 1/2 Mile WNW
G29	HI8000000002377	1/4 - 1/2 Mile WNW
G30	HI8000000002378	1/4 - 1/2 Mile WNW
G31	HI8000000002383	1/4 - 1/2 Mile WNW
G32	HI8000000002384	1/4 - 1/2 Mile WNW
G33	HI8000000002381	1/4 - 1/2 Mile WNW
G34	HI8000000002382	1/4 - 1/2 Mile WNW
H38	HI8000000002338	1/4 - 1/2 Mile SW
H39	HI8000000002344	1/4 - 1/2 Mile SW
H40	HI8000000002342	1/4 - 1/2 Mile SW
H41	HI8000000002343	1/4 - 1/2 Mile SW
I45	HI8000000002348	1/4 - 1/2 Mile ESE
H47	HI8000000002335	1/4 - 1/2 Mile SW
J51	HI8000000002429	1/2 - 1 Mile North
H52	HI8000000002328	1/2 - 1 Mile SW
K54	HI8000000002318	1/2 - 1 Mile SW
L55	HI8000000002337	1/2 - 1 Mile SW
N61	HI8000000002353	1/2 - 1 Mile WSW
J64	HI8000000002436	1/2 - 1 Mile North
J65	HI8000000002435	1/2 - 1 Mile North
M66	HI8000000002430	1/2 - 1 Mile NNE
L67	HI8000000002347	1/2 - 1 Mile WSW
L70	HI8000000002341	1/2 - 1 Mile WSW
J72	HI8000000002450	1/2 - 1 Mile North
O73	HI8000000002306	1/2 - 1 Mile South
N74	HI8000000002352	1/2 - 1 Mile WSW
78	HI8000000002419	1/2 - 1 Mile NE
P79	HI8000000002349	1/2 - 1 Mile ESE
Q80	HI8000000002307	1/2 - 1 Mile SSE
82	HI8000000002302	1/2 - 1 Mile SSE
Q84	HI8000000002303	1/2 - 1 Mile SSE
Q86	HI8000000002301	1/2 - 1 Mile SSE
T90	HI8000000002308	1/2 - 1 Mile SE
U99	HI8000000002294	1/2 - 1 Mile South
S100	HI8000000002441	1/2 - 1 Mile NW
S101	HI8000000002442	1/2 - 1 Mile NW
S102	HI8000000002439	1/2 - 1 Mile NW
S103	HI8000000002440	1/2 - 1 Mile NW
S104	HI8000000002443	1/2 - 1 Mile NW
S105	HI8000000002446	1/2 - 1 Mile NW
S106	HI8000000002447	1/2 - 1 Mile NW

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
S107	HI8000000002444	1/2 - 1 Mile NW
S108	HI8000000002445	1/2 - 1 Mile NW
U111	HI8000000002292	1/2 - 1 Mile South
W113	HI8000000002290	1/2 - 1 Mile South
R114	HI8000000002481	1/2 - 1 Mile North
U117	HI8000000002286	1/2 - 1 Mile South
V119	HI8000000002295	1/2 - 1 Mile SSE
U122	HI8000000002287	1/2 - 1 Mile SSE
X124	HI8000000002478	1/2 - 1 Mile NNW
Y128	HI8000000002288	1/2 - 1 Mile SSE
Z129	HI8000000002297	1/2 - 1 Mile SSE
Z130	HI8000000002296	1/2 - 1 Mile SSE
W133	HI8000000002279	1/2 - 1 Mile South
W134	HI8000000002278	1/2 - 1 Mile South
Z136	HI8000000002293	1/2 - 1 Mile SSE
Y140	HI8000000002280	1/2 - 1 Mile South
Y141	HI8000000002281	1/2 - 1 Mile South
W142	HI8000000002276	1/2 - 1 Mile South
AB144	HI8000000002277	1/2 - 1 Mile South
AA145	HI8000000002477	1/2 - 1 Mile NNW
AA151	HI8000000002484	1/2 - 1 Mile NNW
AB153	HI8000000002266	1/2 - 1 Mile South
AB154	HI8000000002265	1/2 - 1 Mile South
AB155	HI8000000002267	1/2 - 1 Mile South
AD156	HI8000000002300	1/2 - 1 Mile SE
AE157	HI8000000002264	1/2 - 1 Mile South
AF161	HI8000000002284	1/2 - 1 Mile SSE
AF162	HI8000000002282	1/2 - 1 Mile SSE
AG166	HI8000000002269	1/2 - 1 Mile SSE
AG167	HI8000000002268	1/2 - 1 Mile SSE
AE170	HI8000000002259	1/2 - 1 Mile South
AG172	HI8000000002260	1/2 - 1 Mile SSE
AG173	HI8000000002261	1/2 - 1 Mile SSE
AH176	HI8000000002271	1/2 - 1 Mile SSE
AG178	HI8000000002254	1/2 - 1 Mile South
AI180	HI8000000002246	1/2 - 1 Mile South
AJ181	HI8000000002385	1/2 - 1 Mile West
AJ182	HI8000000002386	1/2 - 1 Mile West
AJ186	HI8000000002387	1/2 - 1 Mile WNW
188	HI8000000002245	1/2 - 1 Mile South

PHYSICAL SETTING SOURCE MAP - 4237094.26s



- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location

SITE NAME: Mayor Wright Homes ADDRESS: 521 N. Kukui St. Honolulu HI 96817 LAT/LONG: 21.3202 / 157.8641	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.26s DATE: March 17, 2015 5:34 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
A1 **SSW** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002359**
A2 **SSW** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269794**
B3 **NW** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269810**
B4 **NW** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002375**
C5 **ESE** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002369**
C6 **ESE** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269805**
D7 **North** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269822**
D8 **North** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002389**
E9 **SW** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002358**

Map ID Direction Distance Elevation		Database	EDR ID Number
E10 **SW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269795**
F11 **WSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002364**
F12 **WSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FRDS PWS**	**HI0000301**
F13 **WSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269799**
F14 **WSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269800**
F15 **WSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002363**
F16 **WSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269801**
F17 **WSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002357**
F18 **WSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269796**

Map ID Direction Distance Elevation		Database	EDR ID Number
F19 **WSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002354**
F20 **WSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002362**
G21 **WNW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269813**
F22 **WSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269802**
F23 **WSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269790**
G24 **WNW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269815**
G25 **WNW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269816**
G26 **WNW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269817**
G27 **WNW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002379**

Map ID Direction Distance Elevation		Database	EDR ID Number
G28 **WNW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002380**
G29 **WNW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002377**
G30 **WNW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002378**
G31 **WNW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002383**
G32 **WNW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002384**
G33 **WNW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002381**
G34 **WNW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002382**
G35 **WNW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269811**
G36 **WNW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269812**

Map ID Direction Distance Elevation		Database	EDR ID Number
G37 **WNW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269814**
H38 **SW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002338**
H39 **SW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002344**
H40 **SW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002342**
H41 **SW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002343**
H42 **SW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269778**
H43 **SW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269779**
H44 **SW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269780**
I45 **ESE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002348**

Map ID Direction Distance Elevation		Database	EDR ID Number
I46 **ESE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269785**
H47 **SW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002335**
H48 **SW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269768**
H49 **SW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269771**
J50 **North** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269850**
J51 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002429**
H52 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002328**
H53 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269763**
K54 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002318**

Map ID Direction Distance Elevation		Database	EDR ID Number
L55 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002337**
K56 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269751**
L57 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269772**
J58 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269853**
J59 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269854**
M60 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269852**
N61 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002353**
62 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269742**
N63 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269788**

Map ID Direction Distance Elevation		Database	EDR ID Number
J64 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002436**
J65 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002435**
M66 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002430**
L67 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002347**
L68 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269786**
J69 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269863**
L70 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002341**
L71 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269781**
J72 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002450**

Map ID Direction Distance Elevation		Database	EDR ID Number
O73 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002306**
N74 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002352**
N75 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269789**
O76 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269731**
L77 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269773**
78 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002419**
P79 **ESE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002349**
Q80 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002307**
P81 **ESE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269784**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
82 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002302**
Q83 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269729**
Q84 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002303**
Q85 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269728**
Q86 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002301**
R87 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269888**
S88 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269855**
S89 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269864**
T90 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002308**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
T91 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269733**
S92 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269867**
S93 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269866**
S94 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269865**
S95 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269868**
S96 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269871**
S97 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269870**
S98 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269869**
U99 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002294**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
S100 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002441**
S101 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002442**
S102 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002439**
S103 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002440**
S104 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002443**
S105 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002446**
S106 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002447**
S107 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002444**
S108 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002445**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
U109 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269718**
V110 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269719**
U111 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002292**
U112 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269713**
W113 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002290**
R114 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002481**
W115 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269711**
R116 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269899**
U117 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002286**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
118 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269791**
V119 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002295**
X120 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269893**
U121 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269708**
U122 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002287**
V123 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269717**
X124 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002478**
U125 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269706**
U126 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269707**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
U127 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269705**
Y128 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002288**
Z129 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002297**
Z130 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002296**
Z131 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269715**
Z132 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269716**
W133 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002279**
W134 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002278**
Y135 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269704**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
Z136 SSE 1/2 - 1 Mile Higher	Click here for full text details	**HI WELLS**	**HI8000000002293**
W137 South 1/2 - 1 Mile Lower	Click here for full text details	**FED USGS**	**USGS40000269700**
W138 South 1/2 - 1 Mile Lower	Click here for full text details	**FED USGS**	**USGS40000269701**
Z139 SSE 1/2 - 1 Mile Higher	Click here for full text details	**FED USGS**	**USGS40000269712**
Y140 South 1/2 - 1 Mile Higher	Click here for full text details	**HI WELLS**	**HI8000000002280**
Y141 South 1/2 - 1 Mile Higher	Click here for full text details	**HI WELLS**	**HI8000000002281**
W142 South 1/2 - 1 Mile Lower	Click here for full text details	**HI WELLS**	**HI8000000002276**
AA143 NNW 1/2 - 1 Mile Higher	Click here for full text details	**FED USGS**	**USGS40000269894**
AB144 South 1/2 - 1 Mile Lower	Click here for full text details	**HI WELLS**	**HI8000000002277**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
AA145 NNW 1/2 - 1 Mile Higher	Click here for full text details	**HI WELLS**	**HI8000000002477**
AB146 South 1/2 - 1 Mile Lower	Click here for full text details	**FED USGS**	**USGS40000269697**
AC147 WSW 1/2 - 1 Mile Lower	Click here for full text details	**FED USGS**	**USGS40000269764**
AC148 WSW 1/2 - 1 Mile Lower	Click here for full text details	**FED USGS**	**USGS40000269754**
149 SW 1/2 - 1 Mile Lower	Click here for full text details	**FED USGS**	**USGS40000269730**
AA150 NNW 1/2 - 1 Mile Higher	Click here for full text details	**FED USGS**	**USGS40000269900**
AA151 NNW 1/2 - 1 Mile Higher	Click here for full text details	**HI WELLS**	**HI8000000002484**
AB152 South 1/2 - 1 Mile Lower	Click here for full text details	**FED USGS**	**USGS40000269692**
AB153 South 1/2 - 1 Mile Lower	Click here for full text details	**HI WELLS**	**HI8000000002266**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
AB154 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002265**
AB155 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002267**
AD156 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002300**
AE157 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002264**
AB158 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269690**
AB159 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269691**
AD160 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269721**
AF161 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002284**
AF162 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002282**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
AE163 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269693**
AF164 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269703**
AF165 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269699**
AG166 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002269**
AG167 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002268**
AG168 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269688**
AG169 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269689**
AE170 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002259**
AE171 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269684**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
AG172 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002260**
AG173 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002261**
AG174 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269682**
AG175 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269683**
AH176 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002271**
AH177 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269695**
AG178 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002254**
AG179 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269679**
AI180 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002246**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
AJ181 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002385**
AJ182 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002386**
AJ183 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269819**
AJ184 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269820**
AI185 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269674**
AJ186 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002387**
AJ187 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269821**
188 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002245**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for HONOLULU County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 96817

Number of sites tested: 10

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.110 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	0.200 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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EXHIBIT C

Architectural Inventory Survey

DAVID Y. IGE
GOVERNOR OF HAWAII

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

KEKOA KALUHIWA
FIRST DEPUTY

JEFFREY T. PEARSON
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555

December 2, 2015

IN REPLY REFER TO:
LOG: 2015.02939, 2015.03579
DOC NO: 1511JLP39
Architecture, Archaeology
History and Culture

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
P.O. Box 17907
Honolulu, HI 96817

SUBJECT: **Chapter 6E-8 and National Historic Preservation Act Section (NHPA) Section 106 Consultation – Department of Housing and Urban Development (HUD) Repair and Rehabilitation Project Department of Human Services, Hawai‘i Public Housing Authority (HPHA) Mayor Wright Homes Rehabilitation Project – 521 North Kukui Street Honolulu Ahupua‘a, Kona District, Island of O‘ahu TMK: (1) 1-7-029:003**

Thank you for your initial submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services (DHS), Hawaii Public Housing Authority (HPHA) consultation with SHPD in accordance with 36 CFR 800.3 and Hawaii Revised Statutes (HRS), Chapter 6E. We received your supplemental submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience.

The submittals indicate that the HPHA is requesting the State Historic Preservation Officer's (SHPO) concurrence with a determination of "no effect" for the proposed HUD repair and rehabilitation improvement projects involving 43 existing public housing developments located throughout the State over the next fivd5 (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 consultation on their behalf.

This letter addresses Mayor Wright Homes Rehabilitation Project, 521 North Kukui Street. The HPHA has identified the area of potential effects (APE) as the 14.84 acre area parcel owned by the State (HPHA) which is identified as TMK: (1) 1-7-029:003. DHS/HPHA have indicated at this stage of the planning process, they are unclear whether the subject 14.84-acre project area will require any ground disturbances.

Our records indicate that no archaeological inventory survey has been conducted within the subject parcel and that no historic properties have been identified. However, based on nearby studies potential exists to encounter subsurface traditional Hawaiian and/or historic properties within the subject parcel.

The SHPD has reviewed the undertaking at 521 North Kukui Street, and the SHPO's determination is **no adverse effect** pursuant to NHPA Section 106 and **no historic properties affected** pursuant to HRS §6E-8 within the APE **provided the following conditions are met:**

- If ground disturbing activity is anticipated, DHS must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation;
- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;
- Submit information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;
- Submit a TMK map showing the full extent of the project area within the affected parcel(s);

- Submit description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Submit summary of land use history, such as previous intensive cultivation, grubbing or grading; and
- Submit copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions regarding archaeological resources or concerns please contact Susan Lebo at (808) 692-8019 or at Susan.A.Lebo@hawaii.gov. For any history and cultural concerns please contact Kaʻāhiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov. Please contact Jessica Puff at Jessica.L.Puff@hawaii.gov or (808) 692-8023 for any questions regarding architectural concerns or this letter.

Sincerely,

Alan S. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

2. Mayor Wright Homes

a. Historic Context

During the time that the Mayor Wright Homes project languished in the 1940s, the area was known as "one of the worst slum areas of the city" (Annual Report, 1952: np). After the war, reactivation of the project was sought from the Federal Public Housing Administration in 1945 and 1948, but as construction materials were still scarce (and perhaps owing to the project's size) the requests were not granted until 1950. During those years many existing housing units were razed at the site; "a number" in 1947, 24 in 1948, and 39 in 1949. The remaining buildings were cleared by June 28, 1951 when construction started (Annual Report, 1952: np). A number of design features were described at the project's opening as being unique, such as reinforced concrete and concrete hollow tile construction, and "steel sash doors, cabinets and shelves" (Annual Report 1952, np). Although these items had been used for years in local construction, they were a first for HHA projects. The steel sash doors at Mayor Wright Housing have mostly been removed during a rehabilitation project which widened the project's doorways (Chu, 2006).

The design for Mayor Wright Homes was done by the architectural firm of Law & Wilson. Plans are dated March 1951. The firm specialized in civil engineering projects, industrial facilities, piers, public and commercial buildings. The $3.5m Mayor Wright Homes project was among its largest projects up until that time. Other Law & Wilson projects include a part in the $17m facilities at Kaneohe Marine Corps Base, the Church of the Holy Nativity, the Waikiki Shell, and the Pearl Harbor Elementary School. The design for Mayor Wright Homes featured significant sections of open area between groups of buildings. Some of these areas were paved for play areas and some were lawn areas planted with grass. The open areas, along with the low-rise construction, would have helped to foster a sense of community among the residents, maximizing the opportunity for interaction.

b. Description

Mayor Wright Homes has undergone several alterations over the years. The original open lawn and paved areas between the buildings have been converted to driveways and parking. The units in perimeter buildings of the housing complex have had their entries changed from the kitchen side of the apartment to the living room (opposite) side. Stairways to the upper floors of the three-story buildings serving the kitchen entries were removed and new stairs were constructed on the living room (opposite) side of the building. The resulting lanai (off the kitchens) were closed with concrete hollow tiles set on their sides to form a grille. The original stairways had metal mesh railings. The new stairs were built with concrete hollow tile half-walls and clay tile roofs. Also, the three-story buildings originally had one entry hall way serving a pair of units. The halls led from the stair landing to the unit entry at the living room. These halls have been sealed at the stair landings and the main entry changed to the kitchen door. Many of the original three-light steel sash hopper windows have been replaced by jalousies and most of the original doorways at Mayor Wright Homes have been widened and the doors replaced.

During the 1950s and 1960s, many ethnically distinct neighborhoods began dissolving into residential areas that were defined primarily by income levels rather than by the ancestry of the residents (Johnson, 1991: 358). This occurrence did not happen in the public housing projects; they merely transitioned from enclaves of one nationality to that of another. Newly arriving immigrants were often forced to the public housing projects by a lack of job opportunities. Early in the history of slum clearance in Hawaii ethnic groups such as Hawaiians, Japanese, Chinese, Filipinos, Portuguese, and Puerto Ricans were the groups noted as inhabiting the low-income communities (Annual Report, 1940: 1). Today the primary ethnic groups found in the Mayor Wright Homes project are Micronesians, Vietnamese, Samoans, and Hawaiians (Chu, 2006). Today income level is no longer the definition of the housing projects as it once was. Families with somewhat higher income levels (and receiving proportionally less subsidy) live in the projects; some families have been in residence for decades (Chu, 2006).

See the facing page for the one-page historic assessment and photographs.

c. Historic Assessment: Mayor Wright Homes (1952)

Clockwise from top left: added stairways at changed entries, lanai sealed with hollow tile, solar collector on two-story building, typical kitchen.

Project	Mayor Wright Homes (521 N. Kukui St.)
Date	1952
Integrity	Buildings have been significantly altered. Retain integrity of location. Integrity of setting, design, materials, workmanship, feeling, and association have been greatly compromised.
Character Defining Features	Flat roofline, multi-light hopper windows, cantilevered canopy, metal shelving, chain link stair railings, exposed exterior stairs and open lanai at 3 story buildings.
Alterations	Doorways widened and doors replaced, entry halls sealed, lanai enclosed, entries switched and new enclosed stairway built in 3 story buildings. Open space between buildings utilized for parking.
Significance	Mayor Wright Homes is associated with public housing in Hawaii and with the social history of Hawaii. The project represents the housing reform movement of the Territory and the State.
National Register Eligibility	**Not eligible**

HAWAII PUBLIC HOUSING AUTHORITY

ENVIRONMENTAL REVIEW

KA`AHUMANU HOMES

Honolulu, O`ahu

AMP 33
HPHA No. 1009

Prepared for:

State of Hawaii
Hawaii Public Housing Authority

Prepared by:

HHF PLANNERS
places for people

U.S. Department of Housing and Urban Development
451 Seventh Street, SW
Washington, DC 20410
www.hud.gov

espanol.hud.gov

Environmental Review for Activity/Project that is Categorically Excluded Subject to Section 58.5

Pursuant to 24 CFR 58.35(a)

Project Information

Project Name: Ka‘ahumanu Homes (AMP 33)

Responsible Entity: Hawaii Public Housing Authority
1002 North School Street
Honolulu, HI 96817

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

State/Local Identifier: State of Hawai‘i

Preparer: Mr. Scott Ezer, Vice President
HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawai‘i 96813

Certifying Officer Name and Title: Mr. David Y. Ige
Governor, State of Hawai‘i

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

Consultant (if applicable): HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawai‘i 96813

Direct Comments to: Mr. Hakim Ouansafi, Executive Director
Hawaii Public Housing Authority
1002 North School Street
Honolulu, Hawai‘i 96817

Project Location: 760 McNeill Street
Honolulu, Hawai‘i 96817

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]**:**

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a "major construction activity" and would involve one or a combination of several HUD designated categories of actions.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent;
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons;
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland;
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation;
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls);
7. Interior and exterior renovations and rehabilitation;
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site;
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Level of Environmental Review Determination:

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.5. Compliance with and completion of conformance determinations for other statute, executive order, or regulation has been completed and support the Categorical Exclusion.

Funding Information

Grant Number	HUD Program	Funding Amount
To be determined	Capital Fund	To be determined
To be determined	Economic Development Initiative Special Project Grant	To be determined
To be determined	Other Grants	To be determined

Estimated Total HUD Funded Amount:

To be determined by HUD using a formula and based upon federal budget.

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]**:**

Depends upon funds available.

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	*The project is not within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.*
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☒	*The State of Hawai'i does not have any designated coastal barrier resource units. (http://www.fws.gov/CBRA/Maps/Mapper.html)*
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes ☐ No ☒	*As indicated in the Flood Insurance Rate Panel Number 15003C0353G, Effective: January 19, 2011, Index Date: November 05, 2014, this housing project is located within Flood Hazard Zone X (areas determined to be outside the 0.2% annual chance floodplain). A field inspection and information obtained from the site manager confirmed no major flooding issues within the site. Based on its description, this project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.*

STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5		
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes ☐ No ☒	*The State of Hawai'i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. EPA's Green Book for currently designated "nonattainment areas" as of June 2015. Planned repair and rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.*
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes ☐ No ☒	*Documentation from the Office of Planning determined that projects receiving federal funds do not require review for consistency with Hawai'i's Coastal Zone Management (CZM) program.*
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☐ No ☒	*There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.*
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes ☐ No ☒	*The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices, while project-specific mitigation measures are identified in the following section.*
Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes ☐ No ☒	*There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.*

Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes ☐ No ☒	*The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.*
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes ☐ No ☒	*This housing project is located in Zone X, an area of minimal flooding (i.e., 0.2% annual chance flood), and is located outside the 500-year flood zone. A field inspection and information obtained from AMP Manager confirmed no major flooding issues within the project site.*
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes ☐ No ☒	*The subject housing site was initially occupied in 1958 and is 57 years old. A Historic Property Evaluation in 2006 determined that this project had been altered and was not eligible for the National Registry of Historic Places. In a letter dated November 30, 2015, the State Historic Preservation Officer determined that repair and rehabilitation improvements for this project would have "no adverse effect" on historic properties pursuant to NHPA Section 106 and subject to certain mitigative conditions.*
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes ☐ No ☒	*The project site is not situated along a highway that has a high volume of vehicular traffic. The HUD noise calculator estimated noise levels at the project site to be 60.4 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.*
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes ☐ No ☒	*The housing project is located within the O'ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation.*

Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☐ No ☒	*There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.* *(http://www.fws.gov/wetlands/data/mapper.HTML)*
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes ☐ No ☒	*There are no Wild and Scenic Rivers in Hawai'i, which excludes this project from mitigation or formal consultation requirements (http://www.rivers.gov/map.php)*
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes ☐ No ☒	*Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, these improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects on minority populations and low-income populations. Improvements should benefit low-income and minority populations living within this housing project.*

Field Inspection (Date and completed by)**:** June 5, 2015
Joseph Tamburello, Planner
HHF Planners

Summary of Findings and Conclusions:

Repair and rehabilitation improvements implemented for this existing housing project by HPHA should not result in significant environmental impacts based upon research data collected, a field inspection, consultation with the site manager and maintenance staff, consultation with pertinent resource agencies, and prior HPHA experience implementing repair and rehabilitation improvements. Therefore, repair and rehabilitation improvements would comply and be consistent with the statutes, executive orders, and regulations addressed. Furthermore, HPHA would evaluate improvements planned to ensure the work is consistent with the designated categories of actions described under the project description section. Compliance with these factors evaluated are further addressed in the attached Source Documentation Statutory Worksheet along with relevant technical reports/assessments.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Law, Authority, or Factor	Mitigation Measure
Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	*Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.* *Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved land site at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed upon completion of work, and no contamination of adjacent habitats shall be allowed from project-related activities.* *Hawaiian Hoary Bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.* *Newell's Shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean* *Hawaiian Goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season (September through March). A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.* *Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo'i, impoundments or other vegetated water bodies.*

	1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols. *2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.* *3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.* *In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.* *<u>Additional Measures</u>: The following additional measures would be implemented:* *1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.*
National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	*1. If ground disturbing activity is anticipated, HPHA must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation.* *a. Submit detailed plans, specifications and a detailed scope of work once the plans have been developed.* *b. Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation.* *c. Submit a TMK map showing the full extent of the project area within the affected parcel/s.* *d. Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area.* *e. Summary of land use history, such as previous intensive cultivation, grubbing or grading.* *f. Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.*

	In addition to these mitigation measures, the HPHA would enter into a Programmatic Agreement with the SHPO to address the implementation of future repair and rehabilitation improvements to State housing projects after the current Section 106 review process is completed and prior to the next environmental review process in approximately five years. Furthermore, should subsurface human remains or other traces of human activity greater than 50 years old be encountered during construction, all work in the vicinity of the find would immediately stop and the SHPD would be promptly notified. The treatment of any human remains that are encountered would be conducted in accordance with applicable requirements of Chapter 6E, Hawai'i Revised Statutes (Historic Preservation) and Chapter 13-300, Hawai'i Administrative Rules (Rules of Practice and Procedure Relating to Burial Sites and Human Remains).

Determination:

☒ This categorically excluded activity/project converts to **EXEMPT** per Section 58.34(a)(12), because it does not require any mitigation for compliance with any listed statutes or authorities, nor requires any formal permit or license; **Funds may be committed and drawn down after certification of this part** for this (now) EXEMPT project; OR

☐ This categorically excluded activity/project cannot convert to Exempt status because one or more statutes or authorities listed at Section 58.5 requires formal consultation or mitigation. Complete consultation/mitigation protocol requirements, **publish NOI/RROF and obtain "Authority to Use Grant Funds"** (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR

☐ This project is not categorically excluded OR, if originally categorically excluded, is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

Preparer Signature: Scott Ezer Date: 12-9-15

Name/Title/Organization: Mr. Scott Ezer, Vice President
HHF Planners

Responsible Entity Agency Official Signature:

David Y Ige Date: APR 28 2016

Name/Title: Mr. David Y. Ige, Governor

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

Kaʻahumanu Homes (HA # 1009)

TMK: (1) 1-5-024:001

Hawaiʻi Public Housing Authority (HPHA) Environmental Review

SOURCE DOCUMENTATION (SD) STATUTORY WORKSHEET

Site Visit Date: June 05, 2015
Prepared By: Joseph Tamburello

The Kaʻahumanu Homes housing project is located in the Kalihi community of the Honolulu district on the island of Oʻahu. Kalihi is located west of the Honolulu urban center.

The housing project site is situated off of Waiakamilo Road, with access provided by Alokele and Kaiwiula Streets. The property is bordered to the west by the Kalakaua District Park. This housing project is within HPHA's Asset Management Project (AMP) 33 which includes one other housing project in Kalihi.

Kaʻahumanu Homes was first occupied in 1958 and has a street address of 760 McNeil Street. This property consists of 7.35 acres, and it is identified as Tax Map Key (TMK) No. (1) 1-5-024:001. The housing project includes 19 two-story townhouses containing 152 housing units with one, two, or three bedrooms per unit. The State's land use designation for the property is the "Urban District," and the City's zoning for the site is A-1 Low-Density Apartment.

The project site is not located within a tsunami evacuation zone, and the entire site is located in Flood Zone X based upon the Flood Insurance Rate Map (Community Panel Number 15003C0353G, Revised January 19, 2011). Zone X is defined as areas determined to be outside the 0.2 percent annual (500-year) chance floodplain.

The following figures in Exhibit A provide supporting information on this housing project:

Figure 1: Location Map
Figure 2: TMK Map
Figure 3: Site Map
Figure 4: Flood Map

COMPLIANCE FACTORS

I. AIRPORT CLEAR ZONES AND ACCIDENT POTENTIAL ZONES (24 CFR PART 51D)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The housing project does not lie within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: 24 CFR 51 (D).

Honolulu International Airport Master Plan - 2010 (August 1994), State Department of Transportation, Airports Division;

*Hawai`i Airports and Flying Safety Guide (2012-13, Fifth Edition, Revision 1)* Hawai`i Department of Transportation, Airports Division; and

http://hidot.hawaii.gov/airports/files/2013/01/Airport-Safety-Guide-2012-2013-5rev1.pdf

II. COASTAL BARRIER RESOURCES (COASTAL BARRIER IMPROVEMENT ACT OF 1990 [16 USC 3501])

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i does not have any designated coastal barrier resource units.

SUPPORTING DOCUMENTATION:

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/cbra/maps/mapper.html (Date accessed: 6/30/15).

III. FLOOD INSURANCE (FLOOD DISASTER PROTECTION ACT OF 1973 AND NATIONAL FLOOD INSURANCE REFORM ACT OF 1994 [42 USC 4001-4128 AND 42 USC 5154a])

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program.

As indicated in the Flood Insurance Rate Panel Number 15003C0353G, Effective: January 19, 2011, Index Date: November 05, 2014, this housing project is located within Flood Hazard Zone X (areas determined to be outside the 0.2% annual chance floodplain). A field inspection and information obtained from the site manager confirmed no major flooding issues within the site. Based on its description, this project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal signs of flooding problems. An interview with the AMP Manager also determined that major ponding or flooding issues are currently not an issue for the project site.

Printed: Flood Insurance Rate Map, Community Panel Number 15003C0353G, Effective: January 19, 2011, Index Date: November 05, 2014.

Hawai`i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 7/27/15)

IV. CLEAN AIR ACT (40 CFR PARTS 6, 51, 93)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. Environmental Protection Agency's Green Book for currently designated "nonattainment areas" as of June 2015. Planned rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.

SUPPORTING DOCUMENTATION:

Printed: *State of Hawai‘i Annual Summary 2013 Air Quality Data*. State of Hawai'i, Department of Health, July 2014.

U.S. Environmental Protection Agency website at: http://epa.gov/airquality/greenbk/

V. COASTAL ZONE MANAGEMENT ACT (16 USC 1451, SECTIONS 307 (C), (D)

CONTACT:

Mr. John Nakagawa
Office of Planning
Department of Business, Economic Development & Tourism
State of Hawai‘i
P.O. Box 2359
Honolulu, Hawai'i, 96804-2359

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

Documentation from the Office of Planning determined that projects receiving federal funds do not require review for consistency with Hawai‘i's Coastal Zone Management (CZM) program.

SUPPORTING DOCUMENTATION:

Contact: In an email to the Office of Planning (OP) dated July 27, 2015, the HPHA determined that the use of HUD funds for the implementation of repair and rehabilitation improvements does not require review for consistency with Hawai‘i's CZM program. The OP confirmed this determination in an email dated July 28, 2015 and it is included in the Appendices.

Experience: Previous reviews conducted by OP in 2003, 2005, and 2010 determined that projects receiving federal funds from HUD do not require CZM federal consistency review. OP's current determination confirms this condition is still applicable. Copies of these prior documentations are included in the Appendices.

VI. CONTAMINATION AND TOXIC SUBSTANCES (24 CFR PART 50.3 & 58.5(I)(2))

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Project Not Affected.

There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.

SUPPORTING DOCUMENTATION:

Field: A site inspection and interview with the Asset Management Project (AMP) Manager revealed no presence of any toxic or radioactive materials on the project site that warrant concern. Small quantities of gasoline, paint, and solvents for routine maintenance and lawn equipment are stored in a secured area within the Administration building.

Study: Environmental Data Resources, Inc. (EDR), conducted a search of available environmental records and prepared a Radius Map Report (Inquiry Number 4237094.30s, March 17, 2015). EDR reviewed more than 25 federal and statewide regulatory databases for information regarding the treatment, storage, disposal and release of toxic chemicals at the project site and within specific radii (generally 1 mile) of the site. A Detail Map within the EDR report documents those sites identified within a 0.25 mile radius of the project site. The EDR report in Exhibit B includes the results of their research findings.

The EDR report notes the following activities within a 0.125 mile radius of the project site: Alpac Corporation (299 feet away) one LUST, status: Site Cleanup Complete (NFA); two UST, status; Permanently Out of Use. Graffiti Inc (53 feet away) is classified as a Conditionally Exempt Small Quantity Generator (Handler), no violations found. Chevron (629 feet away) is classified as a Conditionally Exempt Small Quantity Generator (Handler), no violations found; UST: 4 Currently in Use, 2 Temporarily Out of Use, 2 Permanently Out of Use. Hawaiian Candies and Nuts has a LUST, status: Site Cleanup Complete (NFA); and 1 UST, status: Permanently Out of Use.

This project site was not identified as a Formerly Used Defense Site (FUDS) by the U.S. Army Corps of Engineers and is not subject to any cleanup actions for Department of Defense-generated contamination.

VII. ENDANGERED SPECIES (50 CFR PART 402)

CONTACT:
Mr. Loyal Mehrhoff, Field Supervisor
Pacific Islands Administrator
Fish and Wildlife Services
U.S. Department of the Interior
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawai'i 96813
Tel. #: 792-9400

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Adverse Effect Subject to Mitigation.

The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received by the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices.

SUPPORTING DOCUMENTATION:

Contact: A letter from the HPHA dated July 24, 2015 was submitted to the Pacific Island Administrator for the FWS determining that repair and rehabilitation improvements that may be implemented using HUD funds for this housing project would have no likelihood of effect on any listed species or proposed species, or existing or proposed designated critical habitat subject to certain measures. Concurrence with this determination along with proposed minimization and avoidance measures was received from the FWS in a letter dated September 28, 2015 which is included in the Appendices. This housing project is subject to the following minimization and avoidance measures.

Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.

Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved land site at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed upon completion of work, and no contamination of adjacent habitats shall be allowed from project-related activities.

Hawaiian Hoary Bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.

Newell's Shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If

nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean

Hawaiian Goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season (September through March). A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.

Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro loʻi, impoundments or other vegetated water bodies.

1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols.
2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.
3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.

In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.

Additional Measures: The following additional measures would be implemented:

1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.

Experience: The FWS was previously consulted as part of environmental reviews that were completed in 2005 (39 housing projects) and 2010 (70 housing projects) which supported the determination that repair and rehabilitation improvements would either: 1) have no likelihood of effect for certain housing projects; or 2) not likely adversely affect federally listed species or critical habitat for certain housing projects subject to mitigative measures. A summary of these consultation efforts follows.

2005 Consultation: In a letter dated July 15, 2005, the Housing and Community Development Corporation of Hawaiʻi (predecessor to the HPHA), determined that the implementation of minor repair and rehabilitation improvements for 39 housing projects would not have an adverse effect on federally-listed species or critical habitat. In a letter dated August 11, 2005, the FWS concurred with the HCDCH determination.

2010 Consultation: In a letter dated May 17, 2010, the HPHA informed the FWS that HUD funds would be used to immediately implement repair and rehabilitation improvements for six housing projects on O'ahu and the island of Hawai`i. In a subsequent letter dated May 21, 2010, the FWS was informed that HPHA would be using HUD funds to implement minor repair and rehabilitation improvements for 64 projects throughout the State. In both letters, the HPHA determined that the repair and rehabilitation improvements were not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat. Based on further consultation and a meeting with FWS staff on June 24, 2010, the HPHA determined that repair and rehabilitation improvements for most of their housing projects would not likely adversely affect any listed or proposed species, or existing or proposed designated habitat, subject to various mitigative measures for certain housing projects.

VIII. EXPLOSIVE AND FLAMMABLE OPERATIONS (24 CFR PART 51C)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

SUPPORTING DOCUMENTATION:

Field: Field inspection was limited to the exterior of residential buildings and associated structures for this housing project. No above-ground explosive or flammable material storage containers in excess of 100 gallons were observed at the site.

Printed: 24 CFR Part 51, Subpart C addresses acceptable separation distance from above-ground explosive or flammable fuels or chemical containers. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

IX. FARMLANDS PROTECTION (7 CFR PART 658)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. Since the property consists of an existing housing development within an urbanized area, no farmlands would be impacted by the implementation of repair and rehabilitation improvements.

Printed: The property is designated for "Urban" use by the State Land Use Commission and the County's zoning for the parcel is RD-3.75 Double-Family Residential District.

Hawai`i Office of Planning website at: http://planning.hawaii.gov/gis/
(Date accessed: 6/30/2015)

X. FLOODPLAIN MANAGEMENT (EXECUTIVE ORDER 11988, 24 CFR PART 55)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program

This housing project is located in Zone X, an area of minimal flooding (i.e., 0.2% annual chance flood), and is located outside the 500-year flood zone. A field inspection and information obtained from AMP Manager confirmed no major flooding issues within the project site.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal signs of previous flooding problems. An interview with the AMP Manager also determined that no major ponding or flooding issues occur on the project site.

Printed: Flood Insurance Rate Map, Community Panel Number 15003C0353G, Effective: January 19, 2011, Index Date: November 05, 2014

Hawai`i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/ (Date accessed 7/21/15)

XI. HISTORIC PRESERVATION (NATIONAL HISTORIC PRESERVATION ACT OF 1966; SECTIONS 106 AND 110; 36 CFR, PART 800)

CONTACT:

Ms. Suzanne Case, Chairperson
Department of Land and Natural Resources (DLNR)
State of Hawai‘i
1151 Punchbowl Street
Honolulu, Hawai‘i 96813
Tel. #: 587-0400

SUPPORTING DOCUMENTS	
X	Field
X	Contact
X	Printed
	Experience
X	Study

DETERMINATION:

Status Category: No Adverse Effect on Historic Properties with Mitigation

The subject housing site was initially occupied in 1958 and is 57 years old. A Historic Property Evaluation in 2006 determined that this project had been altered and did not meet the criteria to be eligible for listing in the National Registry of Historic Places (NRHP). In a letter dated November 30, 2015, the State Historic Preservation Officer (SHPO) provided a determination and set forth conditions for ground-disturbing activities. In responding to this letter, the HPHA concurred with the conditions set forth by the SHPO.

SUPPORTING DOCUMENTATION:

Field: A site inspection of this housing project did not locate any existing or potential archaeological sites (e.g., heiau) or cultural features on the property. An interview with the AMP manager indicated that no known sites or features are present on the property.

Contact: The HPHA submitted a letter to the SHPO dated August 20, 2015 regarding 28 housing projects, which is included in the Appendix. Of this total, 15 housing projects did not meet National Register eligibility criteria (including Ka‘ahumanu Homes), therefore, a “no historic properties affected” determination was proposed for these repair and rehabilitation improvements. Repair and rehabilitation improvements for the other 13 housing projects were determined to meet National Register eligibility criteria and were proposed to have “no adverse effect” on historic properties subject to certain mitigative measures.

In a letter dated November 30, 2015, the SHPO determined that repair and rehabilitation improvements for this housing project would have “no adverse effect” on historic properties instead of “no historic properties” pursuant to NHPA Section 106 and subject

to the following mitigative measures. In responding to this letter, the HPHA concurred with the conditions set forth by the SHPO. A copy of these letters is included in Exhibit C.

1. If ground disturbing activity is anticipated, HPHA must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation.

    a. Submit detailed plans, specifications and a detailed scope of work once the plans have been developed.

    b. Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation.

    c. Submit a TMK map showing the full extent of the project area within the affected parcel/s.

    d. Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area.

    e. Summary of land use history, such as previous intensive cultivation, grubbing or grading.

    f. Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

In addition to these mitigation measures, the HPHA would enter into a Programmatic Agreement with the SHPO to address the implementation of future repair and rehabilitation improvements to State housing projects after the current Section 106 review process is completed and prior to the next environmental review process in approximately five years. Furthermore, should subsurface human remains or other traces of human activity greater than 50 years old be encountered during construction, all work in the vicinity of the find would immediately stop and the SHPD would be promptly notified. The treatment of any human remains that are encountered would be conducted in accordance with applicable requirements of Chapter 6E, Hawai‘i Revised Statutes (Historic Preservation) and Chapter 13-300, Hawai‘i Administrative Rules (Rules of Practice and Procedure Relating to Burial Sites and Human Remains).

Printed: A review of the U.S. National Parks Service website for the National Register of Historic Places did not identify any historic properties within the limits of this housing project. A similar review of the State DLNR website for the State Register of Historic Places revealed that there are no historic properties within the project site.

National Register: U.S. National Park Service website at:
http://www.nps.gov/nr/research/ (Date accessed: 7/2/15).

State Register: Hawai`i Department of Land and Natural Resources website at:
http://dlnr.hawaii.gov/shpd/state-register/ (Date accessed: 7/2/15).

Study: A 2006 HPE was conducted by Mason Architects, Inc. and determined that this project (built in 1958) was not eligible for the NRHP. According to the HPE, this project is significant because of its association with public housing in Hawai‘i and the social history

of Hawai‘i. The project represents the housing reform movement of the Territory and the State. However, the buildings have been altered. Although they retain integrity of location, setting and feeling, integrity of design, materials, workmanship and association have been compromised. Character defining features include a full length walkway at the entry side, lanais with square pattern decoration, cantilevered canopies, and low-rise buildings separated by open grassy areas. Alterations include a metal window frame added, bathrooms renovated with new tile and fixtures, and metal kitchen counters.

XII. NOISE ABATEMENT CONTROL (24 CFR PART 51B)

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Within HUD Noise Standards

The project site is not situated along a highway that has a high volume of vehicular traffic. The HUD noise calculator estimated noise levels at the project site to be 60.4 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

SUPPORTING DOCUMENTATION:

Field: No significant noise generating sources were identified within the project site during the site inspection. The subject housing site is located within an urban residential neighborhood. Traffic noise is buffered by an approximately 3-foot-high concrete wall along Waiakamilo Road. Low volume of traffic is anticipated along the surrounding: Alokele Street, Kaiwi‘ula Street and McNeill Streets since traffic would be predominantly to existing residential uses in the area. An interview with the AMP Manager did not identify any loud noise producing sources in the area. As a result, notable noise sources are predominantly associated with vehicular traffic along adjacent streets. Traffic noise did not appear significant during the site visit.

Study: The HUD day/night noise level calculator was used to estimate approximate traffic noise. Traffic counts were based on 2013 Hawai‘i State Department of Transportation data taken along the Waiakamilo Road (minor arterial road). Using this HUD calculator, the estimated noise levels from this street to the project site is 60.4 dBA. The actual amount may be lower as the noise calculator does not consider noise attenuation features such as the perimeter wall. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

XIII. SOLE SOURCE AQUIFER (40 CFR PART 149)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact on Sole Source Aquifer

The housing project is located within the O‘ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation. However, if exceptional circumstances require compliance steps with any of these authorities, such compliance must be established and documented prior to approving the site-specific loan or grant.

SUPPORTING DOCUMENTATION:

Printed: This determination was based upon review of the Sole Source Aquifer Memorandum of 4/30/90 (Sections II.B.1 and II.B.2) and consideration of the type of rehabilitation related improvements that would be conducted for this project.

XIV. WETLANDS PROTECTION (EXECUTIVE ORDER 11990)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the property did not identify the presence of any wetlands.

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/wetlands/data/mapper.html (Date accessed 7/23/2015).

XV. WILD AND SCENIC RIVERS ACT (16 USC 1271, SECTION 7 (B), (C))

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no Wild and Scenic Rivers in Hawai‘i, which excludes this project from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: National Wild and Scenic Rivers System website at: http://www.rivers.gov/index.php (Date accessed: 6/30/2015).

XVI. ENVIRONMENTAL JUSTICE (EXECUTIVE ORDER NO. 12898)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Conflict with Requirements

Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, repair and rehabilitation improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations. Repair and rehabilitation improvements should benefit low-income and minority populations living within this housing project.

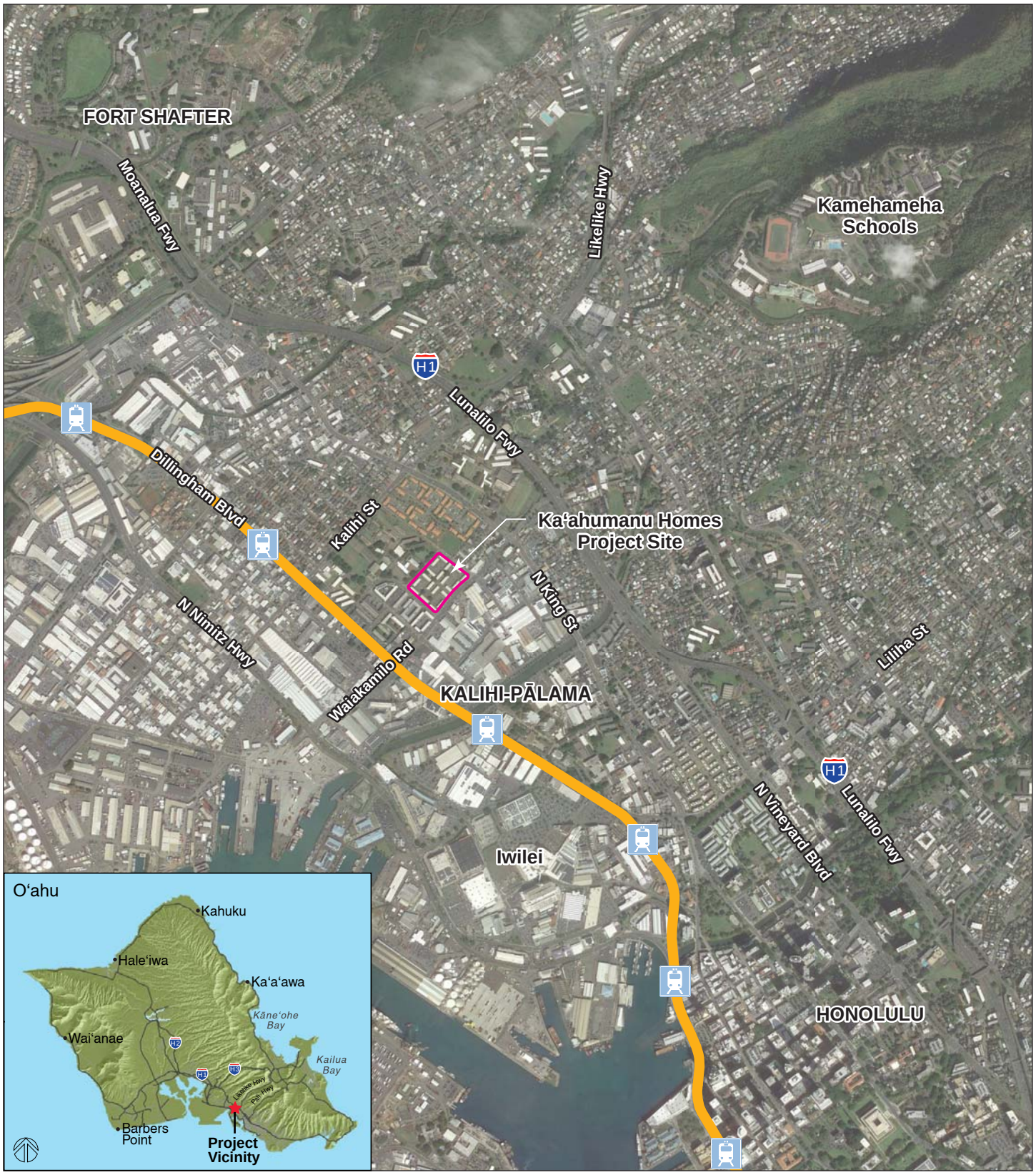
SUPPORTING DOCUMENTATION:

Printed: Executive Order 12898.

U.S. Department of Housing and Urban Development website at: https://www.hudexchange.info/environmental-review/environmental-justice/

EXHIBIT A

Location Map, TMK Map, Site Map, Flood Map, and Site Photos



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

HONOLULU RAIL TRANSIT

Transit Corridor

Transit Station

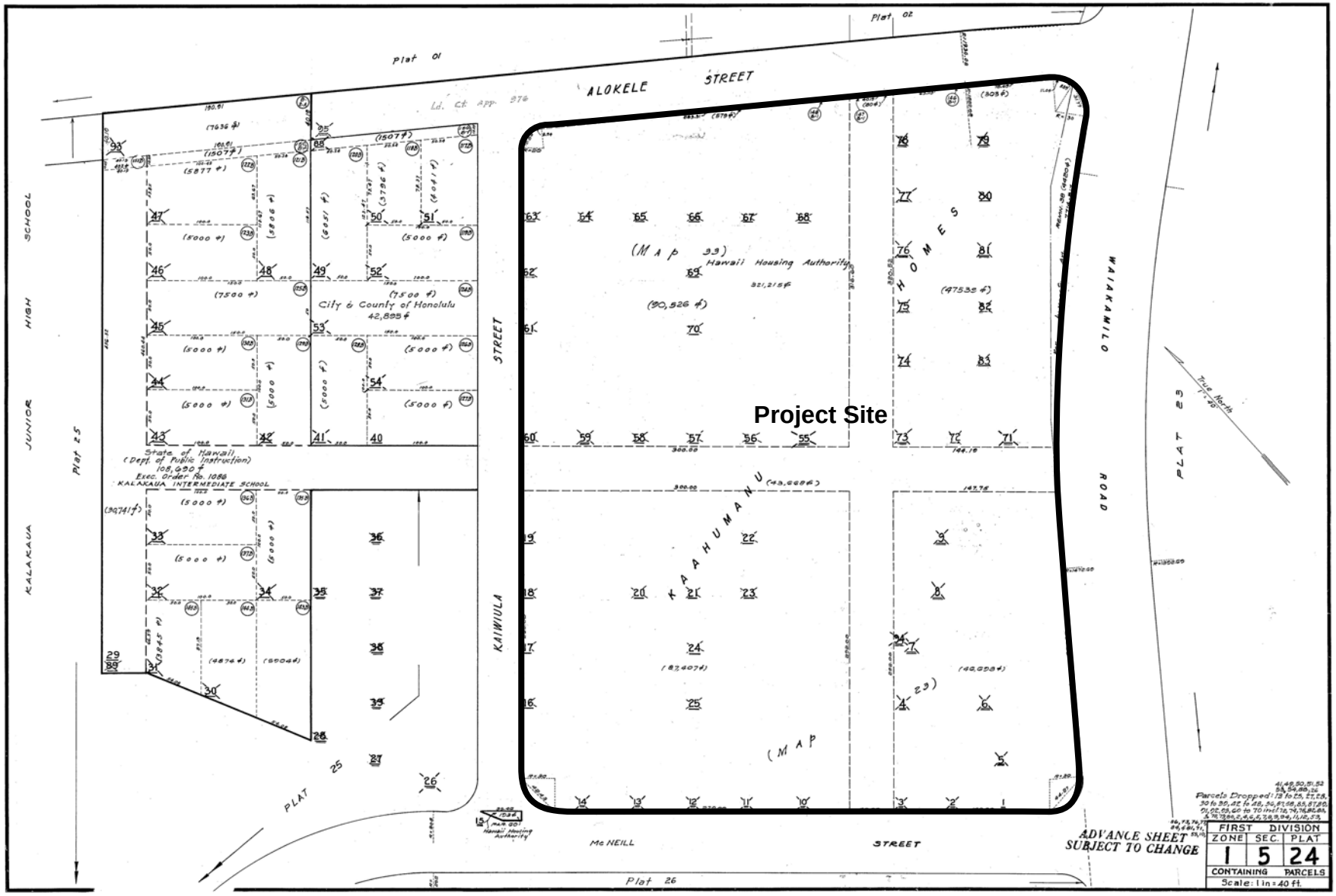
HPHA No. 1009 - Ka'ahumanu Homes (AMP 33)

Figure 1 - Project Location Map

Honolulu, O'ahu

1,500 FT

HHF PLANNERS
places for people

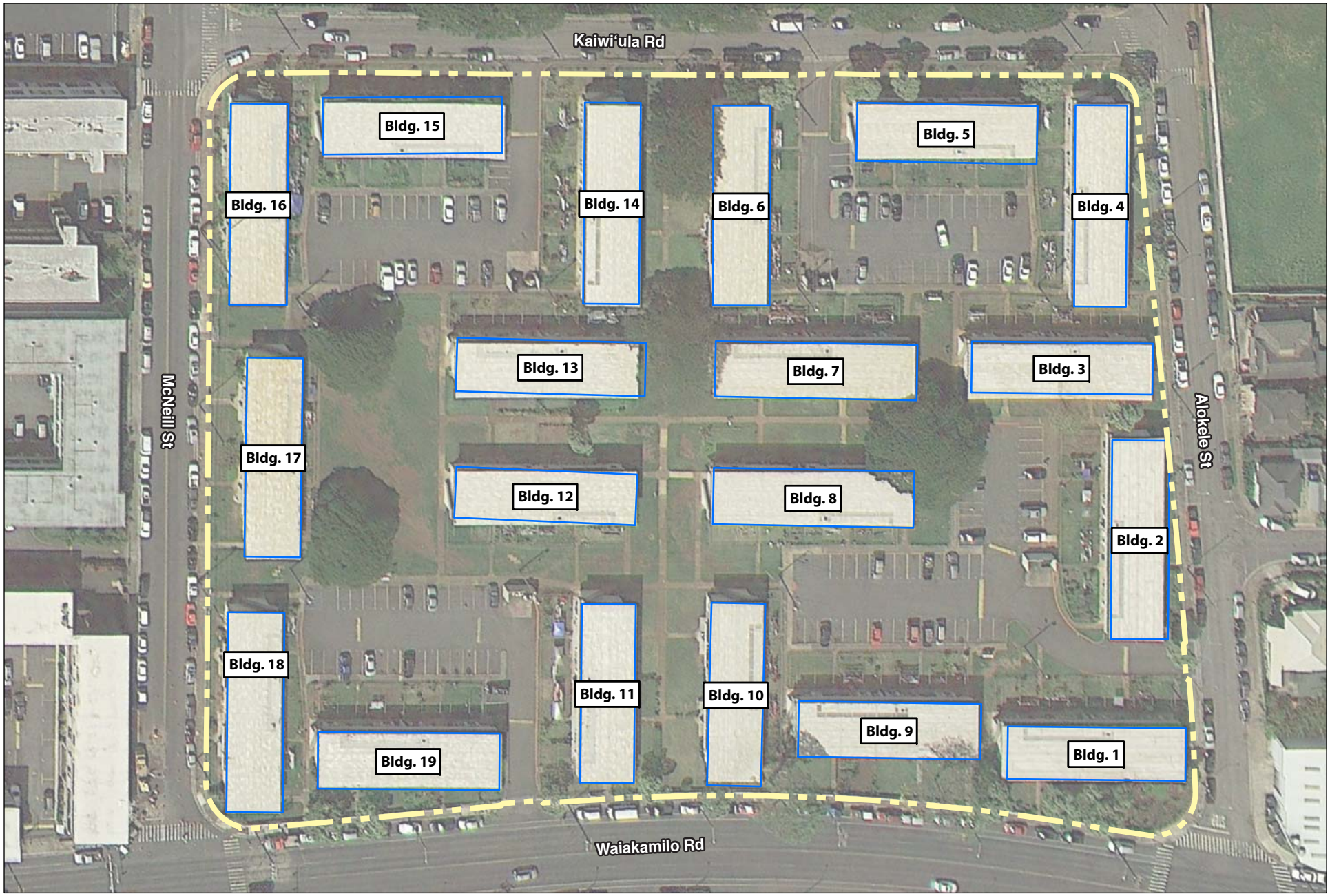


HPHA No. 1009 - Ka'ahumanu Homes (AMP 33)

Figure 2 - TMK Map

Honolulu, O'ahu

HHF PLANNERS
places for people



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

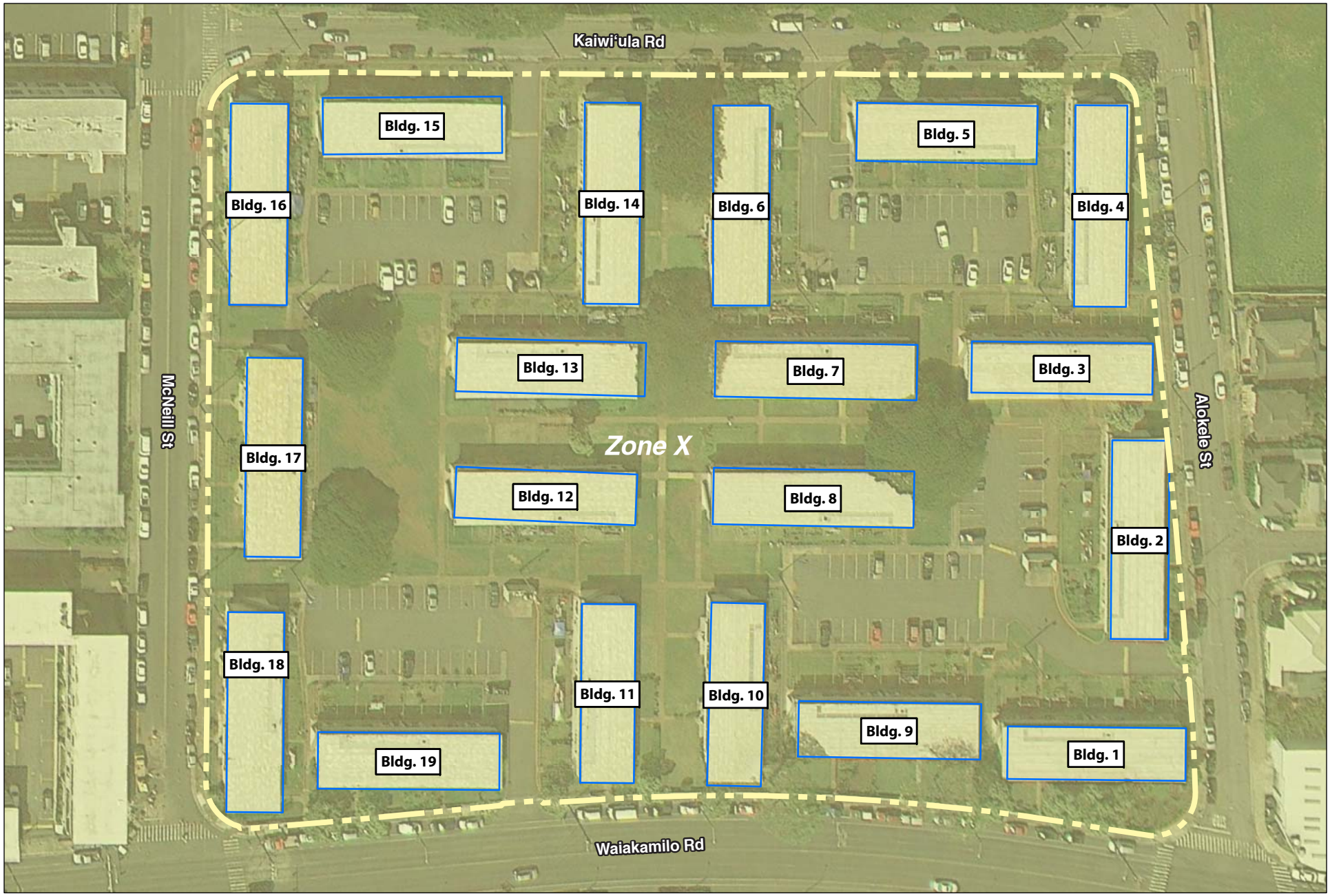
HPHA No. 1009 - Ka'ahumanu Homes (AMP 33)

Figure 3 - Site Map

Honolulu, O'ahu

67 FEET

HHF PLANNERS
places for people



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

LEGEND

Zone X - Outside the 0.2% Annual Chance of Flood

HPHA No. 1009 - Ka'ahumanu Homes (AMP 33)

Figure 4 - Flood Map

Honolulu, O'ahu

67 FEET

HHF PLANNERS
places for people

KA'AHUMANU HOMES
SITE PHOTOS

Traffic entering and within project site is slowed with speed bumps. This is entry at Waiakamilo Rad.

Typical interface between parking lot and housing units

Project frontage along Waiakamilo Road, looking north

Project frontage along Waiakamilo Road, looking south

View down central axis of housing site,looking northwest. Building in center is adjacent property, beyond -- Kalakaua Middle School

Common Area between houing units

KA'AHUMANU HOMES
SITE PHOTOS

Rear yard condition at the housing units

Play area on Kahanu Street side of housing site

View down central axis of housing site,looking northeast toward Alokele Street

Housing site frontage (at left) along Kaiwiula Street (Kalakaua Rec Center on the right)

Trash pickup area

Housing site frontage (at right) along Kaiwiula Street (Kalakaua Middle School on the left)

EXHIBIT B

EDR Radius Map Report

Kaahumanu Homes
760 Mcneill St.
Honolulu, HI 96817

Inquiry Number: 4237094.30s
March 17, 2015

EDR Summary Radius Map Report

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

FORM-NULL-PVC

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

760 MCNEILL ST.
HONOLULU County, HI 96817

COORDINATES

Latitude (North):	21.3269000 - 21˚ 19' 36.84''
Longitude (West):	157.8744000 - 157˚ 52' 27.84''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	616733.1
UTM Y (Meters):	2358605.5
Elevation:	10 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	USGS 7.5 min quad index

Target Property:	W
Source:	USGS 7.5 min quad index

MAPPED SITES SUMMARY

Target Property Address:
760 MCNEILL ST.
, HI 96817

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
Reg	SAND ISLAND MILITARY		DOD	Same	2851, SSW
Reg	FORT SHAFTER		DOD	Same	3438, NW
1	ALPAC CORPORATION	815 WAIAKAMILO RD	HI LUST, HI UST	Higher	299, SE
2	GRAFFITI INC	743 H WAIAKAMILO RD	RCRA-CESQG, FINDS	Higher	530, SSE
A3		908 WAIAKAMILO RD	EDR US Hist Auto Stat	Higher	583, ENE
A4		909 WAIAKAMILO RD	EDR US Hist Auto Stat	Higher	625, ENE
A5	CHEVRON 95023	909 WAIAKAMILO RD	RCRA-CESQG, HI UST, HI Financial Assurance	Higher	629, ENE
6	HAWAIIAN CANDIES & N	707 WAIAKAMILO RD	HI LUST, HI UST	Higher	701, SSW
7		1519 KAUMUALII ST	EDR US Hist Cleaners	Higher	835, WSW
B8	TRANSCEND INC	1321 MOONUI ST	RCRA NonGen / NLR, FINDS	Lower	886, ESE
B9		1321 MOONUI ST	EDR US Hist Auto Stat	Lower	886, ESE
B10	PONY EXPRESS COURIER	1321 MOONUI ST	HI UST	Lower	886, ESE
C11	ISLAND PAINTING	1353 MOOKAULA ST	RCRA NonGen / NLR, FINDS	Higher	894, East
C12	ISLAND PAINTING	1353 MOOKAULA ST	HI LUST, HI UST, HI Financial Assurance	Higher	894, East
D13	SOUTH PACIFIC WHOLES	801 MOOWAA	RCRA NonGen / NLR, FINDS, CA HAZNET	Lower	928, SE
D14	PACIFIC WAREHOUSE	801 MOOWAA ST	HI UST	Lower	928, SE
15	KAMEHAMEHA HOUSING P	1629 HAKA DR	HI LUST, HI UST	Higher	950, North
D16	OKADA TRUCKING CO.,	818 MOOWAA ST	HI LUST, HI UST, HI Financial Assurance	Lower	954, ESE
D17	ROSS TRUSTS	819 MOOWAA ST	HI SHWS, HI VCP	Lower	962, ESE
D18	SEN PLEX CORPORATION	819 MOOWAA ST	HI LUST, HI UST	Lower	962, ESE
C19		1341 MOOKAULA ST	EDR US Hist Auto Stat	Higher	966, East
E20		740 MOOWAA ST	EDR US Hist Auto Stat	Lower	985, SSE
B21	AUTO TECH SERVICE CE	1301 MOONUI ST	RCRA-CESQG, FINDS	Lower	987, ESE
B22		1301 MOONUI ST	EDR US Hist Auto Stat	Lower	987, ESE
B23	FUMISEAL INC	1301 MOONUI ST	RCRA NonGen / NLR	Lower	987, ESE
F24	EDWARD ENTERPRISES I	641 WAIAKAMILO RD	RCRA NonGen / NLR, FINDS	Higher	987, SSW
C25	EDSUNG FOOD SERVICE	1337 MOOKAULA ST	HI UST	Higher	988, East
E26		730 MOOWAA ST	EDR US Hist Auto Stat	Lower	1013, SSE
B27	MARKET CTR SERV STN	840 MOOWAA ST	RCRA-CESQG, FINDS	Lower	1035, ESE
E28		720 MOOWAA ST BAY C	EDR US Hist Auto Stat	Lower	1045, SSE
E29		720 MOOWAA ST	EDR US Hist Auto Stat	Lower	1045, SSE
G30		1316 KAUMUALII ST	EDR US Hist Auto Stat	Lower	1056, South
31		957 KAMENANI ST	EDR US Hist Auto Stat	Higher	1063, ENE
H32	TAKAMIYA PROPERTY	850 MOOWAA ST.	CERCLIS	Lower	1064, ESE
H33	REMEDIATION SPECIALI	850 MOOWAA UNIT C	RCRA NonGen / NLR, FINDS	Lower	1064, ESE
H34	TAKAMIYA PROPERTY	850 MOOWAA ST	HI SHWS, HI SPILLS	Lower	1064, ESE
H35	I. STEVEN SUNADA	850 MOOWAA ST	HI LUST, HI UST	Lower	1064, ESE
36	CLASSIC RUSTPROOFING	1437 N KING ST	HI LUST, HI UST	Higher	1067, NE
G37	CONSOLIDATED REFININ	1312-A KAUMUALII ST	RCRA NonGen / NLR	Lower	1073, South

MAPPED SITES SUMMARY

Target Property Address:
760 MCNEILL ST.
, HI 96817

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
F38	PROPERTY 64 WAREHOUS	609 WAIAKAMILO ROAD	HI LUST, HI UST	Higher	1106, SSW
I39		1311 MOOKAULA ST	EDR US Hist Auto Stat	Higher	1148, East
I40	GERMAN CAR SERVICE	1310 MOOKAULA ST	RCRA-CESQG, FINDS	Higher	1149, East
I41		1310 MOOKAULA ST	EDR US Hist Auto Stat	Higher	1149, East
J42	KALIHI PUMP STATION	1381 N KING ST	HI UST	Higher	1162, ENE
K43		1414 DILLINGHAM BLV	EDR US Hist Auto Stat	Higher	1178, SSW
K44		1425 DILLINGHAM BLV	EDR US Hist Auto Stat	Higher	1206, SSW
K45	DILLINGHAM BUSINESS	1425 DILLINGHAM BLVD	RCRA NonGen / NLR	Higher	1206, SSW
K46		1415 DILLINGHAM BLV	EDR US Hist Auto Stat	Higher	1219, SSW
J47	MARSHALL'S SHELL SS	1029 HOUGHTAILING ST	HI LUST, HI UST, HI Financial Assurance	Higher	1222, ENE
J48	MARSHALL'S SHELL SS	1029 HOUGHTAILING ST	RCRA-CESQG, FINDS	Higher	1222, ENE
L49	FARRINGTON HIGH SCHO	1564 N KING ST	FTTS, HIST FTTS, HI SHWS, HI SPILLS	Higher	1251, North
L50	FARRINGTON HIGH SCHO	1564 N. KING STREET	CERCLIS	Higher	1251, North
M51	PAN PACIFIC PATHOLOG	1505 DILLINGHAM BLVD	RCRA-SQG	Higher	1257, WSW
M52		1505 DILLINGHAM BLV	EDR US Hist Auto Stat	Higher	1257, WSW
M53	PAYLESS DRUG	1505 DILLINGHAM BLV	RCRA NonGen / NLR, FINDS	Higher	1257, WSW
J54	FUTURE HONOLULU FORD	CORNER OF HOUGHTAILI	HI LUST, HI UST	Higher	1270, ENE
K55	MIDAS	1415 DILLINGHAM BLVD	RCRA NonGen / NLR, FINDS	Higher	1285, SSW
56	BOB'S BAR B QUE	1366 DILLINGHAM BLVD	HI LUST, HI UST	Higher	1309, SSW
57	TESORO 2GO #61012	1529 DILLINGHAM BLVD	HI LUST, HI UST, HI Financial Assurance	Higher	1324, WSW
58	U.S. POSTAL SERVICE	1271 N KING ST	HI LUST, HI UST, HI Financial Assurance	Higher	1375, East
59	KAMEHAMEHA SCHOOLS -	1336 DILLINGHAM BLVD	HI SHWS, HI SPILLS	Lower	1385, South
60	OAHU PLUMBING & SHEE	1217 N KING ST	HI LUST, HI UST	Higher	1515, East
61	JOHIRO BROTHERS, INC	1240 MOOKAULA ST	HI LUST, HI UST	Lower	1538, ESE
N62	KALIHI CHEVRON SELF	1715 N KING ST	HI LUST, HI UST, HI Financial Assurance	Higher	1544, NNW
O63	GENERAL TIRE	505 WAIAKAMILO RD	HI SHWS, HI SPILLS	Higher	1570, SSW
O64	1385 COLBURN STREET	1385 COLBURN ST	HI SHWS, HI SPILLS	Higher	1573, SSW
65	SHIMAYA SHOTEN, LTD.	710 KOHOU ST	HI LUST, HI UST	Lower	1584, SSE
N66	C&CH KALIHI FIRE STA	1742 N KING ST	HI LUST, HI UST	Higher	1656, NNW
67	CLASSIC BOWL	1190 DILLINGHAM BLVD	HI SHWS	Lower	1698, SSE
68	CITY SQUARE 76 GAS S	1199 DILLINGHAM BLVD	HI LUST, HI UST, HI Financial Assurance	Lower	1716, South
69	OAHU PLUMBING & SHEE	926 KOHOU ST	HI LUST, HI UST, HI Financial Assurance	Lower	1755, ESE
70	AIM DILLINGHAM	1701 DILLINGHAM BLVD	HI LUST, HI UST, HI Financial Assurance	Higher	1772, West
71	KAPALAMA INCINERATOR	757 KOKEA STREET	CERCLIS	Lower	1797, SSE
P72	GTE-HAWAIIAN TEL EMP	1138 N KING ST	HI SHWS, HI ENG CONTROLS, HI INST CONTROL	Lower	1821, ESE
Q73	JBL HAWAII LTD	905 KOKEA ST	HI LUST, HI UST	Lower	1883, SE
Q74	JBL HAWAII, LTD	905 KOKEA ST	HI SHWS, HI ENG CONTROLS, HI INST CONTROL	Lower	1883, SE
75	BENIYA SHOKUDO CATER	1448 KALANI ST	HI LUST, HI UST	Higher	1893, SW
P76	7-11 KAPALAMA	1136 N KING ST.	HI LUST, HI UST, HI Financial Assurance	Lower	1940, ESE

MAPPED SITES SUMMARY

Target Property Address:
760 MCNEILL ST.
, HI 96817

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
77	ISLAND MINI-MART NOR	1860 N KING ST	HI LUST, HI UST, HI Financial Assurance	Higher	1966, NNW
78	LOOMIS ARMORED INC.	1540 KALANI ST	HI LUST, HI UST	Higher	2021, WSW
79	KING'S SERVICE	1070 N KING ST	HI LUST, HI UST	Lower	2127, ESE
80	PACIFIC TIRE	1955 N KING ST	HI LUST, HI UST	Higher	2296, NW
81	1305 HART STREET	1305 HART ST	HI SHWS, HI SPILLS, HI INST CONTROL	Lower	2354, SSW
82	MAHALO NORTH KING AU	1010 N KING ST	HI LUST, HI UST, HI Financial Assurance	Higher	2357, ESE
R83	DILLINGHAM BOULEVARD	DILLINGHAM BLVD & MO	HI SHWS, HI ENG CONTROLS, HI INST CONTROL	Higher	2363, WNW
R84	KEN T SERVICE	1901 DILLINGHAM BLVD	HI LUST, HI UST, HI Financial Assurance	Higher	2369, WNW
85	HONOLULU COMMUNITY C	DILLINGHAM BLVD	HI LUST, HI UST	Lower	2465, SE
S86	FACTORY STREET LEAD	2003 N KING ST	HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST...	Higher	2480, NW
S87	FACTORY STREET SITE	2003 N. KING STREET	CERC-NFRAP	Higher	2480, NW
88	MORRIS ANGELO	905 FACTORY ST	HI LUST, HI UST	Higher	2507, NW
89	TAGAMI AUTO SERVICE,	1733 KAHAI ST	HI LUST, HI UST, HI Financial Assurance	Higher	2584, West
90	DOLE PACKAGED FOODS	ALA KAWA ST / WAREHO	HI LUST, HI UST	Lower	2610, South
91	YOUNG BROTHERS REFRI	1331 N NIMITZ HWY	HI SHWS, HI SPILLS	Lower	2655, SSW
92	KAPALAMA INCINERATOR	757 KOKEA ST	RCRA-SQG, HI SHWS, HI SPILLS, HI INST CONTROL	Higher	2685, NW
T93	HONOLULU COMMUNITY C	874 DILLINGHAM BLVD	HI SHWS	Lower	2698, SSE
T94	THEO DAVIES CATERPIL	935 DILLINGHAM BLVD	HI SHWS, HI ENG CONTROLS, HI INST CONTROL	Lower	2773, SSE
T95	PIER 51 HONOLULU HAR	925 DILLINGHAM BLVD	FINDS, HI SHWS, HI ENG CONTROLS, HI INST CONTROL,...	Lower	2808, SSE
96	PACIFIC POULTRY	1804 KANAKANUI ST	HI SHWS, HI SPILLS	Higher	2923, WSW
97	DOMESTIC COMMERCIAL	1133 N NIMITZ HWY	HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST...	Lower	2955, SSW
U98	COSTCO GAS STATION	520 ALAKAWA ST	HI SHWS, HI ENG CONTROLS, HI INST CONTROL, HI VCP	Lower	3001, SSE
U99	COSTCO WAREHOUSE	525 ALAKAWA ST	HI SHWS, HI ENG CONTROLS, HI INST CONTROL, HI VCP	Lower	3015, SSE
V100	MCCABE, HAMILTON, &	1130 N NIMITZ HWY	HI SHWS, HI SPILLS	Lower	3046, South
V101	CHEVRON KAPALAMA TER	1105 N NIMITZ HWY	HI SHWS, HI SPILLS, HI INST CONTROL	Lower	3129, South
102	BEST BUY	ALAKAWA ST & NIMITZ	HI SHWS, HI SPILLS	Lower	3160, South
103	HOME DEPOT	421 ALAKAWA ST	HI SHWS, HI ENG CONTROLS, HI INST CONTROL	Lower	3214, South
104	DOLE IWILEI	801 DILLINGHAM BLVD	HI SHWS, HI SPILLS, HI INST CONTROL	Higher	3343, SE
105	HART STREET WWPS	1031 N NIMITZ HWY	HI SHWS, HI UIC	Lower	3386, South
106	GTE HAWAIIAN TEL - C	ALAKAWA ST & NIMITZ	HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST...	Lower	3590, South
107	YUE-FUNG KWAN CONSTR	2004-2008 REPUBLICAN	HI SHWS, HI SPILLS	Higher	3599, West
108	1950 HOMERULE STREET	1950 HOMERULE ST	HI SHWS, HI SPILLS	Higher	3655, West
109	IWILEI BUSINESS CENT	501 SUMNER ST	HI SHWS, HI SPILLS, HI INST CONTROL	Lower	3832, SSE
110	BHP GASCO BENZENE SI	616 IWILEI RD	HI SHWS, HI SPILLS, HI INST CONTROL, HI AIRS	Lower	3836, SSE
W111	HAWAII STEVEDORES	965 N NIMITZ HWY	HI SHWS, HI SPILLS, HI ENG CONTROLS	Lower	3855, South
W112	CHEVRON HONOLULU TRA	933 N NIMITZ HWY	HI SHWS, HI ENG CONTROLS, HI Financial Assurance	Lower	3961, South
X113	BHP GASCO	432 PACIFIC STREET	EDR MGP	Lower	4036, SSE
114	HAWAIIAN GAS PRODUCT	516-520 KUWILI ST	EDR MGP	Lower	4098, SE
115	TRAVEL PLAZA TRANSPO	818 PINE ST	HI SHWS, HI LUST, HI UST, HI Financial Assurance	Lower	4117, SSE

MAPPED SITES SUMMARY

Target Property Address:
760 MCNEILL ST.
, HI 96817

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
X116	UNOCAL 76 HONOLULU L	411 PACIFIC ST	RCRA NonGen / NLR, FINDS, HI SHWS, HI UST, HI...	Lower	4129, SSE
117	LENAKONA DEVELOPMENT	2305 KAMEHAMEHA HWY	HI SHWS, HI LUST, HI UST	Lower	4147, WNW
Y118	WEYERHAEUSER	900 N NIMITZ HWY	HI SHWS, HI SPILLS	Lower	4213, South
119	KUHIO PARK TERRACE T	LINAPUNI ST	HI SHWS, HI ENG CONTROLS, HI INST CONTROL, HI...	Higher	4246, North
Z120	356 PACIFIC STREET B	356 PACIFIC ST	HI SHWS, HI SPILLS	Lower	4312, SSE
Y121	861-869 NORTH NIMITZ	861-869 N NIMITZ HWY	HI SHWS, HI ENG CONTROLS, HI INST CONTROL	Lower	4323, South
AA122	VON HAMM TEXTILES	546 KAAAHI ST	HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST...	Lower	4331, SE
AA123	NUUANU AUTO COMPANY	545 KAAAHI ST	HI SHWS	Lower	4333, SE
Z124	BREWER ENVIRONMENTAL	311 PACIFIC ST	HI SHWS, HI SPILLS, HI VCP	Lower	4350, SSE
Y125	HAWAIIAN ELECTRIC CO	855 N NIMITZ HWY	HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST...	Lower	4368, South
Z126	POLYNESIAN HOSPITALI	330 PACIFIC ST	RCRA-CESQG, FINDS, HI SHWS, HI LUST, HI UST, HI...	Lower	4385, SSE
127	HAWAIIAN MISO AND SO	1714 MARY ST	HI SHWS, HI SPILLS	Lower	4414, WSW
128	HAWAII DAIRY HOLDING	2277 KAMEHAMEHA HWY	HI SHWS, HI LUST, HI UST, HI VCP, HI Financial...	Lower	4430, WNW
129	2343 NORTH KING STRE	2343 N KING ST	HI SHWS, HI INST CONTROL	Higher	4595, NW
130	CHANG-CHOW PROPERTY,	2161 N SCHOOL ST	HI SHWS	Higher	4600, North
131	KUHIO PARK TERRACE C	1475 LINAPUNI ST	HI SHWS, HI ENG CONTROLS, HI INST CONTROL	Higher	4744, NNW
AB132	PAULEY PETROLEUM	795 N NIMITZ HWY	HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST...	Lower	4793, South
AB133	EQUILON ENTERPRISES	789 N NIMITZ HWY	HI SHWS	Lower	4829, South
134	700 N NIMITZ IDPP RE	700 N NIMITZ HWY	HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST...	Lower	4848, South
135	HAWAIIAN BITUMULS &	248 SAND ISLAND ACCE	HI SHWS, HI LUST, HI UST, HI INST CONTROL, HI AIRS	Lower	4867, West
136	775 NORTH NIMITZ HIG	775 N NIMITZ HWY	HI SHWS, HI ENG CONTROLS, HI INST CONTROL	Lower	4914, South
AC137	LONGS DRUG STORES WA	2270 HOONEE PL	HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST...	Lower	4949, West
138	TRANS HAWAIIAN - OAH	124 PUUHALE RD	HI SHWS, HI LUST, HI UST	Lower	4959, WSW
AD139	CITY MILL	660 N NIMITZ HWY	HI SHWS, HI LUST, HI UST, HI INST CONTROL	Lower	4975, SSE
AC140	HAGADONE PRINTING CO	2278 HOONEE PL	HI SHWS, HI INST CONTROL	Lower	4981, West
AD141	580 NORTH NIMITZ HIG	580 N NIMITZ HWY	HI SHWS, HI ENG CONTROLS	Lower	4983, SSE
AD142	ZIPPY'S 634 N NIMITZ	634 N NIMITZ HWY	HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST...	Lower	4988, SSE
143	MID PAC PETROLEUM LL	540 N NIMITZ HWY	HI SHWS, HI LUST, HI UST, HI Financial Assurance	Lower	4991, SSE
144	420-470 NORTH NIMITZ	420-470 N NIMITZ HWY	HI SHWS, HI ENG CONTROLS	Lower	4993, SSE
AE145	755 N NIMITZ HWY	755 N NIMITZ HWY	HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST...	Lower	5019, South
146	373 NORTH NIMITZ HIG	373 N NIMITZ HWY	HI SHWS, HI SPILLS	Lower	5033, SSE
147	HALL MARK DRY CLEANE	1470 LILIHA ST	HI SHWS	Higher	5050, ESE
AE148	BHP PIER 29	739 N NIMITZ HWY	HI SHWS	Lower	5078, South
149	STATE POULTRY PROCES	2132 KALIAWA ST	HI SHWS, HI SPILLS	Lower	5154, WSW
150	SENIOR RESIDENCES AT	888 IWILEI RD	HI SHWS, HI INST CONTROL	Lower	5180, SE
AF151	MOANA PAA KAI	705 N NIMITZ HWY	RCRA-CESQG, HI SHWS, HI SPILLS	Lower	5185, SSE
AF152	HAWAIIAN FLOUR MILL	703 N NIMITZ HWY	HI SHWS	Lower	5195, SSE
AF153	HAWAIIAN GRAIN CORPO	701 N NIMITZ HWY	HI SHWS, HI LUST, HI UST	Lower	5223, SSE
154	LANCE GOYA CHEVRON	504 N SCHOOL ST	HI SHWS, HI LUST, HI UST, HI ENG CONTROLS, HI INST...	Higher	5243, ESE

MAPPED SITES SUMMARY

Target Property Address:
760 MCNEILL ST.
, HI 96817

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
155	OTS KALIHI-PALAMA BU	811 MIDDLE ST	HI SHWS, HI LUST, HI UST, HI Financial Assurance	Higher	5256, NW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal CERCLIS list

CERCLIS: A review of the CERCLIS list, as provided by EDR, and dated 10/25/2013 has revealed that there are 3 CERCLIS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
FARRINGTON HIGH SCHO	1564 N. KING STREET	N 1/8 - 1/4 (0.237 mi.)	L50	17

Lower Elevation	Address	Direction / Distance	Map ID	Page
TAKAMIYA PROPERTY	850 MOOWAA ST.	ESE 1/8 - 1/4 (0.202 mi.)	H32	13
KAPALAMA INCINERATOR	757 KOKEA STREET	SSE 1/4 - 1/2 (0.340 mi.)	71	23

Federal CERCLIS NFRAP site List

CERC-NFRAP: A review of the CERC-NFRAP list, as provided by EDR, and dated 10/25/2013 has revealed that there is 1 CERC-NFRAP site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
FACTORY STREET SITE	2003 N. KING STREET	NW 1/4 - 1/2 (0.470 mi.)	S87	27

EXECUTIVE SUMMARY

Federal RCRA generators list

RCRA-SQG: A review of the RCRA-SQG list, as provided by EDR, and dated 12/09/2014 has revealed that there is 1 RCRA-SQG site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PAN PACIFIC PATHOLOG	1505 DILLINGHAM BLVD	WSW 1/8 - 1/4 (0.238 mi.)	M51	17

RCRA-CESQG: A review of the RCRA-CESQG list, as provided by EDR, and dated 12/09/2014 has revealed that there are 6 RCRA-CESQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
GRAFFITI INC	***743 H WAIAKAMILO RD***	***SSE 0 - 1/8 (0.100 mi.)***	***2***	***7***
CHEVRON 95023	***909 WAIAKAMILO RD***	***ENE 0 - 1/8 (0.119 mi.)***	***A5***	***8***
GERMAN CAR SERVICE	***1310 MOOKAULA ST***	***E 1/8 - 1/4 (0.218 mi.)***	***I40***	***15***
MARSHALL'S SHELL SS	***1029 HOUGHTAILING ST***	***ENE 1/8 - 1/4 (0.231 mi.)***	***J48***	***17***

Lower Elevation	Address	Direction / Distance	Map ID	Page
AUTO TECH SERVICE CE	***1301 MOONUI ST***	***ESE 1/8 - 1/4 (0.187 mi.)***	***B21***	***11***
MARKET CTR SERV STN	***840 MOOWAA ST***	***ESE 1/8 - 1/4 (0.196 mi.)***	***B27***	***13***

State- and tribal - equivalent CERCLIS

HI SHWS: A review of the HI SHWS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 75 HI SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
FARRINGTON HIGH SCHO	***1564 N KING ST***	***N 1/8 - 1/4 (0.237 mi.)***	***L49***	***17***
GENERAL TIRE	***505 WAIAKAMILO RD***	***SSW 1/4 - 1/2 (0.297 mi.)***	***O63***	***20***
1385 COLBURN STREET	***1385 COLBURN ST***	***SSW 1/4 - 1/2 (0.298 mi.)***	***O64***	***21***
DILLINGHAM BOULEVARD	***DILLINGHAM BLVD & MO***	***WNW 1/4 - 1/2 (0.448 mi.)***	***R83***	***26***
FACTORY STREET LEAD	***2003 N KING ST***	***NW 1/4 - 1/2 (0.470 mi.)***	***S86***	***26***
KAPALAMA INCINERATOR	***757 KOKEA ST***	***NW 1/2 - 1 (0.509 mi.)***	***92***	***28***
PACIFIC POULTRY	***1804 KANAKANUI ST***	***WSW 1/2 - 1 (0.554 mi.)***	***96***	***28***
DOLE IWILEI	***801 DILLINGHAM BLVD***	***SE 1/2 - 1 (0.633 mi.)***	***104***	***30***
YUE-FUNG KWAN CONSTR	***2004-2008 REPUBLICAN***	***W 1/2 - 1 (0.682 mi.)***	***107***	***30***
1950 HOMERULE STREET	***1950 HOMERULE ST***	***W 1/2 - 1 (0.692 mi.)***	***108***	***30***
KUHIO PARK TERRACE T	***LINAPUNI ST***	***N 1/2 - 1 (0.804 mi.)***	***119***	***33***
2343 NORTH KING STRE	***2343 N KING ST***	***NW 1/2 - 1 (0.870 mi.)***	***129***	***35***
CHANG-CHOW PROPERTY,	2161 N SCHOOL ST	N 1/2 - 1 (0.871 mi.)	130	35
KUHIO PARK TERRACE C	***1475 LINAPUNI ST***	***NNW 1/2 - 1 (0.898 mi.)***	***131***	***35***
HALL MARK DRY CLEANE	1470 LILIHA ST	ESE 1/2 - 1 (0.956 mi.)	147	39
LANCE GOYA CHEVRON	***504 N SCHOOL ST***	***ESE 1/2 - 1 (0.993 mi.)***	***154***	***40***
OTS KALIHI-PALAMA BU	***811 MIDDLE ST***	***NW 1/2 - 1 (0.995 mi.)***	***155***	***40***

Lower Elevation	Address	Direction / Distance	Map ID	Page
ROSS TRUSTS	***819 MOOWAA ST***	***ESE 1/8 - 1/4 (0.182 mi.)***	***D17***	***11***

Lower Elevation	Address	Direction / Distance	Map ID	Page
TAKAMIYA PROPERTY	850 MOOWAA ST	ESE 1/8 - 1/4 (0.202 mi.)	H34	14
KAMEHAMEHA SCHOOLS -	1336 DILLINGHAM BLVD	S 1/4 - 1/2 (0.262 mi.)	59	19
CLASSIC BOWL	1190 DILLINGHAM BLVD	SSE 1/4 - 1/2 (0.322 mi.)	67	21
GTE-HAWAIIAN TEL EMP	1138 N KING ST	ESE 1/4 - 1/2 (0.345 mi.)	P72	23
JBL HAWAII, LTD	905 KOKEA ST	SE 1/4 - 1/2 (0.357 mi.)	Q74	23
1305 HART STREET	1305 HART ST	SSW 1/4 - 1/2 (0.446 mi.)	81	25
YOUNG BROTHERS REFRI	1331 N NIMITZ HWY	SSW 1/2 - 1 (0.503 mi.)	91	28
HONOLULU COMMUNITY C	874 DILLINGHAM BLVD	SSE 1/2 - 1 (0.511 mi.)	T93	28
THEO DAVIES CATERPIL	935 DILLINGHAM BLVD	SSE 1/2 - 1 (0.525 mi.)	T94	28
PIER 51 HONOLULU HAR	925 DILLINGHAM BLVD	SSE 1/2 - 1 (0.532 mi.)	T95	28
DOMESTIC COMMERCIAL	1133 N NIMITZ HWY	SSW 1/2 - 1 (0.560 mi.)	97	29
COSTCO GAS STATION	520 ALAKAWA ST	SSE 1/2 - 1 (0.568 mi.)	U98	29
COSTCO WAREHOUSE	525 ALAKAWA ST	SSE 1/2 - 1 (0.571 mi.)	U99	29
MCCABE, HAMILTON, &	1130 N NIMITZ HWY	S 1/2 - 1 (0.577 mi.)	V100	29
CHEVRON KAPALAMA TER	1105 N NIMITZ HWY	S 1/2 - 1 (0.593 mi.)	V101	29
BEST BUY	ALAKAWA ST & NIMITZ	S 1/2 - 1 (0.598 mi.)	102	29
HOME DEPOT	421 ALAKAWA ST	S 1/2 - 1 (0.609 mi.)	103	30
HART STREET WWPS	1031 N NIMITZ HWY	S 1/2 - 1 (0.641 mi.)	105	30
GTE HAWAIIAN TEL - C	ALAKAWA ST & NIMITZ	S 1/2 - 1 (0.680 mi.)	106	30
IWILEI BUSINESS CENT	501 SUMNER ST	SSE 1/2 - 1 (0.726 mi.)	109	31
BHP GASCO BENZENE SI	616 IWILEI RD	SSE 1/2 - 1 (0.727 mi.)	110	31
HAWAII STEVEDORES	965 N NIMITZ HWY	S 1/2 - 1 (0.730 mi.)	W111	31
CHEVRON HONOLULU TRA	933 N NIMITZ HWY	S 1/2 - 1 (0.750 mi.)	W112	31
TRAVEL PLAZA TRANSPO	818 PINE ST	SSE 1/2 - 1 (0.780 mi.)	115	32
UNOCAL 76 HONOLULU L	411 PACIFIC ST	SSE 1/2 - 1 (0.782 mi.)	X116	32
LENAKONA DEVELOPMENT	2305 KAMEHAMEHA HWY	WNW 1/2 - 1 (0.785 mi.)	117	32
WEYERHAEUSER	900 N NIMITZ HWY	S 1/2 - 1 (0.798 mi.)	Y118	33
356 PACIFIC STREET B	356 PACIFIC ST	SSE 1/2 - 1 (0.817 mi.)	Z120	33
861-869 NORTH NIMITZ	861-869 N NIMITZ HWY	S 1/2 - 1 (0.819 mi.)	Y121	33
VON HAMM TEXTILES	546 KAAAHI ST	SE 1/2 - 1 (0.820 mi.)	AA122	33
NUUANU AUTO COMPANY	545 KAAAHI ST	SE 1/2 - 1 (0.821 mi.)	AA123	33
BREWER ENVIRONMENTAL	311 PACIFIC ST	SSE 1/2 - 1 (0.824 mi.)	Z124	34
HAWAIIAN ELECTRIC CO	855 N NIMITZ HWY	S 1/2 - 1 (0.827 mi.)	Y125	34
POLYNESIAN HOSPITALI	330 PACIFIC ST	SSE 1/2 - 1 (0.830 mi.)	Z126	34
HAWAIIAN MISO AND SO	1714 MARY ST	WSW 1/2 - 1 (0.836 mi.)	127	34
HAWAII DAIRY HOLDING	2277 KAMEHAMEHA HWY	WNW 1/2 - 1 (0.839 mi.)	128	35
PAULEY PETROLEUM	795 N NIMITZ HWY	S 1/2 - 1 (0.908 mi.)	AB132	35
EQUILON ENTERPRISES	789 N NIMITZ HWY	S 1/2 - 1 (0.915 mi.)	AB133	36
700 N NIMITZ IDPP RE	700 N NIMITZ HWY	S 1/2 - 1 (0.918 mi.)	134	36
HAWAIIAN BITUMULS &	248 SAND ISLAND ACCE	W 1/2 - 1 (0.922 mi.)	135	36
775 NORTH NIMITZ HIG	775 N NIMITZ HWY	S 1/2 - 1 (0.931 mi.)	136	36
LONGS DRUG STORES WA	2270 HOONEE PL	W 1/2 - 1 (0.937 mi.)	AC137	36
TRANS HAWAIIAN - OAH	124 PUUHALE RD	WSW 1/2 - 1 (0.939 mi.)	138	37
CITY MILL	660 N NIMITZ HWY	SSE 1/2 - 1 (0.942 mi.)	AD139	37
HAGADONE PRINTING CO	2278 HOONEE PL	W 1/2 - 1 (0.943 mi.)	AC140	37
580 NORTH NIMITZ HIG	580 N NIMITZ HWY	SSE 1/2 - 1 (0.944 mi.)	AD141	37
ZIPPY'S 634 N NIMITZ	634 N NIMITZ HWY	SSE 1/2 - 1 (0.945 mi.)	AD142	38
MID PAC PETROLEUM LL	540 N NIMITZ HWY	SSE 1/2 - 1 (0.945 mi.)	143	38
420-470 NORTH NIMITZ	420-470 N NIMITZ HWY	SSE 1/2 - 1 (0.946 mi.)	144	38
755 N NIMITZ HWY	755 N NIMITZ HWY	S 1/2 - 1 (0.951 mi.)	AE145	38
373 NORTH NIMITZ HIG	373 N NIMITZ HWY	SSE 1/2 - 1 (0.953 mi.)	146	38
BHP PIER 29	739 N NIMITZ HWY	S 1/2 - 1 (0.962 mi.)	AE148	39
STATE POULTRY PROCES	2132 KALIAWA ST	WSW 1/2 - 1 (0.976 mi.)	149	39
SENIOR RESIDENCES AT	888 IWILEI RD	SE 1/2 - 1 (0.981 mi.)	150	39
MOANA PAA KAI	705 N NIMITZ HWY	SSE 1/2 - 1 (0.982 mi.)	AF151	39
HAWAIIAN FLOUR MILL	703 N NIMITZ HWY	SSE 1/2 - 1 (0.984 mi.)	AF152	39

Lower Elevation	Address	Direction / Distance	Map ID	Page
HAWAIIAN GRAIN CORPO	701 N NIMITZ HWY	SSE 1/2 - 1 (0.989 mi.)	AF153	40

State and tribal leaking storage tank lists

HI LUST: A review of the HI LUST list, as provided by EDR, and dated 12/16/2014 has revealed that there are 35 HI LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ALPAC CORPORATION Facility Status: Site Cleanup Completed (NFA)	815 WAIAKAMILO RD	SE 0 - 1/8 (0.057 mi.)	1	7
HAWAIIAN CANDIES & N Facility Status: Site Cleanup Completed (NFA)	707 WAIAKAMILO RD	SSW 1/8 - 1/4 (0.133 mi.)	6	8
ISLAND PAINTING Facility Status: Site Cleanup Completed (NFA)	1353 MOOKAULA ST	E 1/8 - 1/4 (0.169 mi.)	C12	9
KAMEHAMEHA HOUSING P Facility Status: Site Cleanup Completed (NFA)	1629 HAKA DR	N 1/8 - 1/4 (0.180 mi.)	15	10
CLASSIC RUSTPROOFING Facility Status: Site Cleanup Completed (NFA)	1437 N KING ST	NE 1/8 - 1/4 (0.202 mi.)	36	14
PROPERTY 64 WAREHOUS Facility Status: Site Assessment Ongoing	609 WAIAKAMILO ROAD	SSW 1/8 - 1/4 (0.209 mi.)	F38	15
MARSHALL'S SHELL SS Facility Status: Site Cleanup Completed (NFA)	1029 HOUGHTAILING ST	ENE 1/8 - 1/4 (0.231 mi.)	J47	17
FUTURE HONOLULU FORD Facility Status: Site Cleanup Completed (NFA)	CORNER OF HOUGHTAILI	ENE 1/8 - 1/4 (0.241 mi.)	J54	18
BOB'S BAR B QUE Facility Status: Site Cleanup Completed (NFA)	1366 DILLINGHAM BLVD	SSW 1/8 - 1/4 (0.248 mi.)	56	18
TESORO 2GO #61012 Facility Status: Site Cleanup Completed (NFA)	1529 DILLINGHAM BLVD	WSW 1/4 - 1/2 (0.251 mi.)	57	19
U.S. POSTAL SERVICE Facility Status: Site Cleanup Completed (NFA)	1271 N KING ST	E 1/4 - 1/2 (0.260 mi.)	58	19
OAHU PLUMBING & SHEE Facility Status: Site Cleanup Completed (NFA)	1217 N KING ST	E 1/4 - 1/2 (0.287 mi.)	60	20
KALIHI CHEVRON SELF Facility Status: Site Cleanup Completed (NFA)	1715 N KING ST	NNW 1/4 - 1/2 (0.292 mi.)	N62	20
C&CH KALIHI FIRE STA Facility Status: Site Cleanup Completed (NFA)	1742 N KING ST	NNW 1/4 - 1/2 (0.314 mi.)	N66	21
AIM DILLINGHAM Facility Status: Site Cleanup Completed with EHMP Facility Status: Site Cleanup Completed (NFA)	1701 DILLINGHAM BLVD	W 1/4 - 1/2 (0.336 mi.)	70	22
BENIYA SHOKUDO CATER Facility Status: Site Cleanup Completed (NFA)	1448 KALANI ST	SW 1/4 - 1/2 (0.359 mi.)	75	23
ISLAND MINI-MART NOR Facility Status: Active Remediation	1860 N KING ST	NNW 1/4 - 1/2 (0.372 mi.)	77	24
LOOMIS ARMORED INC. Facility Status: Site Cleanup Completed (NFA)	1540 KALANI ST	WSW 1/4 - 1/2 (0.383 mi.)	78	24

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PACIFIC TIRE	*1955 N KING ST*	*NW 1/4 - 1/2 (0.435 mi.)*	*80*	*25*
Facility Status: Site Cleanup Completed (NFA)				
MAHALO NORTH KING AU	*1010 N KING ST*	*ESE 1/4 - 1/2 (0.446 mi.)*	*82*	*25*
Facility Status: Site Cleanup Completed (NFA)				
Facility Status: Site Cleanup Completed with EHMP				
KEN T SERVICE	*1901 DILLINGHAM BLVD*	*WNW 1/4 - 1/2 (0.449 mi.)*	*R84*	*26*
Facility Status: Site Cleanup Completed (NFA)				
MORRIS ANGELO	*905 FACTORY ST*	*NW 1/4 - 1/2 (0.475 mi.)*	*88*	*27*
Facility Status: Site Cleanup Completed (NFA)				
TAGAMI AUTO SERVICE,	*1733 KAHAI ST*	*W 1/4 - 1/2 (0.489 mi.)*	*89*	*27*
Facility Status: Site Cleanup Completed (NFA)				

Lower Elevation	Address	Direction / Distance	Map ID	Page
OKADA TRUCKING CO.,	*818 MOOWAA ST*	*ESE 1/8 - 1/4 (0.181 mi.)*	*D16*	*10*
Facility Status: Site Cleanup Completed (NFA)				
SEN PLEX CORPORATION	*819 MOOWAA ST*	*ESE 1/8 - 1/4 (0.182 mi.)*	*D18*	*11*
Facility Status: Site Cleanup Completed (NFA)				
I. STEVEN SUNADA	*850 MOOWAA ST*	*ESE 1/8 - 1/4 (0.202 mi.)*	*H35*	*14*
Facility Status: Site Cleanup Completed (NFA)				
JOHIRO BROTHERS, INC	*1240 MOOKAULA ST*	*ESE 1/4 - 1/2 (0.291 mi.)*	*61*	*20*
Facility Status: Site Cleanup Completed (NFA)				
SHIMAYA SHOTEN, LTD.	*710 KOHOU ST*	*SSE 1/4 - 1/2 (0.300 mi.)*	*65*	*21*
Facility Status: Site Cleanup Completed (NFA)				
CITY SQUARE 76 GAS S	*1199 DILLINGHAM BLVD*	*S 1/4 - 1/2 (0.325 mi.)*	*68*	*22*
Facility Status: Confirmed Release				
Facility Status: Site Cleanup Completed (NFA)				
OAHU PLUMBING & SHEE	*926 KOHOU ST*	*ESE 1/4 - 1/2 (0.332 mi.)*	*69*	*22*
Facility Status: Site Cleanup Completed (NFA)				
JBL HAWAII LTD	*905 KOKEA ST*	*SE 1/4 - 1/2 (0.357 mi.)*	*Q73*	*23*
Facility Status: Site Cleanup Completed (NFA)				
7-11 KAPALAMA	*1136 N KING ST.*	*ESE 1/4 - 1/2 (0.367 mi.)*	*P76*	*24*
Facility Status: Site Cleanup Completed (NFA)				
KING'S SERVICE	*1070 N KING ST*	*ESE 1/4 - 1/2 (0.403 mi.)*	*79*	*25*
Facility Status: Site Cleanup Completed (NFA)				
HONOLULU COMMUNITY C	*DILLINGHAM BLVD*	*SE 1/4 - 1/2 (0.467 mi.)*	*85*	*26*
Facility Status: Site Cleanup Completed (NFA)				
DOLE PACKAGED FOODS	*ALA KAWA ST / WAREHO*	*S 1/4 - 1/2 (0.494 mi.)*	*90*	*27*
Facility Status: Site Cleanup Completed (NFA)				

State and tribal registered storage tank lists

HI UST: A review of the HI UST list, as provided by EDR, and dated 12/18/2014 has revealed that there

are 17 HI UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ALPAC CORPORATION	*815 WAIAKAMILO RD*	*SE 0 - 1/8 (0.057 mi.)*	*1*	*7*
CHEVRON 95023	*909 WAIAKAMILO RD*	*ENE 0 - 1/8 (0.119 mi.)*	*A5*	*8*
HAWAIIAN CANDIES & N	*707 WAIAKAMILO RD*	*SSW 1/8 - 1/4 (0.133 mi.)*	*6*	*8*
ISLAND PAINTING	*1353 MOOKAULA ST*	*E 1/8 - 1/4 (0.169 mi.)*	*C12*	*9*
KAMEHAMEHA HOUSING P	*1629 HAKA DR*	*N 1/8 - 1/4 (0.180 mi.)*	*15*	*10*
EDSUNG FOOD SERVICE	1337 MOOKAULA ST	E 1/8 - 1/4 (0.187 mi.)	C25	12
CLASSIC RUSTPROOFING	*1437 N KING ST*	*NE 1/8 - 1/4 (0.202 mi.)*	*36*	*14*
PROPERTY 64 WAREHOUS	*609 WAIAKAMILO ROAD*	*SSW 1/8 - 1/4 (0.209 mi.)*	*F38*	*15*
KALIHI PUMP STATION	1381 N KING ST	ENE 1/8 - 1/4 (0.220 mi.)	J42	16
MARSHALL'S SHELL SS	*1029 HOUGHTAILING ST*	*ENE 1/8 - 1/4 (0.231 mi.)*	*J47*	*17*
FUTURE HONOLULU FORD	*CORNER OF HOUGHTAILI*	*ENE 1/8 - 1/4 (0.241 mi.)*	*J54*	*18*
BOB'S BAR B QUE	*1366 DILLINGHAM BLVD*	*SSW 1/8 - 1/4 (0.248 mi.)*	*56*	*18*

Lower Elevation	Address	Direction / Distance	Map ID	Page
PONY EXPRESS COURIER	1321 MOONUI ST	ESE 1/8 - 1/4 (0.168 mi.)	B10	9
PACIFIC WAREHOUSE	801 MOOWAA ST	SE 1/8 - 1/4 (0.176 mi.)	D14	10
OKADA TRUCKING CO.,	*818 MOOWAA ST*	*ESE 1/8 - 1/4 (0.181 mi.)*	*D16*	*10*
SEN PLEX CORPORATION	*819 MOOWAA ST*	*ESE 1/8 - 1/4 (0.182 mi.)*	*D18*	*11*
I. STEVEN SUNADA	*850 MOOWAA ST*	*ESE 1/8 - 1/4 (0.202 mi.)*	*H35*	*14*

State and tribal institutional control / engineering control registries

HI ENG CONTROLS: A review of the HI ENG CONTROLS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 4 HI ENG CONTROLS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DILLINGHAM BOULEVARD	*DILLINGHAM BLVD & MO*	*WNW 1/4 - 1/2 (0.448 mi.)*	*R83*	*26*
FACTORY STREET LEAD	*2003 N KING ST*	*NW 1/4 - 1/2 (0.470 mi.)*	*S86*	*26*

Lower Elevation	Address	Direction / Distance	Map ID	Page
GTE-HAWAIIAN TEL EMP	*1138 N KING ST*	*ESE 1/4 - 1/2 (0.345 mi.)*	*P72*	*23*
JBL HAWAII, LTD	*905 KOKEA ST*	*SE 1/4 - 1/2 (0.357 mi.)*	*Q74*	*23*

HI INST CONTROL: A review of the HI INST CONTROL list, as provided by EDR, and dated 12/02/2014 has revealed that there are 5 HI INST CONTROL sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DILLINGHAM BOULEVARD	*DILLINGHAM BLVD & MO*	*WNW 1/4 - 1/2 (0.448 mi.)*	*R83*	*26*
FACTORY STREET LEAD	*2003 N KING ST*	*NW 1/4 - 1/2 (0.470 mi.)*	*S86*	*26*

Lower Elevation	Address	Direction / Distance	Map ID	Page
GTE-HAWAIIAN TEL EMP	*1138 N KING ST*	*ESE 1/4 - 1/2 (0.345 mi.)*	*P72*	*23*
JBL HAWAII, LTD	*905 KOKEA ST*	*SE 1/4 - 1/2 (0.357 mi.)*	*Q74*	*23*
1305 HART STREET	*1305 HART ST*	*SSW 1/4 - 1/2 (0.446 mi.)*	*81*	*25*

State and tribal voluntary cleanup sites

HI VCP: A review of the HI VCP list, as provided by EDR, and dated 12/02/2014 has revealed that there is 1 HI VCP site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ROSS TRUSTS	***819 MOOWAA ST***	***ESE 1/8 - 1/4 (0.182 mi.)***	***D17***	***11***

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

RCRA NonGen / NLR: A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 12/09/2014 has revealed that there are 10 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ISLAND PAINTING	***1353 MOOKAULA ST***	***E 1/8 - 1/4 (0.169 mi.)***	***C11***	***9***
EDWARD ENTERPRISES I	***641 WAIAKAMILO RD***	***SSW 1/8 - 1/4 (0.187 mi.)***	***F24***	***12***
DILLINGHAM BUSINESS	1425 DILLINGHAM BLVD	SSW 1/8 - 1/4 (0.228 mi.)	K45	16
PAYLESS DRUG	***1505 DILLINGHAM BLV***	***WSW 1/8 - 1/4 (0.238 mi.)***	***M53***	***18***
MIDAS	***1415 DILLINGHAM BLVD***	***SSW 1/8 - 1/4 (0.243 mi.)***	***K55***	***18***

Lower Elevation	Address	Direction / Distance	Map ID	Page
TRANSCEND INC	***1321 MOONUI ST***	***ESE 1/8 - 1/4 (0.168 mi.)***	***B8***	***9***
SOUTH PACIFIC WHOLES	***801 MOOWAA***	***SE 1/8 - 1/4 (0.176 mi.)***	***D13***	***10***
FUMISEAL INC	1301 MOONUI ST	ESE 1/8 - 1/4 (0.187 mi.)	B23	12
REMEDIATION SPECIALI	***850 MOOWAA UNIT C***	***ESE 1/8 - 1/4 (0.202 mi.)***	***H33***	***14***
CONSOLIDATED REFININ	1312-A KAUMUALII ST	S 1/8 - 1/4 (0.203 mi.)	G37	15

DOD: A review of the DOD list, as provided by EDR, and dated 12/31/2005 has revealed that there are 2 DOD sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAND ISLAND MILITARY		SSW 1/2 - 1 (0.540 mi.)	0	7
FORT SHAFTER		NW 1/2 - 1 (0.651 mi.)	0	7

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: A review of the EDR MGP list, as provided by EDR, has revealed that there are 2 EDR MGP

sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
BHP GASCO	432 PACIFIC STREET	SSE 1/2 - 1 (0.764 mi.)	X113	31
HAWAIIAN GAS PRODUCT	516-520 KUWILI ST	SE 1/2 - 1 (0.776 mi.)	114	31

EDR US Hist Auto Stat: A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there are 17 EDR US Hist Auto Stat sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	908 WAIAKAMILO RD	ENE 0 - 1/8 (0.110 mi.)	A3	7
Not reported	909 WAIAKAMILO RD	ENE 0 - 1/8 (0.118 mi.)	A4	8
Not reported	1341 MOOKAULA ST	E 1/8 - 1/4 (0.183 mi.)	C19	11
Not reported	957 KAMENANI ST	ENE 1/8 - 1/4 (0.201 mi.)	31	13
Not reported	1311 MOOKAULA ST	E 1/8 - 1/4 (0.217 mi.)	I39	15
Not reported	1310 MOOKAULA ST	E 1/8 - 1/4 (0.218 mi.)	I41	15
Not reported	1414 DILLINGHAM BLV	SSW 1/8 - 1/4 (0.223 mi.)	K43	16
Not reported	1425 DILLINGHAM BLV	SSW 1/8 - 1/4 (0.228 mi.)	K44	16
Not reported	1415 DILLINGHAM BLV	SSW 1/8 - 1/4 (0.231 mi.)	K46	16
Not reported	1505 DILLINGHAM BLV	WSW 1/8 - 1/4 (0.238 mi.)	M52	18

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	1321 MOONUI ST	ESE 1/8 - 1/4 (0.168 mi.)	B9	9
Not reported	740 MOOWAA ST	SSE 1/8 - 1/4 (0.187 mi.)	E20	11
Not reported	1301 MOONUI ST	ESE 1/8 - 1/4 (0.187 mi.)	B22	12
Not reported	730 MOOWAA ST	SSE 1/8 - 1/4 (0.192 mi.)	E26	12
Not reported	720 MOOWAA ST BAY C	SSE 1/8 - 1/4 (0.198 mi.)	E28	13
Not reported	720 MOOWAA ST	SSE 1/8 - 1/4 (0.198 mi.)	E29	13
Not reported	1316 KAUMUALII ST	S 1/8 - 1/4 (0.200 mi.)	G30	13

EDR US Hist Cleaners: A review of the EDR US Hist Cleaners list, as provided by EDR, has revealed that there is 1 EDR US Hist Cleaners site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	1519 KAUMUALII ST	WSW 1/8 - 1/4 (0.158 mi.)	7	8

Count: 10 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
HONOLULU	S117391417	1339 SCHOOL STREET	1339, 1341, 1343 N SCHOOL ST		HI SHWS, HI ENG CONTROLS, HI INST CONTROL
HONOLULU	S108008549	KALANI, HART, MOKUAEA STREET, HONO	HART ST & KALANI ST & MOKUAEA		HI SHWS
HONOLULU	1006819301	KEEHI LAGOON CANOE FACILITY, INCRE	HOONEE PL	96819	HI SHWS, HI ENG CONTROLS, HI INST CONTROL
HONOLULU	S115488703	KALIHI AND KALAEPAA INTERSECTION	KALAEPAA DR AND KALIHI ST		HI SHWS, HI SPILLS
HONOLULU	1006820337	ABC DISPOSAL COMPANY	2760 KAMEHAMEHA HWY	96819	HI SHWS
HONOLULU	S111704706	FORMER KAPALAMA MILITARY RESERVATI	N NIMITZ HWY		HI SHWS
HONOLULU	S108008765	CITIZENS ENERGY SERVICES PIER 38	NIMITZ HWY		HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST CONTROL
HONOLULU	S106819311	NIMITZ HIGHWAY WATER IMPROVEMENT P	N NIMITZ HWY	96817	HI SHWS
HONOLULU	1006820220	DLNR BURIED DRUM SITE	SAND ISLAND ACCESS RD	96819	HI SHWS, HI SPILLS, HI INST CONTROL
HONOLULU	S108859926	KOKUA KALIHI VALLEY ACTIVE LIVING	UPPER KALIHI ST		HI SHWS, HI BROWNFIELDS

OVERVIEW MAP - 4237094.30S

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Kaahumanu Homes ADDRESS: 760 Mcneill St. Honolulu HI 96817 LAT/LONG: 21.3269 / 157.8744	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.30s DATE: March 17, 2015 5:40 pm

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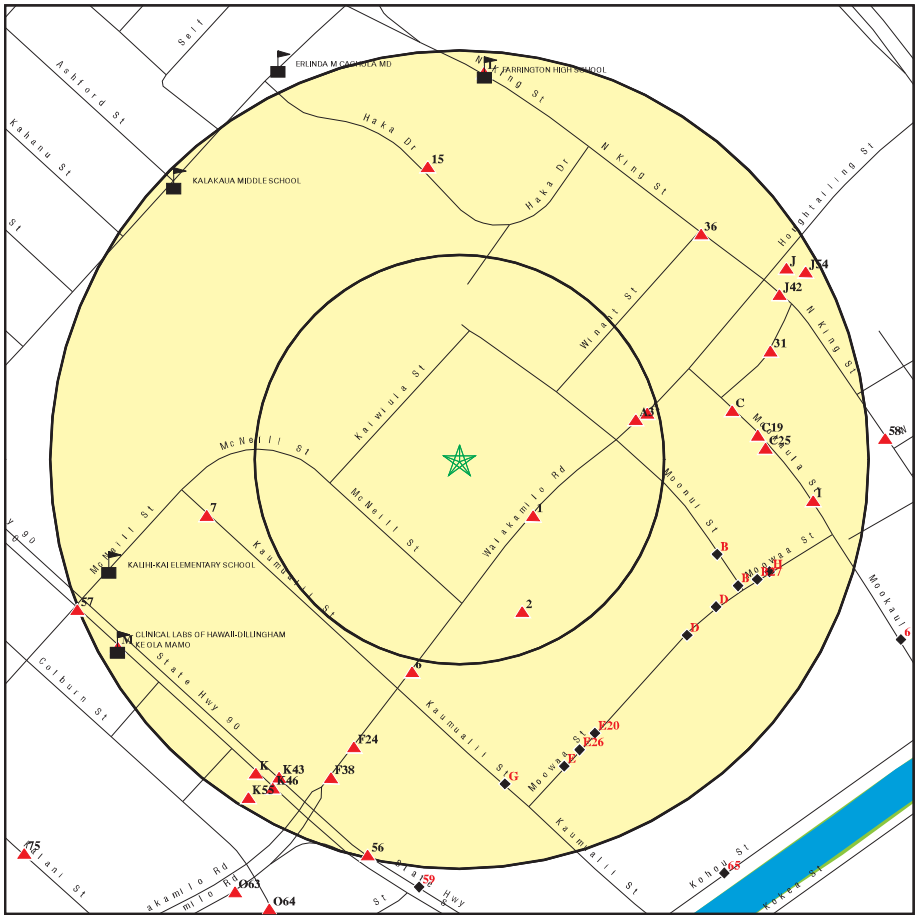
DETAIL MAP - 4237094.30S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	2	1	NR	NR	3
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	1	NR	NR	1
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	1	NR	NR	NR	1
RCRA-CESQG	0.250		2	4	NR	NR	NR	6
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
HI SHWS	1.000		0	3	9	63	NR	75
State and tribal landfill and/or solid waste disposal site lists								
HI SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
HI LUST	0.500		1	11	23	NR	NR	35
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
HI UST	0.250		2	15	NR	NR	NR	17

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
HI ENG CONTROLS	0.500		0	0	4	NR	NR	4
HI INST CONTROL	0.500		0	0	5	NR	NR	5
State and tribal voluntary cleanup sites								
HI VCP	0.500		0	1	0	NR	NR	1
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
HI BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
HI CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
HI SPILLS	TP		NR	NR	NR	NR	NR	0
HI SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	10	NR	NR	NR	10
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	2	NR	2
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
HI UIC	TP		NR	NR	NR	NR	NR	0
HI DRYCLEANERS	0.250		0	0	NR	NR	NR	0
CA HAZNET	TP		NR	NR	NR	NR	NR	0
HI AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
HI Financial Assurance	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	2	NR	2
EDR US Hist Auto Stat	0.250		2	15	NR	NR	NR	17
EDR US Hist Cleaners	0.250		0	1	NR	NR	NR	1
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
HI RGA LF	TP		NR	NR	NR	NR	NR	0
HI RGA LUST	TP		NR	NR	NR	NR	NR	0
HI RGA HWS	TP		NR	NR	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

DOD **Region** **SSW** **1/2-1** **2851 ft.**

SAND ISLAND MILITARY RESERVATION — **DOD** — **CUSA147757** / **N/A**

SAND ISLAND MILITARY RESE (County), HI

Click here for full text details

DOD **Region** **NW** **1/2-1** **3438 ft.**

FORT SHAFTER — **DOD** — **CUSA147753** / **N/A**

FORT SHAFTER (County), HI

Click here for full text details

---

1 **SE** **< 1/8** **0.057 mi.** **299 ft.**

Relative: Higher

ALPAC CORPORATION — **HI LUST**, **HI UST** — **U003221749** / **N/A**
815 WAIAKAMILO RD
HONOLULU, HI 96800

Click here for full text details

HI LUST
Facility Id: 9-102546
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-102546
Tank Status: Permanently Out of Use

---

2 **SSE** **< 1/8** **0.100 mi.** **530 ft.**

Relative: Higher

GRAFFITI INC — **RCRA-CESQG**, **FINDS** — **1004688796** / **HID981654700**
743 H WAIAKAMILO RD
HONOLULU, HI 96817

Click here for full text details

RCRA-CESQG
EPA Id: HID981654700

A3 **ENE** **< 1/8** **0.110 mi.** **583 ft.**

Relative: Higher

908 WAIAKAMILO RD — **EDR US Hist Auto Stat** — **1015670693** / **N/A**
HONOLULU, HI 96817

Click here for full text details

A4 **ENE** **< 1/8** **0.118 mi.** **625 ft.**

Relative: Higher

909 WAIAKAMILO RD — **EDR US Hist Auto Stat** — **1015671002** / **N/A**
HONOLULU, HI 96817

Click here for full text details

A5 **ENE** **< 1/8** **0.119 mi.** **629 ft.**

Relative: Higher

CHEVRON 95023 — **RCRA-CESQG**, **HI UST**, **HI Financial Assurance** — **1000393804** / **HID981628894**
909 WAIAKAMILO RD
HONOLULU, HI 96817

Click here for full text details

RCRA-CESQG
EPA Id: HID981628894

HI UST
Facility Id: 9-101238
Tank Status: Temporarily out of Use
Tank Status: Currently In Use
Tank Status: Permanently Out of Use

---

6 **SSW** **1/8-1/4** **0.133 mi.** **701 ft.**

Relative: Higher

HAWAIIAN CANDIES & NUTS. LTD — **HI LUST**, **HI UST** — **U001235654** / **N/A**
707 WAIAKAMILO RD
HONOLULU, HI 96817

Click here for full text details

HI LUST
Facility Id: 9-101980
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-101980
Tank Status: Permanently Out of Use

---

7 **WSW** **1/8-1/4** **0.158 mi.** **835 ft.**

Relative: Higher

1519 KAUMUALII ST — **EDR US Hist Cleaners** — **1014997197** / **N/A**
HONOLULU, HI 96817

Click here for full text details

B8
ESE
1/8-1/4
0.168 mi.
886 ft.

Relative: Lower

TRANSCEND INC — **RCRA NonGen / NLR** — **1000823270**
1321 MOONUI ST — **FINDS** — **HID984469098**
HONOLULU, HI 96817

Click here for full text details

RCRA NonGen / NLR
EPA Id: HID984469098

B9
ESE
1/8-1/4
0.168 mi.
886 ft.

Relative: Lower

EDR US Hist Auto Stat — **1015207473**
1321 MOONUI ST — **N/A**
HONOLULU, HI 96817

Click here for full text details

B10
ESE
1/8-1/4
0.168 mi.
886 ft.

Relative: Lower

PONY EXPRESS COURIER CORP — **HI UST** — **U001235143**
1321 MOONUI ST — **N/A**
HONOLULU, HI 96817

Click here for full text details

HI UST
Facility Id: 9-100296
Tank Status: Permanently Out of Use

C11
East
1/8-1/4
0.169 mi.
894 ft.

Relative: Higher

ISLAND PAINTING — **RCRA NonGen / NLR** — **1000601457**
1353 MOOKAULA ST — **FINDS** — **HID984466862**
HONOLULU, HI 96817

Click here for full text details

RCRA NonGen / NLR
EPA Id: HID984466862

C12
East
1/8-1/4
0.169 mi.
894 ft.

Relative: Higher

ISLAND PAINTING — **HI LUST** — **U001235756**
1353 MOOKAULA ST — **HI UST** — **N/A**
HONOLULU, HI 96817 — **HI Financial Assurance**

Click here for full text details

HI LUST
Facility Id: 9-102161
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-102161
Tank Status: Permanently Out of Use

D13
SE
1/8-1/4
0.176 mi.
928 ft.

Relative: Lower

SOUTH PACIFIC WHOLESALE PRINTERS, INC — **RCRA NonGen / NLR** — **1000860482**
801 MOOWAA — **FINDS** — **HID984470195**
HONOLULU, HI 96817 — **CA HAZNET**

Click here for full text details

RCRA NonGen / NLR
EPA Id: HID984470195

D14
SE
1/8-1/4
0.176 mi.
928 ft.

Relative: Lower

PACIFIC WAREHOUSE — **HI UST** — **U001235140**
801 MOOWAA ST — **N/A**
HONOLULU, HI 96817

Click here for full text details

HI UST
Facility Id: 9-100290
Tank Status: Permanently Out of Use

15
North
1/8-1/4
0.180 mi.
950 ft.

Relative: Higher

KAMEHAMEHA HOUSING PROJECT — **HI LUST** — **U003221882**
1629 HAKA DR — **HI UST** — **N/A**
HONOLULU, HI 96817

Click here for full text details

HI LUST
Facility Id: 9-103126
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-103126
Tank Status: Permanently Out of Use

D16
ESE
1/8-1/4
0.181 mi.
954 ft.

Relative: Lower

OKADA TRUCKING CO., LTD. — **HI LUST** — **U001235137**
818 MOOWAA ST — **HI UST** — **N/A**
HONOLULU, HI 96817 — **HI Financial Assurance**

Click here for full text details

HI LUST
Facility Id: 9-100285
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-100285
Tank Status: Currently in Use
Tank Status: Permanently Out of Use

D17
ESE
1/8-1/4
0.182 mi.
962 ft.
Relative: Lower

ROSS TRUSTS — **HI SHWS** — **S103290154**
819 MOOWAA ST — **HI VCP** — **N/A**
HONOLULU, HI 96817

Click here for full text details

D18
ESE
1/8-1/4
0.182 mi.
962 ft.
Relative: Lower

SEN PLEX CORPORATION — **HI LUST** — **U003346385**
819 MOOWAA ST — **HI UST** — **N/A**
HONOLULU, HI 96817

Click here for full text details

HI LUST
Facility Id: 9-103359
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-103359
Tank Status: Permanently Out of Use

C19
East
1/8-1/4
0.183 mi.
966 ft.
Relative: Higher

EDR US Hist Auto Stat — **1015211100**
1341 MOOKAULA ST — **N/A**
HONOLULU, HI 96817

Click here for full text details

E20
SSE
1/8-1/4
0.187 mi.
985 ft.
Relative: Lower

EDR US Hist Auto Stat — **1015621885**
740 MOOWAA ST — **N/A**
HONOLULU, HI 96817

Click here for full text details

B21
ESE
1/8-1/4
0.187 mi.
987 ft.
Relative: Lower

AUTO TECH SERVICE CENTER INC — **RCRA-CESQG** — **1000327107**
1301 MOONUI ST — **FINDS** — **HID981688724**
HONOLULU, HI 96817

Click here for full text details

RCRA-CESQG
EPA Id: HID981688724

B22
ESE
1/8-1/4
0.187 mi.
987 ft.
Relative: Lower

EDR US Hist Auto Stat — **1015201889**
1301 MOONUI ST — **N/A**
HONOLULU, HI 96817

Click here for full text details

B23
ESE
1/8-1/4
0.187 mi.
987 ft.
Relative: Lower

FUMISEAL INC — **RCRA NonGen / NLR** — **1000262689**
1301 MOONUI ST — **HID033183963**
HONOLULU, HI 96817

Click here for full text details

RCRA NonGen / NLR
EPA Id: HID033183963

F24
SSW
1/8-1/4
0.187 mi.
987 ft.
Relative: Higher

EDWARD ENTERPRISES INC — **RCRA NonGen / NLR** — **1000154990**
641 WAIAKAMILO RD — **FINDS** — **HID009197716**
HONOLULU, HI 96817

Click here for full text details

RCRA NonGen / NLR
EPA Id: HID009197716

C25
East
1/8-1/4
0.187 mi.
988 ft.
Relative: Higher

EDSUNG FOOD SERVICE CO — **HI UST** — **U003154587**
1337 MOOKAULA ST — **N/A**
HONOLULU, HI 96817

Click here for full text details

HI UST
Facility Id: 9-102447
Tank Status: Permanently Out of Use

E26
SSE
1/8-1/4
0.192 mi.
1013 ft.
Relative: Lower

EDR US Hist Auto Stat — **1015618715**
730 MOOWAA ST — **N/A**
HONOLULU, HI 96817

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B27
ESE
1/8-1/4
0.196 mi.
1035 ft.

Relative: Lower

MARKET CTR SERV STN
840 MOOWAA ST
HONOLULU, HI 96814

RCRA-CESQG
FINDS

1004688772
HID077685634

Click here for full text details

RCRA-CESQG
EPA Id: HID077685634

E28
SSE
1/8-1/4
0.198 mi.
1045 ft.

Relative: Lower

720 MOOWAA ST BAY C
HONOLULU, HI 96813

EDR US Hist Auto Stat

1015614937
N/A

Click here for full text details

E29
SSE
1/8-1/4
0.198 mi.
1045 ft.

Relative: Lower

720 MOOWAA ST
HONOLULU, HI 96817

EDR US Hist Auto Stat

1015614938
N/A

Click here for full text details

G30
South
1/8-1/4
0.200 mi.
1056 ft.

Relative: Lower

1316 KAUMUALII ST
HONOLULU, HI 96817

EDR US Hist Auto Stat

1015206168
N/A

Click here for full text details

31
ENE
1/8-1/4
0.201 mi.
1063 ft.

Relative: Higher

957 KAMENANI ST
HONOLULU, HI 96817

EDR US Hist Auto Stat

1015684014
N/A

Click here for full text details

H32
ESE
1/8-1/4
0.202 mi.
1064 ft.

Relative: Lower

TAKAMIYA PROPERTY
850 MOOWAA ST.
HONOLULU, HI 96817

CERCLIS

1000707614
HID984468371

Click here for full text details

CERCLIS
EPA Id: HID984468371

H33
ESE
1/8-1/4
0.202 mi.
1064 ft.

Relative: Lower

REMEDIATION SPECIALISTS
850 MOOWAA UNIT C
HONOLULU, HI 96817

RCRA NonGen / NLR
FINDS

1000823225
HID984468603

Click here for full text details

RCRA NonGen / NLR
EPA Id: HID984468603

H34
ESE
1/8-1/4
0.202 mi.
1064 ft.

Relative: Lower

TAKAMIYA PROPERTY
850 MOOWAA ST
HONOLULU, HI 96817

HI SHWS
HI SPILLS

S106820561
N/A

Click here for full text details

H35
ESE
1/8-1/4
0.202 mi.
1064 ft.

Relative: Lower

I. STEVEN SUNADA
850 MOOWAA ST
HONOLULU, HI 96817

HI LUST
HI UST

U001235118
N/A

Click here for full text details

HI LUST
Facility Id: 9-100251
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-100251
Tank Status: Permanently Out of Use

36
NE
1/8-1/4
0.202 mi.
1067 ft.

Relative: Higher

CLASSIC RUSTPROOFING
1437 N KING ST
HONOLULU, HI 96817

HI LUST
HI UST

U003732579
N/A

Click here for full text details

HI LUST
Facility Id: 9-103539
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-103539
Tank Status: Permanently Out of Use

G37
South
1/8-1/4
0.203 mi.
1073 ft.

Relative: Lower

CONSOLIDATED REFINING & DISPOSAL CO
1312-A KAUMUALII ST
HONOLULU, HI 96817

RCRA NonGen / NLR — **1000383961** / **HID981426489**

Click here for full text details

RCRA NonGen / NLR
EPA Id: HID981426489

F38
SSW
1/8-1/4
0.209 mi.
1106 ft.

Relative: Higher

PROPERTY 64 WAREHOUSE
609 WAIAKAMILO ROAD
HONOLULU, HI 96817

HI LUST
HI UST — **U004130651** / **N/A**

Click here for full text details

HI LUST
Facility Id: 9-103873
Facility Status: Site Assessment Ongoing

HI UST
Facility Id: 9-103873
Tank Status: Permanently out of Use

I39
East
1/8-1/4
0.217 mi.
1148 ft.

Relative: Higher

1311 MOOKAULA ST
HONOLULU, HI 96817

EDR US Hist Auto Stat — **1015205064** / **N/A**

Click here for full text details

I40
East
1/8-1/4
0.218 mi.
1149 ft.

Relative: Higher

GERMAN CAR SERVICE
1310 MOOKAULA ST
HONOLULU, HI 96817

RCRA-CESQG
FINDS — **1004688801** / **HID981655228**

Click here for full text details

RCRA-CESQG
EPA Id: HID981655228

I41
East
1/8-1/4
0.218 mi.
1149 ft.

Relative: Higher

1310 MOOKAULA ST
HONOLULU, HI 96817

EDR US Hist Auto Stat — **1015204739** / **N/A**

Click here for full text details

J42
ENE
1/8-1/4
0.220 mi.
1162 ft.

Relative: Higher

KALIHI PUMP STATION
1381 N KING ST
HONOLULU, HI 96817

HI UST — **U001236006** / **N/A**

Click here for full text details

HI UST
Facility Id: 9-102663
Tank Status: Permanently Out of Use

K43
SSW
1/8-1/4
0.223 mi.
1178 ft.

Relative: Higher

1414 DILLINGHAM BLVD
HONOLULU, HI 96817

EDR US Hist Auto Stat — **1015223968** / **N/A**

Click here for full text details

K44
SSW
1/8-1/4
0.228 mi.
1206 ft.

Relative: Higher

1425 DILLINGHAM BLVD
HONOLULU, HI 96817

EDR US Hist Auto Stat — **1015226279** / **N/A**

Click here for full text details

K45
SSW
1/8-1/4
0.228 mi.
1206 ft.

Relative: Higher

DILLINGHAM BUSINESS CTR
1425 DILLINGHAM BLVD
HONOLULU, HI 96817

RCRA NonGen / NLR — **1012178209** / **HIP000136267**

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RCRA NonGen / NLR
EPA Id: HIP000136267

K46
SSW
1/8-1/4
0.231 mi.
1219 ft.

Relative: Higher

1415 DILLINGHAM BLVD
HONOLULU, HI 96817

EDR US Hist Auto Stat — **1015224187** / **N/A**

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J47 ENE 1/8-1/4 0.231 mi. 1222 ft. Relative: Higher

MARSHALL'S SHELL SS
1029 HOUGHTAILING ST
HONOLULU, HI 96817

HI LUST **U003402806**
HI UST **N/A**
HI Financial Assurance

Click here for full text details

HI LUST
Facility Id: 9-100783
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-100783
Tank Status: Permanently Out of Use
Tank Status: Currently in Use

J48 ENE 1/8-1/4 0.231 mi. 1222 ft. Relative: Higher

MARSHALL'S SHELL SS
1029 HOUGHTAILING ST
HONOLULU, HI 96817

RCRA-CESQG **1004689079**
FINDS **HIR000110882**

Click here for full text details

RCRA-CESQG
EPA Id: HIR000110882

L49 North 1/8-1/4 0.237 mi. 1251 ft. Relative: Higher

FARRINGTON HIGH SCHOOL
1564 N KING ST
HONOLULU, HI 96817

FTTS **1007277849**
HIST FTTS **N/A**
HI SHWS
HI SPILLS

Click here for full text details

L50 North 1/8-1/4 0.237 mi. 1251 ft. Relative: Higher

FARRINGTON HIGH SCHOOL
1564 N. KING STREET
HONOLULU, HI 96819

CERCLIS **1000885453**
HID984467050

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CERCLIS
EPA Id: HID984467050

M51 WSW 1/8-1/4 0.238 mi. 1257 ft. Relative: Higher

PAN PACIFIC PATHOLOGISTS
1505 DILLINGHAM BLVD
HONOLULU, HI 96817

RCRA-SQG **1010563210**
HIR000138396

Click here for full text details

RCRA-SQG
EPA Id: HIR000138396

M52 WSW 1/8-1/4 0.238 mi. 1257 ft. Relative: Higher

1505 DILLINGHAM BLVD
HONOLULU, HI 96817

EDR US Hist Auto Stat **1015238964**
N/A

Click here for full text details

M53 WSW 1/8-1/4 0.238 mi. 1257 ft. Relative: Higher

PAYLESS DRUG
1505 DILLINGHAM BLVD
HONOLULU, HI 96817

RCRA NonGen / NLR **1000906786**
FINDS **HI0000880609**

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RCRA NonGen / NLR
EPA Id: HI0000880609

J54 ENE 1/8-1/4 0.241 mi. 1270 ft. Relative: Higher

FUTURE HONOLULU FORD PROPERTY
CORNER OF HOUGHTAILING AND KING ST
HONOLULU, HI 96819

HI LUST **U003986422**
HI UST **N/A**

Click here for full text details

HI LUST
Facility Id: 9-103785
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-103785
Tank Status: Permanently Out of Use

K55 SSW 1/8-1/4 0.243 mi. 1285 ft. Relative: Higher

MIDAS
1415 DILLINGHAM BLVD
HONOLULU, HI 96817

RCRA NonGen / NLR **1000156631**
FINDS **HID981638836**

Click here for full text details

RCRA NonGen / NLR
EPA Id: HID981638836

---

56 SSW 1/8-1/4 0.248 mi. 1309 ft. Relative: Higher

BOB'S BAR B QUE
1366 DILLINGHAM BLVD
HONOLULU, HI 96817

HI LUST **U004130649**
HI UST **N/A**

Click here for full text details

HI LUST
Facility Id: 9-103867
Facility Status: Site Cleanup Completed (NFA)

HI UST

BOB'S BAR B QUE (Continued) — **U004130649**

Facility Id: 9-103867
Tank Status: Permanently out of Use

---

57 WSW 1/4-1/2 0.251 mi. 1324 ft. Relative: Higher

TESORO 2GO #61012
1529 DILLINGHAM BLVD
HONOLULU, HI 96817

HI LUST, HI UST, HI Financial Assurance — **U003402811**, **N/A**

Click here for full text details

HI LUST
Facility Id: 9-100915
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-100915
Tank Status: Currently in Use
Tank Status: Currently In Use
Tank Status: Permanently Out of Use

---

58 East 1/4-1/2 0.260 mi. 1375 ft. Relative: Higher

U.S. POSTAL SERVICE - KAPALAMA
1271 N KING ST
HONOLULU, HI 96817

HI LUST, HI UST, HI Financial Assurance — **U001235585**, **N/A**

Click here for full text details

HI LUST
Facility Id: 9-101773
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-101773
Tank Status: Permanently Out of Use

---

59 South 1/4-1/2 0.262 mi. 1385 ft. Relative: Lower

KAMEHAMEHA SCHOOLS - 1336 DILLINGHAM BOULEVARD
1336 DILLINGHAM BLVD
HONOLULU, HI 96813

HI SHWS, HI SPILLS — **S110061575**, **N/A**

Click here for full text details

60 East 1/4-1/2 0.287 mi. 1515 ft. Relative: Higher

OAHU PLUMBING & SHEETMETAL
1217 N KING ST
HONOLULU, HI 96819

HI LUST, HI UST — **U003221928**, **N/A**

Click here for full text details

HI LUST
Facility Id: 9-103346
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-103346
Tank Status: Permanently Out of Use

---

61 ESE 1/4-1/2 0.291 mi. 1538 ft. Relative: Lower

JOHIRO BROTHERS, INC.
1240 MOOKAULA ST
HONOLULU, HI 96817

HI LUST, HI UST — **U003154457**, **N/A**

Click here for full text details

HI LUST
Facility Id: 9-100258
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-100258
Tank Status: Permanently Out of Use

N62 NNW 1/4-1/2 0.292 mi. 1544 ft. Relative: Higher

KALIHI CHEVRON SELF SERVE 93183
1715 N KING ST
HONOLULU, HI 96819

HI LUST, HI UST, HI Financial Assurance — **U001235428**, **N/A**

Click here for full text details

HI LUST
Facility Id: 9-101236
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-101236
Tank Status: Currently in Use

O63 SSW 1/4-1/2 0.297 mi. 1570 ft. Relative: Higher

GENERAL TIRE
505 WAIAKAMILO RD
HONOLULU, HI 96817

HI SHWS, HI SPILLS — **S106817180**, **N/A**

Click here for full text details

O64
SSW
1/4-1/2
0.298 mi.
1573 ft.

Relative: Higher

1385 COLBURN STREET — **HI SHWS** — **S115488666**
1385 COLBURN ST — **HI SPILLS** — **N/A**
KAPALAMA, HI 96817

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65
SSE
1/4-1/2
0.300 mi.
1584 ft.

Relative: Lower

SHIMAYA SHOTEN, LTD. — **HI LUST** — **U001235478**
710 KOHOU ST — **HI UST** — **N/A**
HONOLULU, HI 96817

Click here for full text details

HI LUST
Facility Id: 9-101425
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-101425
Tank Status: Permanently Out of Use

N66
NNW
1/4-1/2
0.314 mi.
1656 ft.

Relative: Higher

C&CH KALIHI FIRE STATION — **HI LUST** — **1006843326**
1742 N KING ST — **HI UST** — **N/A**
HONOLULU, HI 96819

Click here for full text details

HI LUST
Facility Id: 9-100079
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-100079
Tank Status: Permanently Out of Use

67
SSE
1/4-1/2
0.322 mi.
1698 ft.

Relative: Lower

CLASSIC BOWL — **HI SHWS** — **S117391422**
1190 DILLINGHAM BLVD — **N/A**
HONOLULU, HI

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68
South
1/4-1/2
0.325 mi.
1716 ft.

Relative: Lower

CITY SQUARE 76 GAS STATION — **HI LUST** — **U003402836**
1199 DILLINGHAM BLVD — **HI UST** — **N/A**
HONOLULU, HI 96817 — **HI Financial Assurance**

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HI LUST
Facility Id: 9-103241
Facility Status: Confirmed Release
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-103241
Tank Status: Permanently Out of Use
Tank Status: Currently In Use

69
ESE
1/4-1/2
0.332 mi.
1755 ft.

Relative: Lower

OAHU PLUMBING & SHEET METAL, LTD — **HI LUST** — **U001235455**
926 KOHOU ST — **HI UST** — **N/A**
HONOLULU, HI 96817 — **HI Financial Assurance**

Click here for full text details

HI LUST
Facility Id: 9-101367
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-101367
Tank Status: Permanently Out of Use

70
West
1/4-1/2
0.336 mi.
1772 ft.

Relative: Higher

AIM DILLINGHAM — **HI LUST** — **U001235160**
1701 DILLINGHAM BLVD. — **HI UST** — **N/A**
HONOLULU, HI 96819 — **HI Financial Assurance**

Click here for full text details

HI LUST
Facility Id: 9-100322
Facility Status: Site Cleanup Completed with EHMP
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-100322
Tank Status: Permanently Out of Use
Tank Status: Currently In Use

71 SSE 1/4-1/2 0.340 mi. 1797 ft.
Relative: Lower

KAPALAMA INCINERATOR — **CERCLIS** — **1001475694**, **HISFN0905436**
757 KOKEA STREET
HONOLULU, HI 96817

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CERCLIS
EPA Id: HISFN0905436

P72 ESE 1/4-1/2 0.345 mi. 1821 ft.
Relative: Lower

GTE-HAWAIIAN TEL EMPLOYEES FEDERAL CREDIT UNION (HTEFCU) — **HI SHWS**, **HI ENG CONTROLS**, **HI INST CONTROL** — **1006820922**, **N/A**
1138 N KING ST
HONOLULU, HI 96817

Click here for full text details

Q73 SE 1/4-1/2 0.357 mi. 1883 ft.
Relative: Lower

JBL HAWAII LTD — **HI LUST**, **HI UST** — **U001235921**, **N/A**
905 KOKEA ST
HONOLULU, HI 96817

Click here for full text details

HI LUST
Facility Id: 9-102462
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-102462
Tank Status: Permanently Out of Use

Q74 SE 1/4-1/2 0.357 mi. 1883 ft.
Relative: Lower

JBL HAWAII, LTD — **HI SHWS**, **HI ENG CONTROLS**, **HI INST CONTROL** — **1006820832**, **N/A**
905 KOKEA ST
HONOLULU, HI 96817

Click here for full text details

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75 SW 1/4-1/2 0.359 mi. 1893 ft.
Relative: Higher

BENIYA SHOKUDO CATERING — **HI LUST**, **HI UST** — **U003402841**, **N/A**
1448 KALANI ST
HONOLULU, HI 96817

Click here for full text details

HI LUST
Facility Id: 9-103435
Facility Status: Site Cleanup Completed (NFA)

HI UST

BENIYA SHOKUDO CATERING (Continued) — **U003402841**

Facility Id: 9-103435
Tank Status: Permanently Out of Use

P76 ESE 1/4-1/2 0.367 mi. 1940 ft.
Relative: Lower

7-11 KAPALAMA — **HI LUST**, **HI UST**, **HI Financial Assurance** — **U003154444**, **N/A**
1136 N KING ST.
HONOLULU, HI 96817

Click here for full text details

HI LUST
Facility Id: 9-100028
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-100028
Tank Status: Permanently Out of Use
Tank Status: Currently In Use

---

77 NNW 1/4-1/2 0.372 mi. 1966 ft.
Relative: Higher

ISLAND MINI-MART NORTH KING — **HI LUST**, **HI UST**, **HI Financial Assurance** — **U004223403**, **N/A**
1860 N KING ST
HONOLULU, HI 96819

Click here for full text details

HI LUST
Facility Id: 9-101186
Facility Status: Active Remediation

HI UST
Facility Id: 9-101186
Tank Status: Permanently Out of Use
Tank Status: Permanently out of Use
Tank Status: Currently In Use
Tank Status: Currently in Use

---

78 WSW 1/4-1/2 0.383 mi. 2021 ft.
Relative: Higher

LOOMIS ARMORED INC. — **HI LUST**, **HI UST** — **U003541704**, **N/A**
1540 KALANI ST
HONOLULU, HI 96817

Click here for full text details

HI LUST
Facility Id: 9-100268
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-100268
Tank Status: Permanently Out of Use

79 ESE 1/4-1/2 0.403 mi. 2127 ft. Relative: Lower

KING'S SERVICE — HI LUST, HI UST — U003541723, N/A
1070 N KING ST
HONOLULU, HI 96817

Click here for full text details

HI LUST
Facility Id: 9-101111
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-101111
Tank Status: Permanently Out of Use

---

80 NW 1/4-1/2 0.435 mi. 2296 ft. Relative: Higher

PACIFIC TIRE — HI LUST, HI UST — U003541731, N/A
1955 N KING ST
HONOLULU, HI 96819

Click here for full text details

HI LUST
Facility Id: 9-101450
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-101450
Tank Status: Permanently Out of Use

---

81 SSW 1/4-1/2 0.446 mi. 2354 ft. Relative: Lower

1305 HART STREET — HI SHWS, HI SPILLS, HI INST CONTROL — S106815169, N/A
1305 HART ST
HONOLULU, HI 96814

Click here for full text details

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82 ESE 1/4-1/2 0.446 mi. 2357 ft. Relative: Higher

MAHALO NORTH KING AUTO — HI LUST, HI UST, HI Financial Assurance — U001235167, N/A
1010 N KING ST
HONOLULU, HI 96817

Click here for full text details

HI LUST
Facility Id: 9-100339
Facility Status: Site Cleanup Completed (NFA)
Facility Status: Site Cleanup Completed with EHMP

HI UST
Facility Id: 9-100339
Tank Status: Permanently out of Use

MAHALO NORTH KING AUTO (Continued) — U001235167

Tank Status: Permanently Out of Use

R83 WNW 1/4-1/2 0.448 mi. 2363 ft. Relative: Higher

DILLINGHAM BOULEVARD & MOKAUEA STREET — HI SHWS, HI ENG CONTROLS, HI INST CONTROL — S106816881, N/A
DILLINGHAM BLVD & MOKAUEA ST
HONOLULU, HI 96819

Click here for full text details

R84 WNW 1/4-1/2 0.449 mi. 2369 ft. Relative: Higher

KEN T SERVICE — HI LUST, HI UST, HI Financial Assurance — U003402816, N/A
1901 DILLINGHAM BLVD
HONOLULU, HI 96819

Click here for full text details

HI LUST
Facility Id: 9-101112
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-101112
Tank Status: Permanently Out of Use

---

85 SE 1/4-1/2 0.467 mi. 2465 ft. Relative: Lower

HONOLULU COMMUNITY COLLEGE — HI LUST, HI UST — U004109517, N/A
DILLINGHAM BLVD
HONOLULU, HI 96817

Click here for full text details

HI LUST
Facility Id: 9-103285
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-103285
Tank Status: Permanently Out of Use

S86 NW 1/4-1/2 0.470 mi. 2480 ft. Relative: Higher

FACTORY STREET LEAD — HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST CONTROL — 1006820199, N/A
2003 N KING ST
HONOLULU, HI 96819

Click here for full text details

S87
NW
1/4-1/2
0.470 mi.
2480 ft.

Relative: Higher

FACTORY STREET SITE — **CERC-NFRAP** — **1003879898**, **HI0000049775**
2003 N. KING STREET
HONOLULU, HI 96812

Click here for full text details

CERC-NFRAP
EPA Id: HI0000049775

88
NW
1/4-1/2
0.475 mi.
2507 ft.

Relative: Higher

MORRIS ANGELO — **HI LUST**, **HI UST** — **U003711688**, **N/A**
905 FACTORY ST
HONOLULU, HI 96819

Click here for full text details

HI LUST
Facility Id: 9-103511
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-103511
Tank Status: Permanently Out of Use

89
West
1/4-1/2
0.489 mi.
2584 ft.

Relative: Higher

TAGAMI AUTO SERVICE, LTD. — **HI LUST**, **HI UST**, **HI Financial Assurance** — **U001235159**, **N/A**
1733 KAHAI ST
HONOLULU, HI 96819

Click here for full text details

HI LUST
Facility Id: 9-100321
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-100321
Tank Status: Permanently Out of Use

90
South
1/4-1/2
0.494 mi.
2610 ft.

Relative: Lower

DOLE PACKAGED FOODS CO. — **HI LUST**, **HI UST** — **U001237406**, **N/A**
ALA KAWA ST / WAREHOUSE 59
HONOLULU, HI 96800

Click here for full text details

HI LUST
Facility Id: 9-102736
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-102736
Tank Status: Permanently Out of Use

91
SSW
1/2-1
0.503 mi.
2655 ft.

Relative: Lower

YOUNG BROTHERS REFRIGERATE RELEASE — **HI SHWS**, **HI SPILLS** — **S108009312**, **N/A**
1331 N NIMITZ HWY
HONOLULU, HI 96817

Click here for full text details

92
NW
1/2-1
0.509 mi.
2685 ft.

Relative: Higher

KAPALAMA INCINERATOR — **RCRA-SQG**, **HI SHWS**, **HI SPILLS**, **HI INST CONTROL** — **1001116173**, **HIR000001008**
757 KOKEA ST
HONOLULU, HI 96817

Click here for full text details

RCRA-SQG
EPA Id: HIR000001008

T93
SSE
1/2-1
0.511 mi.
2698 ft.

Relative: Lower

HONOLULU COMMUNITY COLLEGE GAS STATION — **HI SHWS** — **1006820629**, **N/A**
874 DILLINGHAM BLVD
HONOLULU, HI 96817

Click here for full text details

T94
SSE
1/2-1
0.525 mi.
2773 ft.

Relative: Lower

THEO DAVIES CATERPILLAR REPAIR SITE — **HI SHWS**, **HI ENG CONTROLS**, **HI INST CONTROL** — **S109096031**, **N/A**
935 DILLINGHAM BLVD
HONOLULU, HI 96817

Click here for full text details

T95
SSE
1/2-1
0.532 mi.
2808 ft.

Relative: Lower

PIER 51 HONOLULU HARBOR, OIL/DIESEL LEAK TO OCEAN — **FINDS**, **HI SHWS**, **HI ENG CONTROLS**, **HI INST CONTROL**, **HI VCP** — **1006819934**, **N/A**
925 DILLINGHAM BLVD
HONOLULU, HI 96817

Click here for full text details

96
WSW
1/2-1
0.554 mi.
2923 ft.

Relative: Higher

PACIFIC POULTRY — **HI SHWS**, **HI SPILLS** — **1006819073**, **N/A**
1804 KANAKANUI ST
HONOLULU, HI 96819

Click here for full text details

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
97 SSW 1/2-1 0.560 mi. 2955 ft. Relative: Lower	DOMESTIC COMMERCIAL FISHING VILLAGE 1133 N NIMITZ HWY HONOLULU, HI 96817 Click here for full text details	HI SHWS HI SPILLS HI ENG CONTROLS HI INST CONTROL	S111677154 N/A
U98 SSE 1/2-1 0.568 mi. 3001 ft. Relative: Lower	COSTCO GAS STATION 520 ALAKAWA ST HONOLULU, HI 96817 Click here for full text details	HI SHWS HI ENG CONTROLS HI INST CONTROL HI VCP	S108859910 N/A
U99 SSE 1/2-1 0.571 mi. 3015 ft. Relative: Lower	COSTCO WAREHOUSE 525 ALAKAWA ST HONOLULU, HI 96817 Click here for full text details	HI SHWS HI ENG CONTROLS HI INST CONTROL HI VCP	S108008497 N/A
V100 South 1/2-1 0.577 mi. 3046 ft. Relative: Lower	MCCABE, HAMILTON, & RENNY COMPANY, LTD 1130 N NIMITZ HWY HONOLULU, HI 96817 Click here for full text details	HI SHWS HI SPILLS	1006818946 N/A
V101 South 1/2-1 0.593 mi. 3129 ft. Relative: Lower	CHEVRON KAPALAMA TERMINAL 1105 N NIMITZ HWY HONOLULU, HI 96817 Click here for full text details	HI SHWS HI SPILLS HI INST CONTROL	S108008763 N/A
102 South 1/2-1 0.598 mi. 3160 ft. Relative: Lower	BEST BUY ALAKAWA ST & NIMITZ HWY HONOLULU, HI 96817 Click here for full text details	HI SHWS HI SPILLS	S108008729 N/A

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
103 South 1/2-1 0.609 mi. 3214 ft. Relative: Lower	HOME DEPOT 421 ALAKAWA ST HONOLULU, HI 96817 Click here for full text details	HI SHWS HI ENG CONTROLS HI INST CONTROL	S105887731 N/A
104 SE 1/2-1 0.633 mi. 3343 ft. Relative: Higher	DOLE IWILEI 801 DILLINGHAM BLVD HONOLULU, HI 96817 Click here for full text details	HI SHWS HI SPILLS HI INST CONTROL	S106816902 N/A
105 South 1/2-1 0.641 mi. 3386 ft. Relative: Lower	HART STREET WWPS 1031 N NIMITZ HWY HONOLULU, HI 96817 Click here for full text details HI UIC Facility Id/Lat Long Min Coord: 3-1952.05.1-2	HI SHWS HI UIC	U003154453 N/A
106 South 1/2-1 0.680 mi. 3590 ft. Relative: Lower	GTE HAWAIIAN TEL - CONTAMINATED SOIL ALAKAWA ST & NIMITZ HWY HONOLULU, HI 96817 Click here for full text details	HI SHWS HI SPILLS HI ENG CONTROLS HI INST CONTROL	S106817210 N/A
107 West 1/2-1 0.682 mi. 3599 ft. Relative: Higher	YUE-FUNG KWAN CONSTRUCTION SITE 2004-2008 REPUBLICAN ST HONOLULU, HI 96819 Click here for full text details	HI SHWS HI SPILLS	S110061865 N/A
108 West 1/2-1 0.692 mi. 3655 ft. Relative: Higher	1950 HOMERULE STREET 1950 HOMERULE ST HONOLULU, HI 96819 Click here for full text details	HI SHWS HI SPILLS	S113230429 N/A

109 SSE 1/2-1 0.726 mi. 3832 ft. — **IWILEI BUSINESS CENTER**, **501 SUMNER ST**, **HONOLULU, HI 96814**
HI SHWS, HI SPILLS, HI INST CONTROL — S106817968, N/A

Relative: Lower

Click here for full text details

110 SSE 1/2-1 0.727 mi. 3836 ft. — **BHP GASCO BENZENE SITE**, **616 IWILEI RD**, **HONOLULU, HI 96817**
HI SHWS, HI SPILLS, HI INST CONTROL, HI AIRS — S110277531, N/A

Relative: Lower

Click here for full text details

HI AIRS
Facility Id: 0551-01-N

W111 South 1/2-1 0.730 mi. 3855 ft. — **HAWAII STEVEDORES**, **965 N NIMITZ HWY**, **HONOLULU, HI 96817**
HI SHWS, HI SPILLS, HI ENG CONTROLS — S106817380, N/A

Relative: Lower

Click here for full text details

W112 South 1/2-1 0.750 mi. 3961 ft. — **CHEVRON HONOLULU TRANSPORTATION TERMINAL**, **933 N NIMITZ HWY**, **HONOLULU, HI 96817**
HI SHWS, HI ENG CONTROLS, HI Financial Assurance — U003154454, N/A

Relative: Lower

Click here for full text details

X113 SSE 1/2-1 0.764 mi. 4036 ft. — **BHP GASCO**, **432 PACIFIC STREET**, **HONOLULU, HI 96817**
EDR MGP — 1008409005, N/A

Relative: Lower

Click here for full text details

114 SE 1/2-1 0.776 mi. 4098 ft. — **HAWAIIAN GAS PRODUCTS LTD**, **516-520 KUWILI ST**, **HONOLULU, HI 96817**
EDR MGP — 1008409006, N/A

Relative: Lower

Click here for full text details

115 SSE 1/2-1 0.780 mi. 4117 ft. — **TRAVEL PLAZA TRANSPORTATION, LLC**, **818 PINE ST**, **HONOLULU, HI 96817**
HI SHWS, HI LUST, HI UST, HI Financial Assurance — U003154753, N/A

Relative: Lower

Click here for full text details

HI LUST
Facility Id: 9-102991
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-102991
Tank Status: Currently In Use
Tank Status: Permanently Out of Use

X116 SSE 1/2-1 0.782 mi. 4129 ft. — **UNOCAL 76 HONOLULU LRNG CTR**, **411 PACIFIC ST**, **HONOLULU, HI 96817**
RCRA NonGen / NLR, FINDS, HI SHWS, HI UST, HI SPILLS, HI VCP, HI Financial Assurance — 1000167494, HID981652696

Relative: Lower

Click here for full text details

RCRA NonGen / NLR
EPA Id: HID981652696

HI UST
Facility Id: 9-100108
Tank Status: Permanently Out of Use

117 WNW 1/2-1 0.785 mi. 4147 ft. — **LENAKONA DEVELOPMENT, LTD**, **2305 KAMEHAMEHA HWY**, **HONOLULU, HI 96800**
HI SHWS, HI LUST, HI UST — U001237397, N/A

Relative: Lower

Click here for full text details

HI LUST
Facility Id: 9-102588
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-102588
Tank Status: Permanently Out of Use

Y118
South
1/2-1
0.798 mi.
4213 ft.
Relative: Lower

WEYERHAEUSER
900 N NIMITZ HWY
HONOLULU, HI 96817

Click here for full text details

HI SHWS — **S106821137**
HI SPILLS — **N/A**

119
North
1/2-1
0.804 mi.
4246 ft.
Relative: Higher

KUHIO PARK TERRACE TOWERS
LINAPUNI ST
HONOLULU, HI 96819

Click here for full text details

HI SHWS — **S108008570**
HI ENG CONTROLS — **N/A**
HI INST CONTROL
HI BROWNFIELDS

Z120
SSE
1/2-1
0.817 mi.
4312 ft.
Relative: Lower

356 PACIFIC STREET BWS TRENCHING SHEEN
356 PACIFIC ST
HONOLULU, HI

Click here for full text details

HI SHWS — **S110169069**
HI SPILLS — **N/A**

Y121
South
1/2-1
0.819 mi.
4323 ft.
Relative: Lower

861-869 NORTH NIMITZ HIGHWAY
861-869 N NIMITZ HWY
HONOLULU, HI 96817

Click here for full text details

HI SHWS — **S108859941**
HI ENG CONTROLS — **N/A**
HI INST CONTROL

AA122
SE
1/2-1
0.820 mi.
4331 ft.
Relative: Lower

VON HAMM TEXTILES
546 KAAAHI ST
HONOLULU, HI 96817

Click here for full text details

HI SHWS — **S106820929**
HI SPILLS — **N/A**
HI ENG CONTROLS
HI INST CONTROL

AA123
SE
1/2-1
0.821 mi.
4333 ft.
Relative: Lower

NUUANU AUTO COMPANY LTD
545 KAAAHI ST
HONOLULU, HI 96817

Click here for full text details

HI SHWS — **S111704825**
N/A

Z124
SSE
1/2-1
0.824 mi.
4350 ft.
Relative: Lower

BREWER ENVIRONMENTAL INDUSTRIES-PACIFIC STREET
311 PACIFIC ST
HONOLULU, HI 96817

Click here for full text details

HI SHWS — **1000436248**
HI SPILLS — **N/A**
HI VCP

Y125
South
1/2-1
0.827 mi.
4368 ft.
Relative: Lower

HAWAIIAN ELECTRIC COMPANY (HECO) - IWILEI TANK YARD
855 N NIMITZ HWY
HONOLULU, HI 96818

Click here for full text details

HI SHWS — **U001235311**
HI SPILLS — **N/A**
HI ENG CONTROLS
HI INST CONTROL

Z126
SSE
1/2-1
0.830 mi.
4385 ft.
Relative: Lower

POLYNESIAN HOSPITALITY
330 PACIFIC ST
HONOLULU, HI 96817

Click here for full text details

RCRA-CESQG — **1000906758**
FINDS — **HI0000589812**
HI SHWS
HI LUST
HI UST
HI SPILLS
HI Financial Assurance

RCRA-CESQG
EPA Id: HI0000589812

HI LUST
Facility Id: 9-101379
Facility Status: Active Remediation

HI UST
Facility Id: 9-101379
Tank Status: Permanently Out of Use
Tank Status: Currently in Use

127
WSW
1/2-1
0.836 mi.
4414 ft.
Relative: Lower

HAWAIIAN MISO AND SOY CO., LTD
1714 MARY ST
HONOLULU, HI 96819

Click here for full text details

HI SHWS — **1006821063**
HI SPILLS — **N/A**

128 WNW 1/2-1 0.839 mi. 4430 ft. Relative: Lower

HAWAII DAIRY HOLDINGS, INC DBA FOREMOST DAIRIES
2277 KAMEHAMEHA HWY
HONOLULU, HI 96819

HI SHWS — **1000934769**
HI LUST — **N/A**
HI UST
HI VCP
HI Financial Assurance

Click here for full text details

HI LUST
Facility Id: 9-100210
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-100210
Tank Status: Permanently Out of Use

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129 NW 1/2-1 0.870 mi. 4595 ft. Relative: Higher

2343 NORTH KING STREET
2343 N KING ST
HONOLULU, HI 96819

HI SHWS — **S115488667**
HI INST CONTROL — **N/A**

Click here for full text details

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130 North 1/2-1 0.871 mi. 4600 ft. Relative: Higher

CHANG-CHOW PROPERTY, NORTH SCHOOL STREET
2161 N SCHOOL ST
HONOLULU, HI 96817

HI SHWS — **1006820024**
N/A

Click here for full text details

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131 NNW 1/2-1 0.898 mi. 4744 ft. Relative: Higher

KUHIO PARK TERRACE COMMUNITY CENTER
1475 LINAPUNI ST
HONOLULU, HI 96819

HI SHWS — **S115488710**
HI ENG CONTROLS — **N/A**
HI INST CONTROL

Click here for full text details

AB132 South 1/2-1 0.908 mi. 4793 ft. Relative: Lower

PAULEY PETROLEUM
795 N NIMITZ HWY
HONOLULU, HI 96817

HI SHWS — **S108009116**
HI SPILLS — **N/A**
HI ENG CONTROLS
HI INST CONTROL

Click here for full text details

AB133 South 1/2-1 0.915 mi. 4829 ft. Relative: Lower

EQUILON ENTERPRISES LLC HONOLULU TERMINAL
789 N NIMITZ HWY
HONOLULU, HI 96817

HI SHWS — **S115488694**
N/A

Click here for full text details

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134 South 1/2-1 0.918 mi. 4848 ft. Relative: Lower

700 N NIMITZ IDPP RELEASE
700 N NIMITZ HWY
HONOLULU, HI

HI SHWS — **S110061245**
HI SPILLS — **N/A**
HI ENG CONTROLS
HI INST CONTROL

Click here for full text details

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135 West 1/2-1 0.922 mi. 4867 ft. Relative: Lower

HAWAIIAN BITUMULS & PAVING
248 SAND ISLAND ACCESS RD
HONOLULU, HI 96819

HI SHWS — **U001235221**
HI LUST — **N/A**
HI UST
HI INST CONTROL
HI AIRS

Click here for full text details

HI LUST
Facility Id: 9-100764
Facility Status: Site Cleanup Completed with EHMP

HI UST
Facility Id: 9-100764
Tank Status: Permanently Out of Use

HI AIRS
Facility Id: 0540-01-C

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136 South 1/2-1 0.931 mi. 4914 ft. Relative: Lower

775 NORTH NIMITZ HIGHWAY
775 N NIMITZ HWY
HONOLULU, HI

HI SHWS — **S110061247**
HI ENG CONTROLS — **N/A**
HI INST CONTROL

Click here for full text details

AC137 West 1/2-1 0.937 mi. 4949 ft. Relative: Lower

LONGS DRUG STORES WAREHOUSE
2270 HOONEE PL
HONOLULU, HI 96819

HI SHWS — **S106818797**
HI SPILLS — **N/A**
HI ENG CONTROLS
HI INST CONTROL

Click here for full text details

138 WSW 1/2-1 0.939 mi. 4959 ft. — **TRANS HAWAIIAN - OAHU, INC.**, **124 PUUHALE RD**, **HONOLULU, HI 96819**
Database(s): HI SHWS, HI LUST, HI UST
EDR ID Number: U003221615
EPA ID Number: N/A

Relative: Lower

Click here for full text details

HI LUST
Facility Id: 9-100804
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-100804
Tank Status: Permanently Out of Use

AD139 SSE 1/2-1 0.942 mi. 4975 ft. — **CITY MILL**, **660 N NIMITZ HWY**, **HONOLULU, HI 96817**
Database(s): HI SHWS, HI LUST, HI UST, HI INST CONTROL
EDR ID Number: U001235472
EPA ID Number: N/A

Relative: Lower

Click here for full text details

HI LUST
Facility Id: 9-101398
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-101398
Tank Status: Permanently Out of Use

AC140 West 1/2-1 0.943 mi. 4981 ft. — **HAGADONE PRINTING COMPANY SAND ISLAND**, **2278 HOONEE PL**, **HONOLULU, HI 96819**
Database(s): HI SHWS, HI INST CONTROL
EDR ID Number: S106817239
EPA ID Number: N/A

Relative: Lower

Click here for full text details

AD141 SSE 1/2-1 0.944 mi. 4983 ft. — **580 NORTH NIMITZ HIGHWAY**, **580 N NIMITZ HWY**, **HONOLULU, HI 96817**
Database(s): HI SHWS, HI ENG CONTROLS
EDR ID Number: S109096040
EPA ID Number: N/A

Relative: Lower

Click here for full text details

AD142 SSE 1/2-1 0.945 mi. 4988 ft. — **ZIPPY'S 634 N NIMITZ HIGHWAY**, **634 N NIMITZ HWY**, **HONOLULU, HI 96781**
Database(s): HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST CONTROL
EDR ID Number: S110061866
EPA ID Number: N/A

Relative: Lower

Click here for full text details

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143 SSE 1/2-1 0.945 mi. 4991 ft. — **MID PAC PETROLEUM LLC 2705958**, **540 N NIMITZ HWY**, **HONOLULU, HI 96817**
Database(s): HI SHWS, HI LUST, HI UST, HI Financial Assurance
EDR ID Number: U001235004
EPA ID Number: N/A

Relative: Lower

Click here for full text details

HI LUST
Facility Id: 9-100017
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-100017
Tank Status: Permanently out of Use
Tank Status: Permanently Out of Use

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144 SSE 1/2-1 0.946 mi. 4993 ft. — **420-470 NORTH NIMITZ HIGHWAY**, **420-470 N NIMITZ HWY**, **HONOLULU, HI 96817**
Database(s): HI SHWS, HI ENG CONTROLS
EDR ID Number: S106815536
EPA ID Number: N/A

Relative: Lower

Click here for full text details

AE145 South 1/2-1 0.951 mi. 5019 ft. — **755 N NIMITZ HWY**, **755 N NIMITZ HWY**, **HONOLULU, HI**
Database(s): HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST CONTROL
EDR ID Number: S110061246
EPA ID Number: N/A

Relative: Lower

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146 SSE 1/2-1 0.953 mi. 5033 ft. — **373 NORTH NIMITZ HIGHWAY**, **373 N NIMITZ HWY**, **HONOLULU, HI 96817**
Database(s): HI SHWS, HI SPILLS
EDR ID Number: S106815507
EPA ID Number: N/A

Relative: Lower

Click here for full text details

147 ESE 1/2-1 0.956 mi. 5050 ft. — **HALL MARK DRY CLEANERS**, **1470 LILIHA ST**, **HONOLULU, HI 96814** — **HI SHWS** — **S104534167**, **N/A**

Relative: Higher

Click here for full text details

AE148 South 1/2-1 0.962 mi. 5078 ft. — **BHP PIER 29**, **739 N NIMITZ HWY**, **HONOLULU, HI 96817** — **HI SHWS** — **S106816192**, **N/A**

Relative: Lower

Click here for full text details

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149 WSW 1/2-1 0.976 mi. 5154 ft. — **STATE POULTRY PROCESSORS FACILITY**, **2132 KALIAWA ST**, **HONOLULU, HI 96813** — **HI SHWS**, **HI SPILLS** — **S104534384**, **N/A**

Relative: Lower

Click here for full text details

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150 SE 1/2-1 0.981 mi. 5180 ft. — **SENIOR RESIDENCES AT IWILEI**, **888 IWILEI RD**, **HONOLULU, HI 96813** — **HI SHWS**, **HI INST CONTROL** — **S111704855**, **N/A**

Relative: Lower

Click here for full text details

AF151 SSE 1/2-1 0.982 mi. 5185 ft. — **MOANA PAA KAI**, **705 N NIMITZ HWY**, **HONOLULU, HI 96817** — **RCRA-CESQG**, **HI SHWS**, **HI SPILLS** — **1000146699**, **HID982411357**

Relative: Lower

Click here for full text details

RCRA-CESQG
EPA Id: HID982411357

AF152 SSE 1/2-1 0.984 mi. 5195 ft. — **HAWAIIAN FLOUR MILL**, **703 N NIMITZ HWY**, **HONOLULU, HI 96808** — **HI SHWS** — **S106817404**, **N/A**

Relative: Lower

Click here for full text details

AF153 SSE 1/2-1 0.989 mi. 5223 ft. — **HAWAIIAN GRAIN CORPORATION**, **701 N NIMITZ HWY**, **HONOLULU, HI 96817** — **HI SHWS**, **HI LUST**, **HI UST** — **U003402808**, **N/A**

Relative: Lower

Click here for full text details

HI LUST
Facility Id: 9-100852
Facility Status: Case Transferred to HEER (regulated)

HI UST
Facility Id: 9-100852
Tank Status: Permanently Out of Use

---

154 ESE 1/2-1 0.993 mi. 5243 ft. — **LANCE GOYA CHEVRON**, **504 N SCHOOL ST**, **HONOLULU, HI 96817** — **HI SHWS**, **HI LUST**, **HI UST**, **HI ENG CONTROLS**, **HI INST CONTROL**, **HI Financial Assurance** — **U003402822**, **N/A**

Relative: Higher

Click here for full text details

HI LUST
Facility Id: 9-101259
Facility Status: Site Cleanup Completed with EHMP
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-101259
Tank Status: Permanently Out of Use

---

155 NW 1/2-1 0.995 mi. 5256 ft. — **OTS KALIHI-PALAMA BUS FACILITY**, **811 MIDDLE ST**, **HONOLULU, HI 96819** — **HI SHWS**, **HI LUST**, **HI UST**, **HI Financial Assurance** — **U003541805**, **N/A**

Relative: Higher

Click here for full text details

HI LUST
Facility Id: 9-102498
Facility Id: 9-101884
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-102498
Facility Id: 9-103189
Facility Id: 9-101884
Tank Status: Currently in Use
Tank Status: Permanently Out of Use

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
HI	AIRS	List of Permitted Facilities	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	BROWNFIELDS	Brownfields Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	CDL	Clandestine Drug Lab Listing	Department of Health	08/04/2010	09/10/2010	10/22/2010
HI	DRYCLEANERS	Permitted Drycleaner Facility Listing	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	ENG CONTROLS	Engineering Control Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	Financial Assurance	Financial Assurance Information Listing	Department of Health	12/01/2014	12/19/2014	01/28/2015
HI	INST CONTROL	Sites with Institutional Controls	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	LUST	Leaking Underground Storage Tank Database	Department of Health	12/16/2014	12/19/2014	01/28/2015
HI	RGA HWS	Recovered Government Archive State Hazardous Waste Facilitie	Department of Health		07/01/2013	01/08/2014
HI	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Health		07/01/2013	01/17/2014
HI	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	Department of Health		07/01/2013	01/03/2014
HI	SHWS	Sites List	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	SPILLS	Release Notifications	Department of Health	12/02/2014	12/22/2014	01/28/2015
HI	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	03/10/2012	01/03/2013	02/11/2013
HI	SWF/LF	Permitted Landfills in the State of Hawaii	Department of Health	09/17/2012	04/03/2013	05/10/2013
HI	UIC	Underground Injection Wells Listing	Department of Health	02/07/2013	02/12/2013	04/09/2013
HI	UST	Underground Storage Tank Database	Department of Health	12/18/2014	12/19/2014	01/28/2015
HI	VCP	Voluntary Response Program Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	04/22/2013	03/03/2015	03/09/2015
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2011	02/26/2013	04/19/2013
US	CERCLIS	Comprehensive Environmental Response, Compensation, and Liab	EPA	10/25/2013	11/11/2013	02/13/2014
US	CERCLIS-NFRAP	CERCLIS No Further Remedial Action Planned	EPA	10/25/2013	11/11/2013	02/13/2014
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	07/01/2014	09/10/2014	10/20/2014
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	01/23/2015	02/13/2015	03/09/2015
US	CORRACTS	Corrective Action Report	EPA	12/09/2014	12/29/2014	01/29/2015
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DELISTED NPL	National Priority List Deletions	EPA	12/16/2014	01/08/2015	02/09/2015
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	07/31/2012	08/07/2012	09/18/2012
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EDR US Hist Auto Stat	EDR Exclusive Historic Gas Stations	EDR, Inc.			
US	EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	09/29/2014	09/30/2014	11/06/2014
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	07/21/2014	10/07/2014	10/20/2014
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
US	FEMA UST	Underground Storage Tank Listing	FEMA	01/01/2010	02/16/2010	04/12/2010
US	FINDS	Facility Index System/Facility Registry System	EPA	08/16/2014	09/10/2014	10/20/2014
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	06/06/2014	09/10/2014	09/18/2014
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	12/29/2014	12/30/2014	03/09/2015
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	01/23/2015	02/06/2015	03/09/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	02/01/2013	05/01/2013	11/01/2013

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	01/30/2015	02/05/2015	03/09/2015
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/10/2015	03/13/2015
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	01/28/2015	01/30/2015	03/13/2015
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	01/08/2015	01/08/2015	02/09/2015
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2005	12/08/2006	01/11/2007
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	02/01/2013	05/01/2013	01/27/2014
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	01/30/2015	02/05/2015	03/13/2015
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/13/2015	03/13/2015
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	01/29/2015	01/30/2015	03/13/2015
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	12/14/2014	02/13/2015	03/13/2015
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	09/29/2014	10/01/2014	11/06/2014
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	11/25/2014	11/26/2014	01/29/2015
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	02/18/2014	03/18/2014	04/24/2014
US	LUCIS	Land Use Control Information System	Department of the Navy	12/03/2014	12/12/2014	01/29/2015
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	12/29/2014	01/08/2015	01/29/2015
US	NPL	National Priority List	EPA	12/16/2014	01/08/2015	02/09/2015
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	07/01/2014	10/15/2014	11/17/2014
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	02/01/2011	10/19/2011	01/10/2012
US	PRP	Potentially Responsible Parties	EPA	10/25/2013	10/17/2014	10/20/2014
US	Proposed NPL	Proposed National Priority List Sites	EPA	12/16/2014	01/08/2015	02/09/2015
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	10/07/2014	10/08/2014	10/20/2014
US	RCRA NonGen / NLR	RCRA - Non Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RMP	Risk Management Plans	Environmental Protection Agency	08/01/2014	08/12/2014	11/06/2014
US	ROD	Records Of Decision	EPA	11/25/2013	12/12/2013	02/24/2014
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	03/07/2011	03/09/2011	05/02/2011
US	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2011	07/31/2013	09/13/2013
US	TSCA	Toxic Substances Control Act	EPA	12/31/2012	01/15/2015	01/29/2015
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	09/14/2010	10/07/2011	03/01/2012
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/16/2014	10/31/2014	11/17/2014
US	US AIRS MINOR	Air Facility System Data	EPA	10/16/2014	10/31/2014	11/17/2014

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	12/22/2014	12/22/2014	01/29/2015
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	11/19/2014	11/21/2014	01/29/2015
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	12/30/2014	12/31/2014	01/29/2015
US	Oil/Gas Pipelines	GeoData Digital Line Graphs from 1:100,000-Scale Maps	USGS			
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
US	USGS 7.5' Topographic Map	Scanned Digital USGS 7.5' Topographic Map (DRG)	USGS			

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

KAAHUMANU HOMES
760 MCNEILL ST.
HONOLULU, HI 96817

TARGET PROPERTY COORDINATES

Latitude (North):	21.3269 - 21˚ 19' 36.84''
Longitude (West):	157.8744 - 157˚ 52' 27.84''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	616733.1
UTM Y (Meters):	2358605.5
Elevation:	10 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	21157-C7 HONOLULU, HI
Most Recent Revision:	Not reported
West Map:	21157-C8 PEARL HARBOR, HI
Most Recent Revision:	Not reported

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

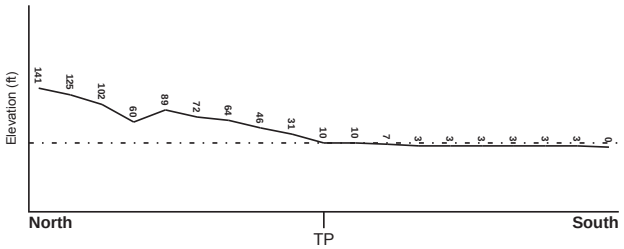
TOPOGRAPHIC INFORMATION

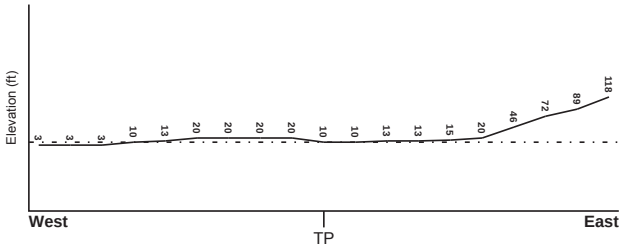
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General South

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 10 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
HONOLULU, HI	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 15003C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
NOT AVAILABLE	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

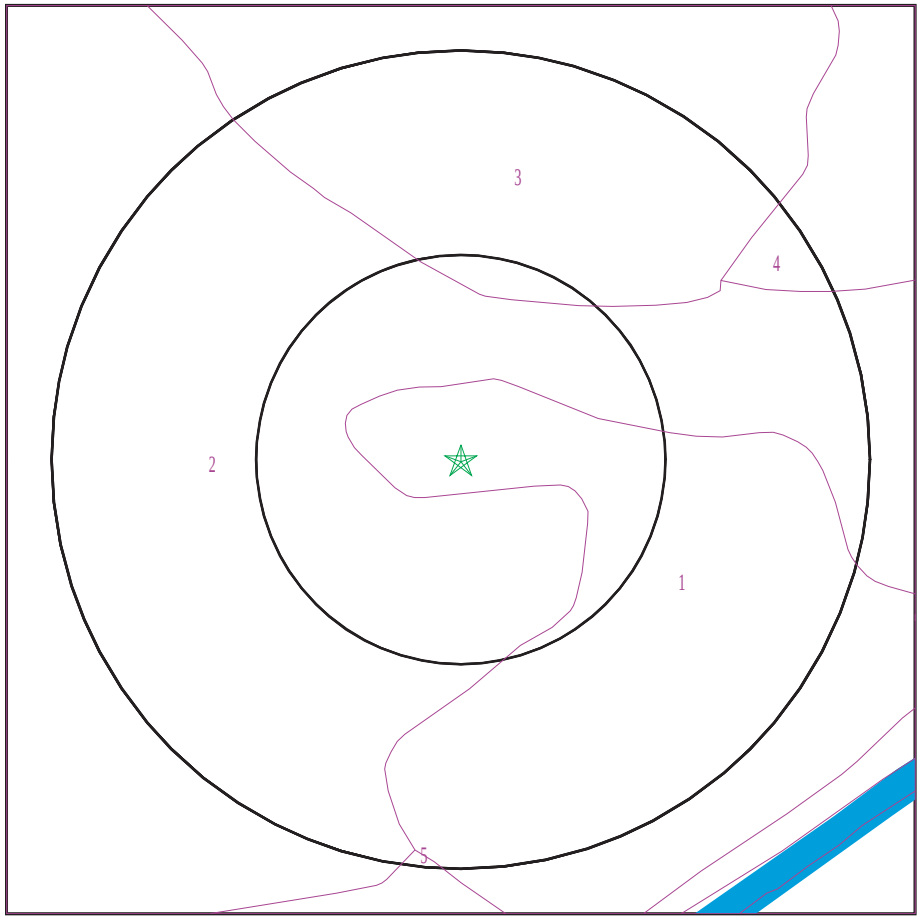
GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT		GEOLOGIC AGE IDENTIFICATION	
Era:	-	Category:	-
System:	-		
Series:	-		
Code:	N/A *(decoded above as Era, System & Series)*		

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4237094.30s



★ Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME: Kaahumanu Homes ADDRESS: 760 Mcneill St. Honolulu HI 96817 LAT/LONG: 21.3269 / 157.8744	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.30s DATE: March 17, 2015 5:45 pm

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DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Pearl Harbor

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 30 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4.23 Min: 0.42	Max: 7.3 Min: 6.6
2	11 inches	31 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 8.4 Min: 6.6
3	31 inches	48 inches	muck	A-8	Highly organic soils, Peat.	Max: 0.42 Min: 0.01	Max: 7.8 Min: 7.4

Soil Map ID: 2

Soil Component Name: Ewa

Soil Surface Texture: silty clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Highly organic soils, Peat.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6
2	7 inches	29 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Highly organic soils, Peat.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6
3	29 inches	38 inches	bedrock	Not reported	Not reported	Max: 42 Min: 1	Max: Min:

Soil Map ID: 3

Soil Component Name: Honouliuli

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	14 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4 Min: 0.42	Max: 7.3 Min: 6.6
2	14 inches	68 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 7.8 Min: 6.6

Soil Map ID: 4

Soil Component Name: Kawaihapai

Soil Surface Texture: stony clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	22 inches	stony clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 42.34 Min: 4.23	Max: 7.3 Min: 6.6

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	22 inches	31 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.14 Min: 14.11	Max: 7.3 Min: 6.6
3	31 inches	53 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.14 Min: 14.11	Max: 7.3 Min: 6.6

Soil Map ID: 5

Soil Component Name: Fill land, mixed

Soil Surface Texture: gravelly sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 152 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	gravelly sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 1.41	Max: 7.3 Min: 6.1

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	5 inches	59 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 1.41	Max: 7.3 Min: 6.1
3	59 inches	70 inches	bedrock	Not reported	Not reported	Max: 0.42 Min: 0.02	Max: Min:

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	USGS40000269864	1/8 - 1/4 Mile ENE
A3	USGS40000269867	1/8 - 1/4 Mile ENE
A4	USGS40000269866	1/8 - 1/4 Mile ENE
A5	USGS40000269865	1/8 - 1/4 Mile ENE
A6	USGS40000269868	1/8 - 1/4 Mile ENE
A7	USGS40000269871	1/8 - 1/4 Mile ENE
A8	USGS40000269870	1/8 - 1/4 Mile ENE
A9	USGS40000269869	1/8 - 1/4 Mile ENE
A19	USGS40000269855	1/8 - 1/4 Mile ENE
B20	USGS40000269880	1/4 - 1/2 Mile NW
C22	USGS40000269894	1/4 - 1/2 Mile NE
D25	USGS40000269834	1/4 - 1/2 Mile WSW
C26	USGS40000269900	1/4 - 1/2 Mile NE
B28	USGS40000269889	1/4 - 1/2 Mile NW
E33	USGS40000269821	1/4 - 1/2 Mile SW

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
E34	USGS40000269819	1/4 - 1/2 Mile SW
E35	USGS40000269820	1/4 - 1/2 Mile SW
F44	USGS40000269815	1/4 - 1/2 Mile SE
F45	USGS40000269816	1/4 - 1/2 Mile SE
F46	USGS40000269817	1/4 - 1/2 Mile SE
F47	USGS40000269814	1/4 - 1/2 Mile SE
F48	USGS40000269813	1/4 - 1/2 Mile SE
F49	USGS40000269811	1/4 - 1/2 Mile SE
F50	USGS40000269812	1/4 - 1/2 Mile SE
G51	USGS40000269893	1/4 - 1/2 Mile NE
H53	USGS40000269908	1/4 - 1/2 Mile NW
55	USGS40000269830	1/2 - 1 Mile WSW
I56	USGS40000269910	1/2 - 1 Mile NW
J58	USGS40000269888	1/2 - 1 Mile ENE
K60	USGS40000269854	1/2 - 1 Mile East
J62	USGS40000269899	1/2 - 1 Mile ENE
L64	USGS40000269810	1/2 - 1 Mile SE
K65	USGS40000269853	1/2 - 1 Mile East
K66	USGS40000269863	1/2 - 1 Mile East
K69	USGS40000269850	1/2 - 1 Mile East
M71	USGS40000269919	1/2 - 1 Mile NE
O73	USGS40000269881	1/2 - 1 Mile WNW
N75	USGS40000269802	1/2 - 1 Mile SSE
N78	USGS40000269801	1/2 - 1 Mile SSE
N79	USGS40000269800	1/2 - 1 Mile SSE
82	USGS40000269791	1/2 - 1 Mile South
N83	USGS40000269799	1/2 - 1 Mile SSE
N84	USGS40000269796	1/2 - 1 Mile SSE
M86	USGS40000269923	1/2 - 1 Mile NE
P87	USGS40000269789	1/2 - 1 Mile SSE
Q88	USGS40000269856	1/2 - 1 Mile West
Q89	USGS40000269857	1/2 - 1 Mile West
Q90	USGS40000269858	1/2 - 1 Mile West
P93	USGS40000269788	1/2 - 1 Mile SSE
R95	USGS40000269822	1/2 - 1 Mile ESE
M97	USGS40000269937	1/2 - 1 Mile NE
P98	USGS40000269786	1/2 - 1 Mile SSE
S102	USGS40000269790	1/2 - 1 Mile SSE
T103	USGS40000269939	1/2 - 1 Mile NW
P104	USGS40000269781	1/2 - 1 Mile SSE
U107	USGS40000269795	1/2 - 1 Mile SE
V108	USGS40000269773	1/2 - 1 Mile SSE
W113	USGS40000269913	1/2 - 1 Mile WNW
S115	USGS40000269778	1/2 - 1 Mile SSE
S116	USGS40000269779	1/2 - 1 Mile SSE
S117	USGS40000269780	1/2 - 1 Mile SSE
V118	USGS40000269772	1/2 - 1 Mile SSE
X119	USGS40000269764	1/2 - 1 Mile South
Y120	USGS40000269771	1/2 - 1 Mile SSE
Z121	USGS40000269852	1/2 - 1 Mile East
AA125	USGS40000269794	1/2 - 1 Mile SE
Y127	USGS40000269768	1/2 - 1 Mile SSE

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
Y129	USGS40000269763	1/2 - 1 Mile SSE
X130	USGS40000269754	1/2 - 1 Mile South
AB132	USGS40000269940	1/2 - 1 Mile NW
AC134	USGS40000269945	1/2 - 1 Mile NW
AD137	USGS40000269751	1/2 - 1 Mile SSE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A2	HI0000331	1/8 - 1/4 Mile ENE

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

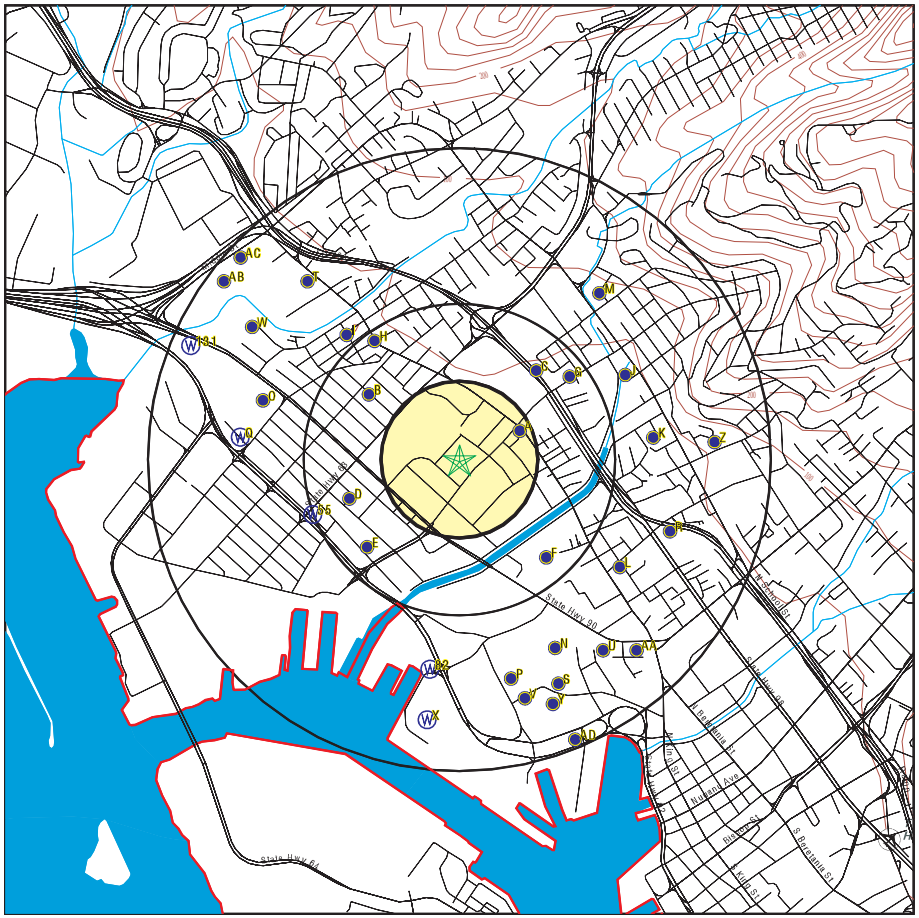
MAP ID	WELL ID	LOCATION FROM TP
A10	HI8000000002441	1/8 - 1/4 Mile ENE
A11	HI8000000002442	1/8 - 1/4 Mile ENE
A12	HI8000000002439	1/8 - 1/4 Mile ENE
A13	HI8000000002440	1/8 - 1/4 Mile ENE
A14	HI8000000002443	1/8 - 1/4 Mile ENE
A15	HI8000000002446	1/8 - 1/4 Mile ENE
A16	HI8000000002447	1/8 - 1/4 Mile ENE
A17	HI8000000002444	1/8 - 1/4 Mile ENE
A18	HI8000000002445	1/8 - 1/4 Mile ENE
B21	HI8000000002461	1/4 - 1/2 Mile NW
D23	HI8000000002412	1/4 - 1/2 Mile WSW
C24	HI8000000002477	1/4 - 1/2 Mile NE
C27	HI8000000002484	1/4 - 1/2 Mile NE
B29	HI8000000002471	1/4 - 1/2 Mile NW
E30	HI8000000002385	1/4 - 1/2 Mile SW
E31	HI8000000002386	1/4 - 1/2 Mile SW
E32	HI8000000002387	1/4 - 1/2 Mile SW
F36	HI8000000002379	1/4 - 1/2 Mile SE
F37	HI8000000002380	1/4 - 1/2 Mile SE
F38	HI8000000002377	1/4 - 1/2 Mile SE
F39	HI8000000002378	1/4 - 1/2 Mile SE
F40	HI8000000002383	1/4 - 1/2 Mile SE
F41	HI8000000002384	1/4 - 1/2 Mile SE
F42	HI8000000002381	1/4 - 1/2 Mile SE
F43	HI8000000002382	1/4 - 1/2 Mile SE
G52	HI8000000002478	1/4 - 1/2 Mile NE
H54	HI8000000002496	1/4 - 1/2 Mile NW
I57	HI8000000002501	1/2 - 1 Mile NW
J59	HI8000000002481	1/2 - 1 Mile ENE
K61	HI8000000002435	1/2 - 1 Mile East
L63	HI8000000002375	1/2 - 1 Mile ESE
K67	HI8000000002436	1/2 - 1 Mile East

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
K68	HI8000000002450	1/2 - 1 Mile East
K70	HI8000000002429	1/2 - 1 Mile East
N72	HI8000000002362	1/2 - 1 Mile SSE
O74	HI8000000002460	1/2 - 1 Mile WNW
M76	HI8000000002519	1/2 - 1 Mile NE
N77	HI8000000002363	1/2 - 1 Mile SSE
N80	HI8000000002364	1/2 - 1 Mile SSE
N81	HI8000000002357	1/2 - 1 Mile SSE
P85	HI8000000002352	1/2 - 1 Mile SSE
P91	HI8000000002353	1/2 - 1 Mile SSE
M92	HI8000000002534	1/2 - 1 Mile NE
R94	HI8000000002389	1/2 - 1 Mile ESE
P96	HI8000000002347	1/2 - 1 Mile SSE
M99	HI8000000002537	1/2 - 1 Mile NE
N100	HI8000000002354	1/2 - 1 Mile SSE
P101	HI8000000002341	1/2 - 1 Mile SSE
T105	HI8000000002540	1/2 - 1 Mile NW
U106	HI8000000002358	1/2 - 1 Mile SE
W109	HI8000000002502	1/2 - 1 Mile WNW
S110	HI8000000002342	1/2 - 1 Mile SSE
S111	HI8000000002344	1/2 - 1 Mile SSE
S112	HI8000000002343	1/2 - 1 Mile SSE
V114	HI8000000002337	1/2 - 1 Mile SSE
Z122	HI8000000002430	1/2 - 1 Mile East
AA123	HI8000000002359	1/2 - 1 Mile SE
Y124	HI8000000002335	1/2 - 1 Mile SSE
Y126	HI8000000002338	1/2 - 1 Mile SSE
Y128	HI8000000002328	1/2 - 1 Mile SSE
131	HI8000000002494	1/2 - 1 Mile WNW
AB133	HI8000000002539	1/2 - 1 Mile NW
AC135	HI8000000002547	1/2 - 1 Mile NW
AD136	HI8000000002318	1/2 - 1 Mile SSE

PHYSICAL SETTING SOURCE MAP - 4237094.30s



County Boundary
Major Roads
Contour Lines
Airports
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons

Groundwater Flow Direction
Indeterminate Groundwater Flow at Location
Groundwater Flow Varies at Location

SITE NAME: Kaahumanu Homes ADDRESS: 760 Mcneill St. Honolulu HI 96817 LAT/LONG: 21.3269 / 157.8744	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.30s DATE: March 17, 2015 5:45 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
A1 **ENE** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269864**
A2 **ENE** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**FRDS PWS**	**HI0000331**
A3 **ENE** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269867**
A4 **ENE** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269866**
A5 **ENE** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269865**
A6 **ENE** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269868**
A7 **ENE** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269871**
A8 **ENE** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269870**
A9 **ENE** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269869**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
A10 **ENE** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002441**
A11 **ENE** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002442**
A12 **ENE** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002439**
A13 **ENE** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002440**
A14 **ENE** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002443**
A15 **ENE** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002446**
A16 **ENE** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002447**
A17 **ENE** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002444**
A18 **ENE** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002445**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
A19 **ENE** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269855**
B20 **NW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269880**
B21 **NW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002461**
C22 **NE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269894**
D23 **WSW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002412**
C24 **NE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002477**
D25 **WSW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269834**
C26 **NE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269900**
C27 **NE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002484**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
B28 **NW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269889**
B29 **NW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002471**
E30 **SW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002385**
E31 **SW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002386**
E32 **SW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002387**
E33 **SW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269821**
E34 **SW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269819**
E35 **SW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269820**
F36 **SE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002379**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
F37 **SE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002380**
F38 **SE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002377**
F39 **SE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002378**
F40 **SE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002383**
F41 **SE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002384**
F42 **SE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002381**
F43 **SE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002382**
F44 **SE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269815**
F45 **SE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269816**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
F46 **SE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269817**
F47 **SE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269814**
F48 **SE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269813**
F49 **SE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269811**
F50 **SE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269812**
G51 **NE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269893**
G52 **NE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002478**
H53 **NW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269908**
H54 **NW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002496**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
55 **WSW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269830**
I56 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269910**
I57 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002501**
J58 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269888**
J59 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002481**
K60 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269854**
K61 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002435**
J62 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269899**
L63 **ESE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002375**

Map ID Direction Distance Elevation		Database	EDR ID Number
L64 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269810**
K65 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269853**
K66 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269863**
K67 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002436**
K68 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002450**
K69 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269850**
K70 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002429**
M71 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269919**
N72 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002362**

Map ID Direction Distance Elevation		Database	EDR ID Number
O73 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269881**
O74 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002460**
N75 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269802**
M76 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002519**
N77 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002363**
N78 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269801**
N79 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269800**
N80 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002364**
N81 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002357**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
82 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269791**
N83 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269799**
N84 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269796**
P85 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002352**
M86 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269923**
P87 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269789**
Q88 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269856**
Q89 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269857**
Q90 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269858**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
P91 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002353**
M92 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002534**
P93 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269788**
R94 **ESE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002389**
R95 **ESE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269822**
P96 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002347**
M97 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269937**
P98 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269786**
M99 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002537**

Map ID Direction Distance Elevation		Database	EDR ID Number
N100 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002354**
P101 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002341**
S102 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269790**
T103 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269939**
P104 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269781**
T105 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002540**
U106 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002358**
U107 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269795**
V108 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269773**

Map ID Direction Distance Elevation		Database	EDR ID Number
W109 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002502**
S110 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002342**
S111 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002344**
S112 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002343**
W113 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269913**
V114 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002337**
S115 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269778**
S116 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269779**
S117 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269780**

Map ID Direction Distance Elevation		Database	EDR ID Number
V118 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269772**
X119 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269764**
Y120 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269771**
Z121 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269852**
Z122 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002430**
AA123 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002359**
Y124 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002335**
AA125 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269794**
Y126 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002338**

Map ID Direction Distance Elevation		Database	EDR ID Number
Y127 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269768**
Y128 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002328**
Y129 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269763**
X130 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269754**
131 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002494**
AB132 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269940**
AB133 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002539**
AC134 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269945**
AC135 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002547**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
AD136 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002318**
AD137 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269751**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for HONOLULU County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 96817

Number of sites tested: 10

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.110 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	0.200 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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EXHIBIT C

Section 106 Consultation &

Architectural Inventory Survey Information

DAVID Y. IGE
GOVERNOR OF HAWAII

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

KEKOA KALUHIWA
FIRST DEPUTY

JEFFREY T. PEARSON
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555

November 30, 2015

IN REPLY REFER TO:
LOG: 2015.02939, 2015.03581
DOC NO: 1509JLP40
Architecture, Archaeology
History and Culture

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
P.O. Box 17907
Honolulu, HI 96817

SUBJECT: **Chapter 6E-8 and National Historic Preservation Act Section (NHPA) Section 106 Consultation – Department of Housing and Urban Development (HUD) Repair and Rehabilitation Project Department of Human Services, Hawai‘i Public Housing Authority (HPHA) Ka‘ahumanu Homes Rehabilitation Project – 760 McNeill Street Kapālama Ahupua‘a, Kona District, Island of O‘ahu TMK: (1) 1-5-024:001**

Thank you for your initial submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services (DHS), Hawaii Public Housing Authority (HPHA) consultation with SHPD in accordance with 36 CFR 800.3 and Hawaii Revised Statutes (HRS), Chapter 6E. We received your supplemental submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience.

The submittals indicate that the HPHA is requesting the State Historic Preservation Officer’s (SHPO) concurrence with a determination of “no effect” for the proposed HUD repair and rehabilitation improvement projects involving 43 existing public housing developments located throughout the State over the next fivd5 (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 consultation on their behalf.

This letter addresses Ka‘ahumanu Homes Rehabilitation Project, 760 McNeill Street. The HPHA has identified the area of potential effects (APE) as the 7.35-acre area parcel owned by the State (HPHA) which is identified as TMK: (1) 1-5-024:001. DHS/HPHA have indicated at this stage of the planning process, they are unclear whether the subject 7.35-acre project area will require any ground disturbances.

Our records indicate that no archaeological inventory survey has been conducted within the subject parcel and that no historic properties have been identified. However, based on nearby studies potential exists to encounter subsurface traditional Hawaiian and/or historic properties within the subject parcel.

The SHPD has reviewed the undertaking at 760 McNeill Street, and the SHPO’s determination is **no adverse effect** pursuant to NHPA Section 106 and **no historic properties affected** pursuant to HRS §6E-8 within the APE **provided the following conditions are met:**

- If ground disturbing activity is anticipated, DHS must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation;
- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;
- Submit information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;

- Submit a TMK map showing the full extent of the project area within the affected parcel(s);
- Submit description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Submit summary of land use history, such as previous intensive cultivation, grubbing or grading; and
- Submit copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions regarding archaeological resources or concerns please contact Susan Lebo at (808) 692-8019 or at Susan.A.Lebo@hawaii.gov. For any history and cultural concerns please contact Kaʻāhiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov. Please contact Jessica Puff at Jessica.L.Puff@hawaii.gov or (808) 692-8023 for any questions regarding architectural concerns or this letter.

Sincerely,

Alan S. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

4. Kaahumanu Homes

a. Historic Context

Architects Law & Wilson prepared plans for Kaahumanu Homes in August 1957. The initial move-in day was October 26, 1958 (Annual Report, 1958: 19). This 152-unit project along with the Palolo Valley Homes project were undertaken by HHA during a time of an "acute housing shortage" when there was "no increase in the availability of homes at rentals that families in the low income group can afford to pay" (Annual Report, 1958: 18). This housing shortage for low-income renters was reported as early as 1956 ("Shortages in Lower Price Field," HA) and which essentially was a continuation of housing scarcity extending back to World War II. The combined units (270) from the two projects, along with housing at other HHA projects and from Honolulu Redevelopment Agency and military housing from the last half of the 1950s, did little to alleviate the housing situation since Hawaii's population rose along with land and construction costs ("Land Prices Blamed for High Cost," HA).

b. Description

The buildings at Kaahumanu homes are two-story concrete with flat roofs and cantilevered overhanging eaves. The front sides of the buildings have main entries to the first floor apartments and lanai with concrete and metal railings at the second floor apartments. Cantilevered concrete visors extend from lanai to lanai between the first and second floors. The rear sides of the buildings have service entries to the first floor apartments and a second floor walkway which provides access to the main entries of the upper apartments. The original windows in the buildings have been replaced with aluminum frame double-hung sash, and floors covered with vinyl tile.

See the facing page for the one-page historic assessment and photographs.

c. Historic Assessment: Kaahumanu Homes (1958)

Clockwise from top left: typical lanai showing added aluminum frame windows, typical kitchen, rear of a typical building.

Project	Kaahumanu Homes (Alokele & Kaiwiula St.)
Date	1958
Integrity	Buildings have been altered. Retain integrity of location, setting, and feeling. Integrity of design, materials, workmanship, and association have been compromised.
Character Defining Features	Full length walkway at entry side, lanai with square pattern decoration, cantilevered canopies. Low-rise buildings separated by open grassy areas.
Alterations	Metal frame windows added, bathrooms renovated with new tile and fixtures, metal kitchen counters.
Significance	Kaahumanu Homes is associated with public housing in Hawaii and with the social history of Hawaii. The project represents the housing reform movement of the Territory and the State.
National Register Eligibility	**Not eligible**

HAWAII PUBLIC HOUSING AUTHORITY

ENVIRONMENTAL REVIEW

KAMEHAMEHA HOMES

Honolulu, O`ahu

AMP 33
HPHA No. 1099

Prepared for:

State of Hawaii
Hawaii Public Housing Authority

Prepared by:

HHF PLANNERS
places for people

U.S. Department of Housing and Urban Development
451 Seventh Street, SW
Washington, DC 20410
www.hud.gov

espanol.hud.gov

Environmental Review for Activity/Project that is Categorically Excluded Subject to Section 58.5

Pursuant to 24 CFR 58.35(a)

Project Information

Project Name: Kamehameha Homes (AMP 33)

Responsible Entity: Hawaii Public Housing Authority
1002 North School Street
Honolulu, HI 96817

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

State/Local Identifier: State of Hawai‘i

Preparer: Mr. Scott Ezer, Vice President
HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawai‘i 96813

Certifying Officer Name and Title: Mr. David Y. Ige
Governor, State of Hawai‘i

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

Consultant (if applicable): HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawai‘i 96813

Direct Comments to: Mr. Hakim Ouansafi, Executive Director
Hawaii Public Housing Authority
1002 North School Street
Honolulu, Hawai‘i 96817

Project Location: 1629 Haka Drive
Honolulu, Hawai‘i 96817

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]**:**

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a "major construction activity" and would involve one or a combination of several HUD designated categories of actions.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent;
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons;
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland;
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation;
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls);
7. Interior and exterior renovations and rehabilitation;
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site;
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Level of Environmental Review Determination:

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.5. Compliance with and completion of conformance determinations for other statute, executive order, or regulation has been completed and support the Categorical Exclusion.

Funding Information

Grant Number	HUD Program	Funding Amount
To be determined	Capital Fund	To be determined
To be determined	Economic Development Initiative Special Project Grant	To be determined
To be determined	Other Grants	To be determined

Estimated Total HUD Funded Amount:

To be determined by HUD using a formula and based upon federal budget.

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]**:**

Depends upon funds available.

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	*The project is not within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.*
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☒	*The State of Hawai'i does not have any designated coastal barrier resource units. (http://www.fws.gov/CBRA/Maps/Mapper.html)*
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes ☐ No ☒	*As indicated in the Flood Insurance Rate Panel Number 15003C0353G, Effective: January 19, 2011, Index Date: November 05, 2014, this housing project is located within Flood Hazard Zone X (areas determined to be outside the 0.2% annual chance floodplain). A field inspection and information obtained from the site manager confirmed no major flooding issues within the site. Based on its description, this project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.*

STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5		
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes ☐ No ☒	*The State of Hawai'i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. EPA's Green Book for currently designated "nonattainment areas" as of June 2015. Planned repair and rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.*
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes ☐ No ☒	*Documentation from the Office of Planning determined that projects receiving federal funds do not require review for consistency with Hawai'i's Coastal Zone Management (CZM) program.*
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☐ No ☒	*There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.*
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes ☒ No ☐	*The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (USFWS) in their letter dated September 28, 2015 which is included in the Appendices, while project-specific mitigation measures are identified in the following section*
Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes ☐ No ☒	*There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.*

Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes ☐ No ☒	*The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.*
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes ☐ No ☒	*This housing project is located in Zone X, an area of minimal flooding (i.e., 0.2% annual chance flood), and is located outside the 500-year flood zone. A field inspection and information obtained from AMP Manager confirmed no major flooding issues within the project site.*
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes ☐ No ☒	*The subject housing site was first occupied in 1996 and is 19 years old. To be eligible for listing in the National Register of Historic Places (NRHP), a property must meet the National Register criteria for evaluation which involves examining its integrity, significance, and age (generally at least 50 years old). Due to its age, this housing project does not meet the eligibility criteria to be evaluated for the NRHP. In a letter to the State Historic Preservation Officer dated July 23, 2015, the HPHA determined that no historic properties would be affected by repair and rehabilitation improvements for this housing project. No comments or objections about this no effect determination were received.*
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes ☐ No ☒	*The project site is not situated along a highway that has a high volume of vehicular traffic. The HUD noise calculator estimated noise levels at the project site to be 60.5 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.*
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes ☐ No ☒	*The housing project is located within the O‘ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation.*

Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☐ No ☒	*There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.* *(http://www.fws.gov/wetlands/data/mapper.HTML)*
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes ☐ No ☒	*There are no Wild and Scenic Rivers in Hawai'i, which excludes this project from mitigation or formal consultation requirements (http://www.rivers.gov/map.php)*
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes ☐ No ☒	*Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, these improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects on minority populations and low-income populations. Improvements should benefit low-income and minority populations living within this housing project.*

Field Inspection (Date and completed by)**:** June 05, 2015
Joseph Tamburello, Planner
HHF Planners

Summary of Findings and Conclusions:

Repair and rehabilitation improvements implemented for this existing housing project by HPHA should not result in significant environmental impacts based upon research data collected, a field inspection, consultation with the site manager and maintenance staff, consultation with pertinent resource agencies, and prior HPHA experience implementing repair and rehabilitation improvements. Therefore, repair and rehabilitation improvements would comply and be consistent with the statutes, executive orders, and regulations addressed. Furthermore, HPHA would evaluate improvements planned to ensure the work is consistent with the designated categories of actions described under the project description section. Compliance with these factors evaluated are further addressed in the attached Source Documentation Statutory Worksheet along with relevant technical reports/assessments.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Law, Authority, or Factor	Mitigation Measure
Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	*Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.* *Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.* *Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.* *Newell's shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.* *Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.* *Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo'i, impoundments or other vegetated water bodies.* *1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols.* *2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have*

	fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted. *3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.* *In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.* *<u>Additional Measures</u>: The following additional measures would be implemented:* *1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.*

Determination:

☒ This categorically excluded activity/project converts to **EXEMPT** per Section 58.34(a)(12), because it does not require any mitigation for compliance with any listed statutes or authorities, nor requires any formal permit or license; **Funds may be committed and drawn down after certification of this part** for this (now) EXEMPT project; OR

☐ This categorically excluded activity/project cannot convert to Exempt status because one or more statutes or authorities listed at Section 58.5 requires formal consultation or mitigation. Complete consultation/mitigation protocol requirements, **publish NOI/RROF and obtain "Authority to Use Grant Funds"** (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR

☐ This project is not categorically excluded OR, if originally categorically excluded, is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

Preparer Signature: Scott Ezer Date: 11-10-15

Name/Title/Organization: Mr. Scott Ezer, Vice President
HHF Planners

Responsible Entity Agency Official Signature:

David Y. Ige Date: APR 28 2016

Name/Title: Mr. David Y. Ige, Governor

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

Kamehameha Homes (HA # 1099)

TMK: (1) 1-5-001:001

Hawai‘i Public Housing Authority (HPHA) Environmental Review

SOURCE DOCUMENTATION (SD) STATUTORY WORKSHEET

Site Visit Date: June 05, 2015
Prepared By: Joseph Tamburello

The Kamehameha Homes housing project is located in the Kalihi-Pālama district on the island of O‘ahu. This community is located in the urbanized center of downtown Honolulu.

The property is bordered by King Street to the north, Liliha Street to the west, and Kalākaua Middle School to the south. This housing project is within HPHA’s Asset Management Project (AMP) 33 which includes one other housing project.

Kamehameha Homes was first occupied in 1996 and has a street address of 1629 Haka Drive. This property consists of 16 acres, and it is identified as Tax Map Key (TMK) No. (1) 1-5-001:001. In addition to a community building, the housing project includes 28 two-story townhouses containing 221 housing units with one, two, or three bedrooms per unit. The State’s land use designation for the property is the “Urban District,” and the City’s zoning for the site is A-1 Low-Density Apartment.

The project site is not located within a tsunami evacuation zone or within a flood hazard area based upon the Flood Insurance Rate Map (Community Panel Number 15003C0353G, Revised January 19, 2011). The entire property is designated as Flood Zone X (areas determined to be outside the 0.2% annual chance of flood).

The following figures in Exhibit A provide supporting information on this housing project:

Figure 1: Location Map
Figure 2: TMK Map
Figure 3: Site Map
Figure 4: Flood Map

COMPLIANCE FACTORS

I. AIRPORT CLEAR ZONES AND ACCIDENT POTENTIAL ZONES (24 CFR PART 51D)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The housing project does not like within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: 24 CFR 51 (D).

Honolulu International Airport Master Plan - 2010 (August 1994), State Department of Transportation, Airports Division;

*Hawai`i Airports and Flying Safety Guide (2012-13, Fifth Edition, Revision 1)* Hawai`i Department of Transportation, Airports Division; and

http://hidot.hawaii.gov/airports/files/2013/01/Airport-Safety-Guide-2012-2013-5rev1.pdf

II. COASTAL BARRIER RESOURCES (COASTAL BARRIER IMPROVEMENT ACT OF 1990 [16 USC 3501])

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i does not have any designated coastal barrier resource units.

SUPPORTING DOCUMENTATION:

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/cbra/maps/mapper.html (Date accessed: 6/30/15).

III. FLOOD INSURANCE (FLOOD DISASTER PROTECTION ACT OF 1973 AND NATIONAL FLOOD INSURANCE REFORM ACT OF 1994 [42 USC 4001-4128 AND 42 USC 5154a])

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program.

As indicated in the Flood Insurance Rate Panel Number 15003C0353G, Effective: January 19, 2011, Index Date: November 05, 2014, this housing project is located within Flood Hazard Zone X (areas determined to be outside the 0.2% annual chance floodplain). A field inspection and information obtained from the site manager confirmed no major flooding issues within the site. Based on its description, this project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal signs of flooding problems. An interview with the AMP Manager also determined that major ponding or flooding issues are currently not an issue for the project site.

Printed: Flood Insurance Rate Map, Community Panel Number 15003C0353G, Effective: January 19, 2011, Index Date: November 05, 2014.

Hawai`i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 7/27/15)

IV. CLEAN AIR ACT (40 CFR PARTS 6, 51, 93)

SUPPORTING DOCUMENTS	
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. Environmental Protection Agency's Green Book for currently designated "nonattainment areas" as of June 2015. Planned rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.

SUPPORTING DOCUMENTATION:

Printed: *State of Hawai‘i Annual Summary 2013 Air Quality Data*. State of Hawai'i, Department of Health, July 2014.

U.S. Environmental Protection Agency website at: http://epa.gov/airquality/greenbk/

V. COASTAL ZONE MANAGEMENT ACT (16 USC 1451, SECTIONS 307 (C), (D)

CONTACT:

Mr. John Nakagawa
Office of Planning
Department of Business, Economic Development & Tourism
State of Hawai‘i
P.O. Box 2359
Honolulu, Hawai'i, 96804-2359

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

Documentation from the Office of Planning determined that projects receiving federal funds do not require review for consistency with Hawai‘i's Coastal Zone Management (CZM) program.

SUPPORTING DOCUMENTATION:

Contact: In an email to the Office of Planning (OP) dated July 27, 2015, the HPHA determined that the use of HUD funds for the implementation of repair and rehabilitation improvements does not require review for consistency with Hawai‘i's CZM program. The OP confirmed this determination in an email dated July 28, 2015 and it is included in the Appendices.

Experience: Previous reviews conducted by OP in 2003, 2005, and 2010 determined that projects receiving federal funds from HUD do not require CZM federal consistency review. OP's current determination confirms this condition is still applicable. Copies of these prior documentations are included in the Appendices.

VI. CONTAMINATION AND TOXIC SUBSTANCES (24 CFR PART 50.3 & 58.5(I)(2))

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Project Not Affected.

There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.

SUPPORTING DOCUMENTATION:

Field: A site inspection and interview with the Asset Management Project (AMP) Manager revealed no presence of any toxic or radioactive materials on the project site that warrant concern. Small quantities of gasoline, paint, and solvents for routine maintenance and lawn equipment are stored in a secured area within the Administration building.

Study: Environmental Data Resources, Inc. (EDR), conducted a search of available environmental records and prepared a Radius Map Report (Inquiry Number 4237094.34s, March 17, 2015). EDR reviewed more than 25 federal and statewide regulatory databases for information regarding the treatment, storage, disposal and release of toxic chemicals at the project site and within specific radii (generally 1 mile) of the site. A Detail Map within the EDR report documents those sites identified within a 0.25 mile radius of the project site. The EDR report in Exhibit B includes the results of their research findings.

The EDR report notes the following activities within a 0.125 mile radius of the project site: This project site has one LUST, status: Site Cleanup Completed (NFA); one UST, status; Permanently Out of Use. Farrington High School (355 feet away) found petroleum in soil; hazard undetermined, documentation inadequate to evaluate risk. Chevron (625 feet away) is classified as a Conditionally Exempt Small Quantity Generator (Handler), no violations found. Kalihi Chevron (625 feet away) had one LUST, status: Site Cleanup Completed (NFA); three UST, status: Currently in Use (30,000 gallons, gasoline).

This project site was not identified as a Formerly Used Defense Site (FUDS) by the U.S. Army Corps of Engineers and is not subject to any cleanup actions for Department of Defense-generated contamination.

VII. ENDANGERED SPECIES (50 CFR PART 402)

CONTACT:
Mr. Loyal Mehrhoff, Field Supervisor
Pacific Islands Administrator
Fish and Wildlife Services
U.S. Department of the Interior
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawai'i 96813
Tel. #: 792-9400

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Adverse Effect Subject to Mitigation

The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices.

SUPPORTING DOCUMENTATION:

Contact: A letter from the HPHA dated July 24, 2015 was submitted to the Pacific Island Administrator for the FWS determining that repair and rehabilitation improvements that may be implemented using HUD funds for this housing project would have no likelihood of effect on any listed species or proposed species, or existing or proposed designated critical habitat subject to certain measures. Concurrence with this determination along with proposed minimization and avoidance measures was received from the FWS in a letter dated September 28, 2015 which is included in the Appendices. This housing project is subject to the following minimization and avoidance measures.

Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.

Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.

Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.

Newell's shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If

nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.

Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.

Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo‘i, impoundments or other vegetated water bodies.

1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS’s recommended Hawaiian Waterbird Survey Protocols.
2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.
3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.

In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.

Additional Measures: The following additional measures would be implemented:

1. No vegetation or soil disturbance shall be conducted outside a project’s previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.

Experience: The FWS was previously consulted as part of environmental reviews that were completed in 2005 (39 housing projects) and 2010 (70 housing projects) which supported the determination that repair and rehabilitation improvements would either: 1) have no likelihood of effect for certain housing projects; or 2) not likely adversely affect federally listed species or critical habitat for certain housing projects subject to mitigative measures. A summary of these consultation efforts follows.

2005 Consultation: In a letter dated July 15, 2005, the Housing and Community Development Corporation of Hawai‘i (predecessor to the HPHA), determined that the implementation of minor repair and rehabilitation improvements for 39 housing projects

would not have an adverse effect on federally-listed species or critical habitat. In a letter dated August 11, 2005, the FWS concurred with the HCDCH determination.

2010 Consultation: In a letter dated May 17, 2010, the HPHA informed the FWS that HUD funds would be used to immediately implement repair and rehabilitation improvements for six housing projects on O'ahu and the island of Hawai`i. In a subsequent letter dated May 21, 2010, the FWS was informed that HPHA would be using HUD funds to implement minor repair and rehabilitation improvements for 64 projects throughout the State. In both letters, the HPHA determined that the repair and rehabilitation improvements were not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat. Based on further consultation and a meeting with FWS staff on June 24, 2010, the HPHA determined that repair and rehabilitation improvements for most of their housing projects would not likely adversely affect any listed or proposed species, or existing or proposed designated habitat, subject to various mitigative measures for certain housing projects.

VIII. EXPLOSIVE AND FLAMMABLE OPERATIONS (24 CFR PART 51C)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

SUPPORTING DOCUMENTATION:

Field: Field inspection was limited to the exterior of residential buildings and associated structures for this housing project. No above-ground explosive or flammable material storage containers in excess of 100 gallons were observed at the site.

Printed: 24 CFR Part 51, Subpart C addresses acceptable separation distance from above-ground explosive or flammable fuels or chemical containers. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

IX. FARMLANDS PROTECTION (7 CFR PART 658)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. Since the property consists of an existing housing development within an urbanized area, no farmlands would be impacted by the implementation of repair and rehabilitation improvements.

Printed: The property is designated for "Urban" use by the State Land Use Commission and the County's zoning for the parcel is RD-3.75 Double-Family Residential District.

Hawai`i Office of Planning website at: http://planning.hawaii.gov/gis/
(Date accessed: 6/30/2015)

X. FLOODPLAIN MANAGEMENT (EXECUTIVE ORDER 11988, 24 CFR PART 55)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program

This housing project is located in Zone X, an area of minimal flooding (i.e., 0.2% annual chance flood), and is located outside the 500-year flood zone. A field inspection and information obtained from AMP Manager confirmed no major flooding issues within the project site.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal signs of previous flooding problems. An interview with the AMP Manager also determined that no major ponding or flooding issues occur on the project site.

Printed: Flood Insurance Rate Map, Community Panel Number 15003C0353G, Effective: January 19, 2011, Index Date: November 05, 2014

Hawai`i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/ (Date accessed 7/21/15)

XI. HISTORIC PRESERVATION (NATIONAL HISTORIC PRESERVATION ACT OF 1966; SECTIONS 106 AND 110; 36 CFR, PART 800)

CONTACT:

Ms. Suzanne Case, Chairperson
Department of Land and Natural Resources (DLNR)
State of Hawai'i
1151 Punchbowl Street
Honolulu, Hawai'i 96813
Tel. #: 587-0400

SUPPORTING DOCUMENTS	
X	Field
X	Contact
X	Printed
	Experience
X	Study

DETERMINATION:

Status Category: No Effect on Historic Properties

The subject housing site was initially occupied in 1996 and is 19 years old. To be eligible for listing in the National Register of Historic Places (NRHP), a property must meet the National Register criteria for evaluation which involves examining its integrity, significance, and age (generally at least 50 years old). Due to its age, this housing project does not meet the eligibility criteria to be evaluated for the NRHP. In a letter to the State Historic Preservation Officer (SHPO) dated July 23, 2015, the HPHA determined that no historic properties would be affected (no effect) by repair and rehabilitation improvements for this housing project. No comments or objections about this no effect determination were received.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the subject housing site did not locate any existing or potential archaeological sites (e.g., heiau) or cultural features on the property. An interview with the property manager and maintenance supervisor indicates that no known sites or features are present on the property.

Contact: A letter from the HPHA dated July 23, 2015, which is included in the Appendix, was submitted to the State Historic Preservation Officer [SHPO] (Chair of State Board of Land and Natural Resources) as part of Section 106 consultation determining that no historic properties would be affected (no effect) by repair and rehabilitation improvements that may be implemented using HUD funds for this housing project. The SHPO did not submit any comments or objections on the "no effect" determination for this housing project, which included follow-up e-mails with the State Historic Preservation Division regarding a response. On September 28, 2015, notice of HPHA's determination was also distributed to several native Hawaiian organizations and the various County Planning Departments. No concerns or opposition to this determination was received.

Printed: A review of the U.S. National Parks Service website for the National Register of Historic Places did not identify any historic properties within the limits of this housing project. A similar review of the State DLNR website for the State Register of Historic Places revealed that there are no historic properties within the project site.

National Register: U.S. National Park Service website at: http://www.nps.gov/nr/research/ (Date accessed: 7/2/15).

State Register: Hawai`i Department of Land and Natural Resources website at: http://dlnr.hawaii.gov/shpd/state-register/ (Date accessed: 7/2/15).

Experience: In letter to the State Historic Preservation Officer (SHPO) dated April 19, 2011, the HPHA determined that minor repair and rehabilitation improvement at 57 public housing projects throughout Hawai'i (including this housing site) would have "no effect" on historic properties. The SHPO had no comments or objections on the "no effect" determination.

XII. NOISE ABATEMENT CONTROL (24 CFR PART 51B)

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Within HUD Noise Standards

The project site is not situated along a highway that has a high volume of vehicular traffic. The HUD noise calculator estimated noise levels at the project site to be 60.5 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

SUPPORTING DOCUMENTATION:

Field: No significant noise generating sources were identified within the project site during the site inspection. The subject housing site is located within an urban residential neighborhood. Traffic noise is buffered by an approximately 4-foot-high concrete wall along N. King Street and Kalihi Street. An interior roadway runs though and is contained within the housing site, but it is used primarily by tenants and therefore has a low volume of traffic. An interview with the AMP Manager did not identify any loud noise producing sources in the area. As a result, notable noise sources are predominantly associated with vehicular traffic along adjacent streets. Traffic noise did not appear significant during the site visit.

Study: The HUD day/night noise level calculator was used to estimate approximate traffic noise. Traffic counts were based on 2013 Hawai'i State Department of Transportation data taken along the N King Street (principal arterial road) and Kalihi Street (minor arterial road). Using this HUD calculator, the estimated noise levels from both streets combined at the project site is 60.5 dBA. The actual amount may be lower as the noise calculator does not

consider noise attenuation features such as the perimeter wall, which would lower noise levels. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

XIII. SOLE SOURCE AQUIFER (40 CFR PART 149)

	SUPPORTING DOCUMENTS
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact on Sole Source Aquifer

The housing project is located within the O‘ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation. However, if exceptional circumstances require compliance steps with any of these authorities, such compliance must be established and documented prior to approving the site-specific loan or grant.

SUPPORTING DOCUMENTATION:

Printed: This determination was based upon review of the Sole Source Aquifer Memorandum of 4/30/90 (Sections II.B.1 and II.B.2) and consideration of the type of rehabilitation related improvements that would be conducted for this project.

XIV. WETLANDS PROTECTION (EXECUTIVE ORDER 11990)

	SUPPORTING DOCUMENTS
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the property did not identify the presence of any wetlands.

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/wetlands/data/mapper.html (Date accessed 7/23/2015).

XV. WILD AND SCENIC RIVERS ACT (16 USC 1271, SECTION 7 (B), (C))

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no Wild and Scenic Rivers in Hawai‘i, which excludes this project from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: National Wild and Scenic Rivers System website at: http://www.rivers.gov/index.php (Date accessed: 6/30/2015).

XVI. ENVIRONMENTAL JUSTICE (EXECUTIVE ORDER NO. 12898)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Conflict with Requirements

Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, repair and rehabilitation improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations. Repair and rehabilitation improvements should benefit low-income and minority populations living within this housing project.

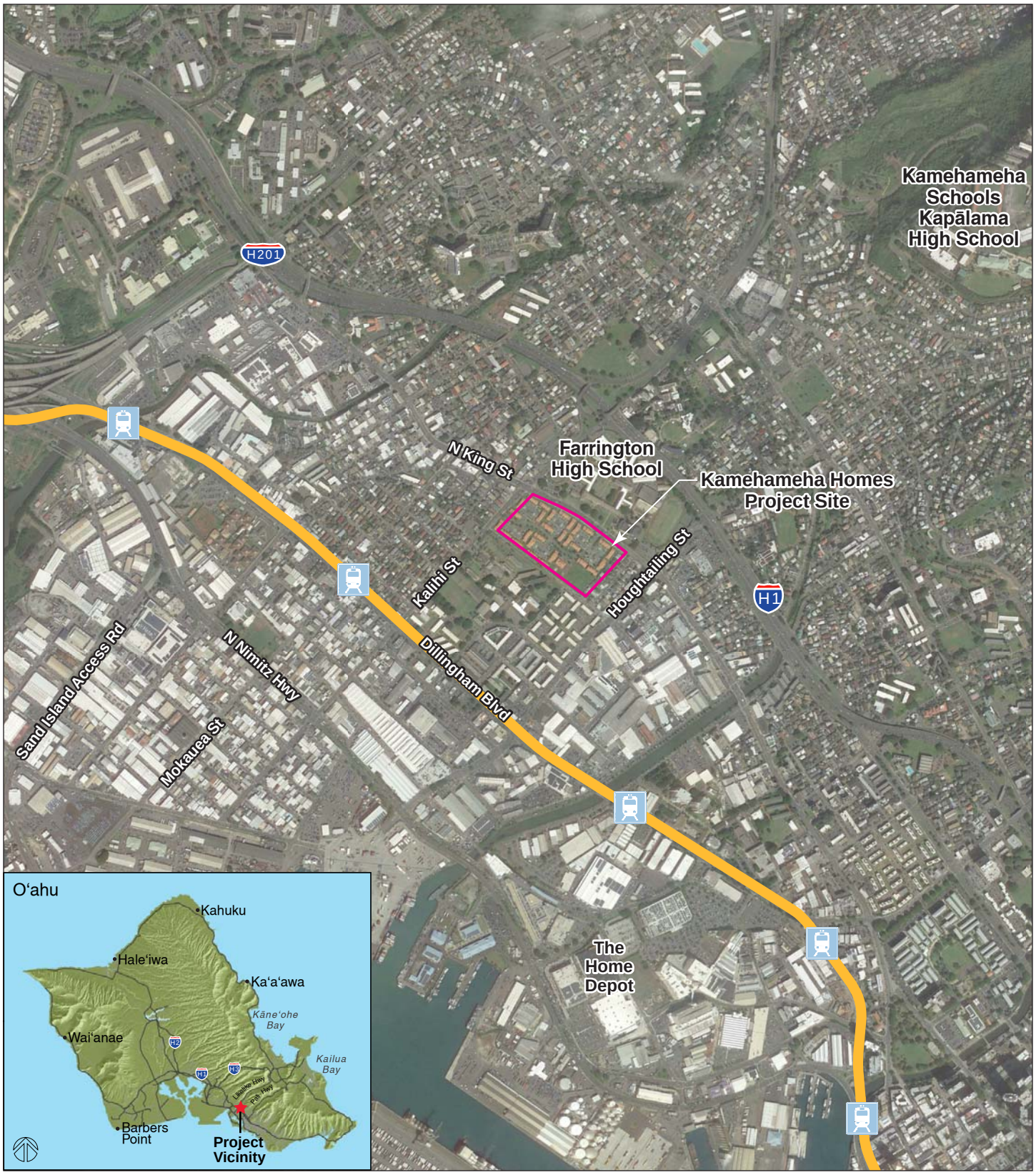
SUPPORTING DOCUMENTATION:

Printed: Executive Order 12898.

U.S. Department of Housing and Urban Development website at:
https://www.hudexchange.info/environmental-review/environmental-justice/

EXHIBIT A

Location Map, TMK Map, Site Map, Flood Map, and Site Photos



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

HONOLULU RAIL TRANSIT

Transit Corridor

Transit Station

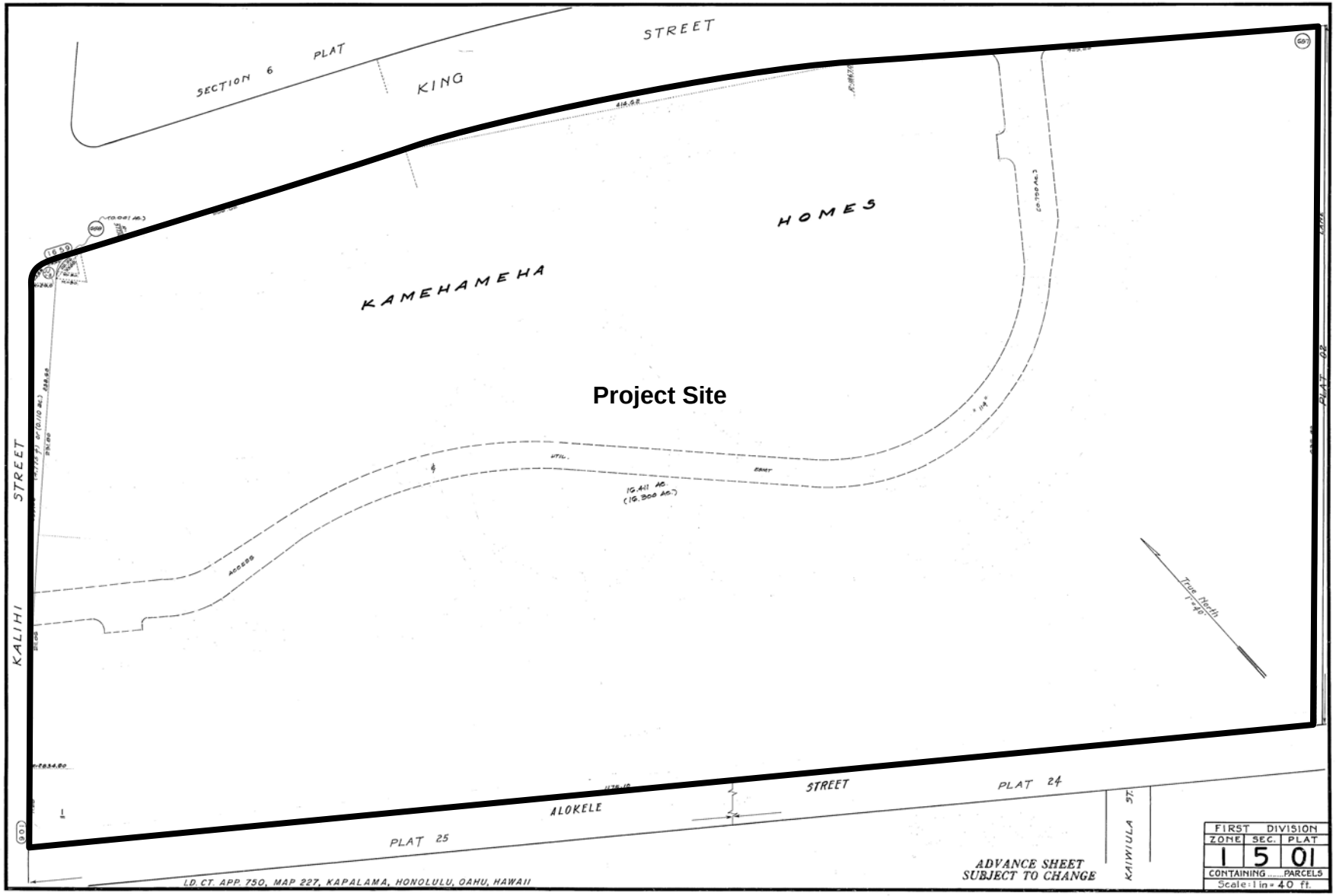
HPHA No. 1099 - Kamehameha Homes (AMP 33)

Figure 1 - Project Location Map

Honolulu, O'ahu

1,500 FT

HHF PLANNERS
places for people

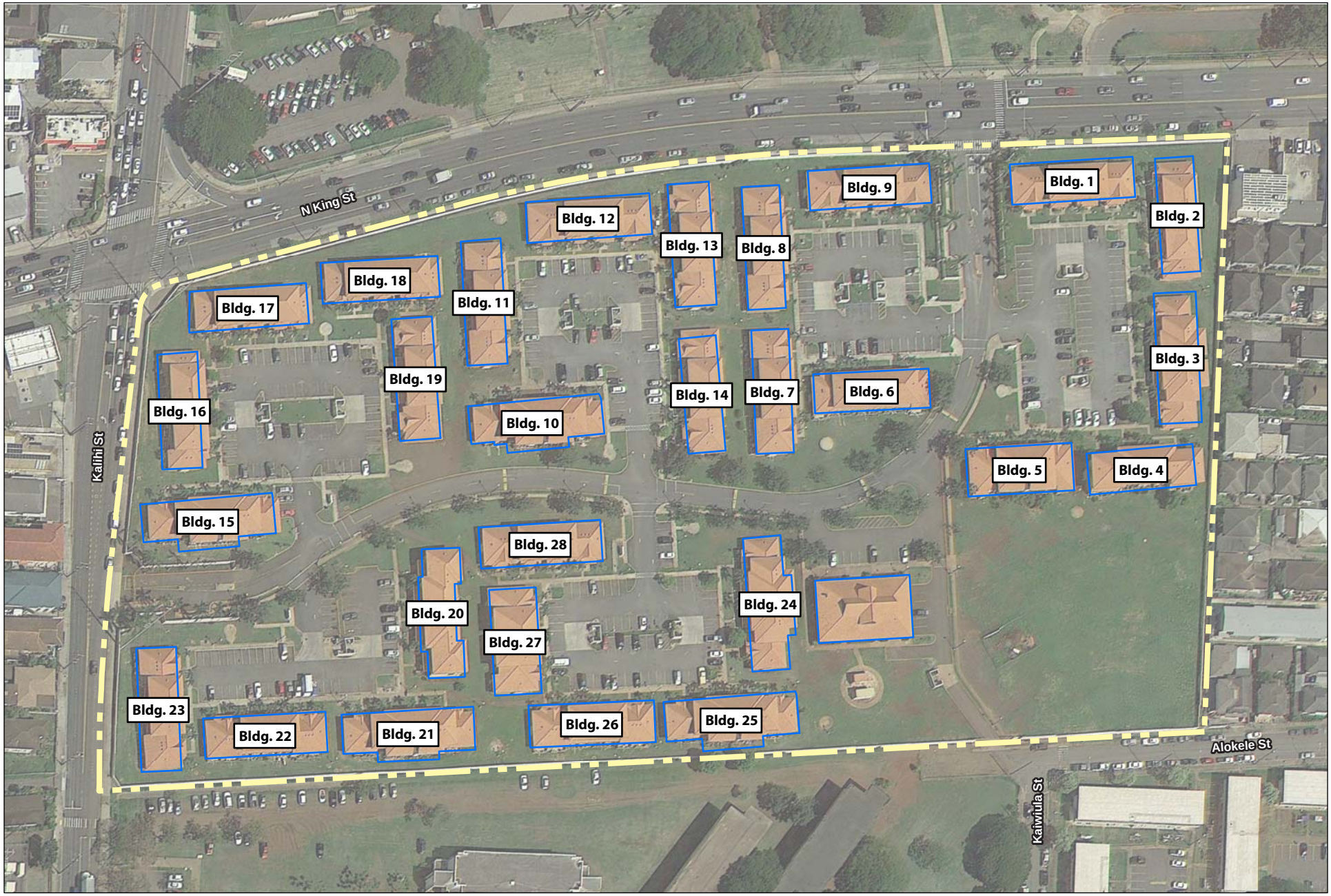


HPHA No. 1099 - Kamehameha Homes (AMP 33)

Figure 2 - TMK Map

Honolulu, O'ahu

HHF PLANNERS
places for people



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

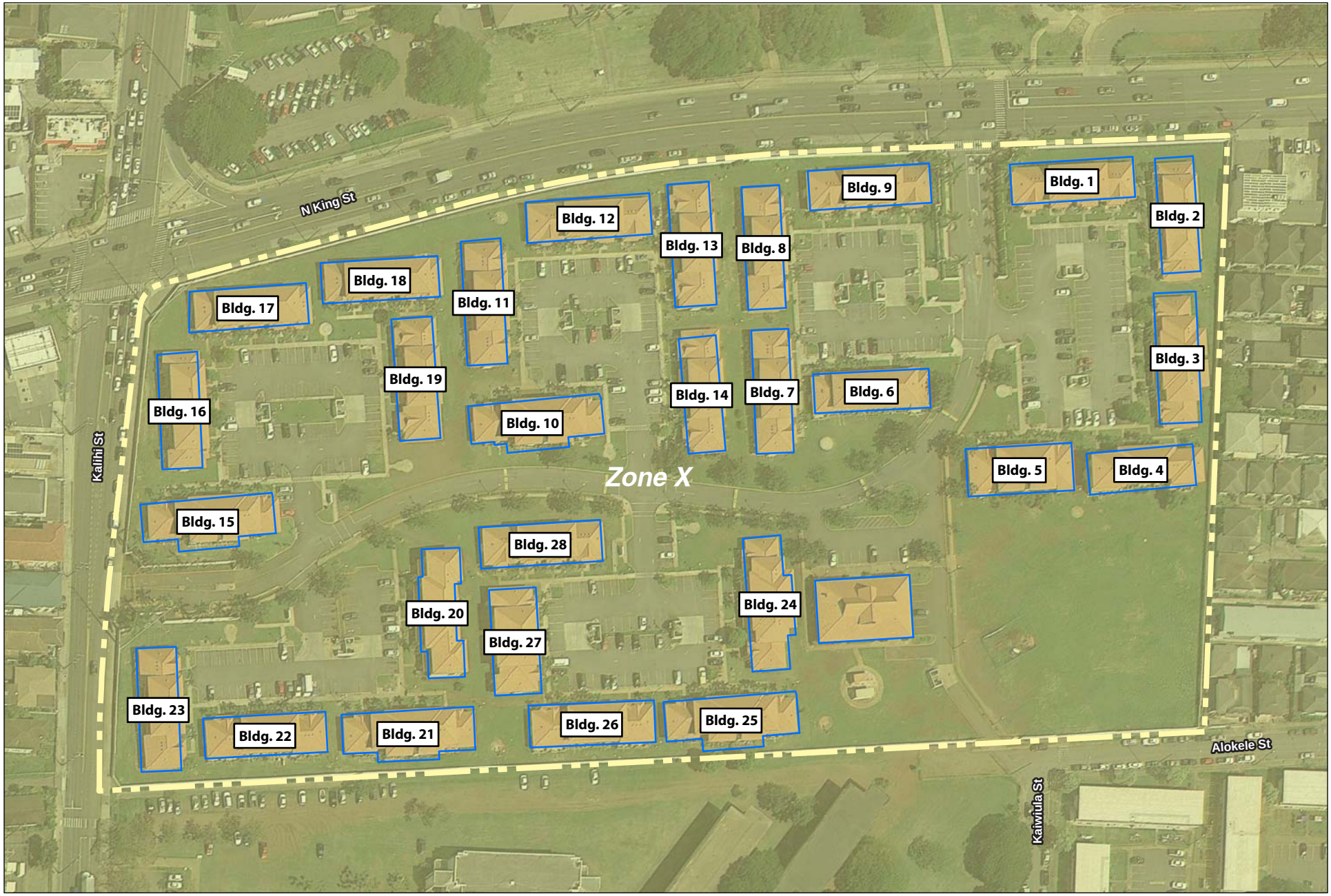
HPHA No. 1099 - Kamehameha Homes (AMP 33)

Figure 3 - Site Map

Honolulu, O'ahu

50 FEET

HHF PLANNERS
places for people



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

LEGEND

Zone X - Outside the 0.2% Annual Chance of Flood

HPHA No. 1099 - Kamehameha Homes (AMP 33)

Figure 4 - Flood Map

Honolulu, O'ahu

50 FEET

HHF PLANNERS
places for people

KAMEHAMEHA HOMES
SITE PHOTOS

View from project (Haka Drive), looking toward King Street

View from project (Haka Drive), looking toward Kalihi Street. Low CMU wall surrounds project site.

Onsite standard curbing and drain inlets along street. Grade slopes toward street.

Front yard condition at entry to housing units

Housing units rear yard adjacent to project's open field.

Typical side yard condition; subject housing site to the right

KAMEHAMEHA HOMES
SITE PHOTOS

Project's southeastern boundary. CMU wall separates project from adjacent single-family dwellings.

Temporary staging area in one of the project's parking lot

Typical yard condition at parking lot and entry to housing units

Adjacent grade slopes toward drain inlet

Trash pickup

Storage Area

EXHIBIT B

EDR Radius Map Report

Kamehameha Homes
1629 Haka Dr.
Honolulu, HI 96817

Inquiry Number: 4237094.34s
March 17, 2015

EDR Summary Radius Map Report

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

FORM-NULL-PVC

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

1629 HAKA DR.
HONOLULU County, HI 96817

COORDINATES

Latitude (North):	21.3295000 - 21˚ 19' 46.20''
Longitude (West):	157.8747000 - 157˚ 52' 28.92''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	616699.9
UTM Y (Meters):	2358893.0
Elevation:	39 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	USGS 7.5 min quad index

Target Property:	W
Source:	USGS 7.5 min quad index

MAPPED SITES SUMMARY

Target Property Address:
1629 HAKA DR.
, HI 96817

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
A1	KAMEHAMEHA HOUSING P	1629 HAKA DR	FINDS		TP
A2	KAMEHAMEHA HOUSING P	1629 HAKA DR	LUST, UST		TP
A3	KAMEHAMEHA HOUSING P	1629 HAKA DR	RGA LUST		TP
Reg	SAND ISLAND MILITARY		DOD	Same	3717, SSW
Reg	FORT SHAFTER		DOD	Same	2621, NW
B4	FARRINGTON HIGH SCHO	1564 N KING ST	FTTS, HIST FTTS, SHWS, SPILLS	Higher	355, NNE
B5	FARRINGTON HIGH SCHO	1564 N. KING STREET	CERCLIS	Higher	355, NNE
C6		1715 N KING ST	EDR US Hist Auto Stat	Higher	621, NNW
C7	CHEVRON 93183	1715 N KING ST	RCRA-CESQG, FINDS	Higher	625, NNW
C8	KALIHI CHEVRON SELF	1715 N KING ST	LUST, UST, Financial Assurance	Higher	625, NNW
9		1714 DAY PL	EDR US Hist Auto Stat	Higher	749, North
C10	C&CH KALIHI FIRE STA	1742 N KING ST	LUST, UST	Higher	763, NW
11	CLASSIC RUSTPROOFING	1437 N KING ST	LUST, UST	Lower	908, ESE
D12		908 WAIAKAMILO RD	EDR US Hist Auto Stat	Lower	1056, SE
D13		909 WAIAKAMILO RD	EDR US Hist Auto Stat	Lower	1064, SE
D14	CHEVRON 95023	909 WAIAKAMILO RD	RCRA-CESQG, UST, Financial Assurance	Lower	1072, SE
E15		1860 N KING ST	EDR US Hist Auto Stat	Higher	1141, NW
E16	ISLAND MINI-MART NOR	1860 N KING ST	LUST, UST, Financial Assurance	Higher	1141, NW
17	ALPAC CORPORATION	815 WAIAKAMILO RD	LUST, UST	Lower	1176, SSE
F18	MARSHALL'S SHELL SS	1029 HOUGHTAILING ST	LUST, UST, Financial Assurance	Lower	1202, ESE
F19	MARSHALL'S SHELL SS	1029 HOUGHTAILING ST	RCRA-CESQG, FINDS	Lower	1202, ESE
F20	KALIHI PUMP STATION	1381 N KING ST	UST	Lower	1207, ESE
21	KALIHI CENTRAL OFFIC	1025 KAILI ST	UST, Financial Assurance	Higher	1225, NW
22		957 KAMENANI ST	EDR US Hist Auto Stat	Lower	1255, ESE
G23	ISLAND PAINTING	1353 MOOKAULA ST	RCRA NonGen / NLR, FINDS	Lower	1258, SE
G24	ISLAND PAINTING	1353 MOOKAULA ST	LUST, UST, Financial Assurance	Lower	1258, SE
F25	FUTURE HONOLULU FORD	CORNER OF HOUGHTAILI	LUST, UST	Lower	1265, ESE
26	PACIFIC TIRE	1955 N KING ST	LUST, UST	Higher	1524, NW
27	HAWAIIAN CANDIES & N	707 WAIAKAMILO RD	LUST, UST	Lower	1629, South
H28	OKADA TRUCKING CO.,	818 MOOWAA ST	LUST, UST, Financial Assurance	Lower	1696, SSE
H29	ROSS TRUSTS	819 MOOWAA ST	SHWS, VCP	Lower	1706, SSE
H30	SEN PLEX CORPORATION	819 MOOWAA ST	LUST, UST	Lower	1706, SSE
I31	I. STEVEN SUNADA	850 MOOWAA ST	LUST, UST	Lower	1709, SE
I32	TAKAMIYA PROPERTY	850 MOOWAA ST.	CERCLIS	Lower	1709, SE
I33	TAKAMIYA PROPERTY	850 MOOWAA ST	SHWS, SPILLS	Lower	1709, SE
J34	FACTORY STREET SITE	2003 N. KING STREET	CERC-NFRAP	Higher	1713, NW
J35	FACTORY STREET LEAD	2003 N KING ST	SHWS, SPILLS, ENG CONTROLS, INST CONTROL	Higher	1713, NW
36	U.S. POSTAL SERVICE	1271 N KING ST	LUST, UST, Financial Assurance	Lower	1716, ESE
37	TESORO 2GO #61012	1529 DILLINGHAM BLVD	LUST, UST, Financial Assurance	Lower	1821, SW

MAPPED SITES SUMMARY

Target Property Address:
1629 HAKA DR.
, HI 96817

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
38	MORRIS ANGELO	905 FACTORY ST	LUST, UST	Higher	1834, WNW
39	AIM DILLINGHAM	1701 DILLINGHAM BLVD	LUST, UST, Financial Assurance	Lower	1917, WSW
40	OAHU PLUMBING & SHEE	1217 N KING ST	LUST, UST	Lower	1938, SE
41	PROPERTY 64 WAREHOUS	609 WAIAKAMILO ROAD	LUST, UST	Lower	1995, South
42	KAPALAMA INCINERATOR	757 KOKEA ST	RCRA-SQG, SHWS, SPILLS, INST CONTROL	Lower	2098, WNW
43	JOHIRO BROTHERS, INC	1240 MOOKAULA ST	LUST, UST	Lower	2158, SE
44	BOB'S BAR B QUE	1366 DILLINGHAM BLVD	LUST, UST	Lower	2228, South
K45	DILLINGHAM BOULEVARD	DILLINGHAM BLVD & MO	SHWS, ENG CONTROLS, INST CONTROL	Lower	2253, WSW
K46	KEN T SERVICE	1901 DILLINGHAM BLVD	LUST, UST, Financial Assurance	Lower	2254, WSW
47	RAKUYO KEN U.S.A.	804 GULICK AVE	LUST, UST	Higher	2310, WNW
48	KAMEHAMEHA SCHOOLS -	1336 DILLINGHAM BLVD	SHWS, SPILLS	Lower	2323, South
L49	GTE-HAWAIIAN TEL EMP	1138 N KING ST	SHWS, ENG CONTROLS, INST CONTROL	Lower	2344, SE
M50	GENERAL TIRE	505 WAIAKAMILO RD	SHWS, SPILLS	Lower	2419, SSW
51	OAHU PLUMBING & SHEE	926 KOHOU ST	LUST, UST, Financial Assurance	Lower	2427, SE
M52	1385 COLBURN STREET	1385 COLBURN ST	SHWS, SPILLS	Lower	2447, SSW
L53	7-11 KAPALAMA	1136 N KING ST.	LUST, UST, Financial Assurance	Lower	2451, SE
54	SHIMAYA SHOTEN, LTD.	710 KOHOU ST	LUST, UST	Lower	2470, SSE
55	KALIHI STREAM CHEVRO	2160 N. KING ST.	LUST, UST, Financial Assurance	Lower	2484, NW
56	LOOMIS ARMORED INC.	1540 KALANI ST	LUST, UST	Lower	2512, SW
57	BENIYA SHOKUDO CATER	1448 KALANI ST	LUST, UST	Lower	2569, SSW
N58	JBL HAWAII, LTD	905 KOKEA ST	SHWS, ENG CONTROLS, INST CONTROL	Lower	2616, SE
N59	JBL HAWAII LTD	905 KOKEA ST	LUST, UST	Lower	2616, SE
60	CLASSIC BOWL	1190 DILLINGHAM BLVD	SHWS	Lower	2646, South
61	1305 HART STREET	1305 HART ST	SHWS, SPILLS, INST CONTROL	Lower	3160, SSW
62	PACIFIC POULTRY	1804 KANAKANUI ST	SHWS, SPILLS	Lower	3173, WSW
63	KUHIO PARK TERRACE T	LINAPUNI ST	SHWS, ENG CONTROLS, INST CONTROL, BROWNFIELDS	Higher	3297, North
64	YOUNG BROTHERS REFRI	1331 N NIMITZ HWY	SHWS, SPILLS	Lower	3441, SSW
O65	HONOLULU COMMUNITY C	874 DILLINGHAM BLVD	SHWS	Lower	3586, SSE
O66	THEO DAVIES CATERPIL	935 DILLINGHAM BLVD	SHWS, ENG CONTROLS, INST CONTROL	Lower	3658, SSE
67	CHANG-CHOW PROPERTY,	2161 N SCHOOL ST	SHWS	Higher	3671, North
O68	PIER 51 HONOLULU HAR	925 DILLINGHAM BLVD	FINDS, SHWS, ENG CONTROLS, INST CONTROL, VCP	Lower	3690, SSE
69	YUE-FUNG KWAN CONSTR	2004-2008 REPUBLICAN	SHWS, SPILLS	Lower	3701, WSW
70	LENAKONA DEVELOPMENT	2305 KAMEHAMEHA HWY	SHWS, LUST, UST	Lower	3761, WNW
71	KUHIO PARK TERRACE C	1475 LINAPUNI ST	SHWS, ENG CONTROLS, INST CONTROL	Higher	3810, NNW
72	1950 HOMERULE STREET	1950 HOMERULE ST	SHWS, SPILLS	Lower	3833, WSW
73	2343 NORTH KING STRE	2343 N KING ST	SHWS, INST CONTROL	Higher	3841, NW
74	DOMESTIC COMMERCIAL	1133 N NIMITZ HWY	SHWS, SPILLS, ENG CONTROLS, INST CONTROL	Lower	3864, South
P75	COSTCO GAS STATION	520 ALAKAWA ST	SHWS, ENG CONTROLS, INST CONTROL, VCP	Lower	3943, SSE
P76	COSTCO WAREHOUSE	525 ALAKAWA ST	SHWS, ENG CONTROLS, INST CONTROL, VCP	Lower	3956, SSE

MAPPED SITES SUMMARY

Target Property Address:
1629 HAKA DR.
, HI 96817

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
Q77	MCCABE, HAMILTON, &	1130 N NIMITZ HWY	SHWS, SPILLS	Lower	3972, South
Q78	CHEVRON KAPALAMA TER	1105 N NIMITZ HWY	SHWS, SPILLS, INST CONTROL	Lower	4049, South
79	HAWAII DAIRY HOLDING	2277 KAMEHAMEHA HWY	SHWS, LUST, UST, VCP, Financial Assurance	Lower	4074, West
80	BEST BUY	ALAKAWA ST & NIMITZ	SHWS, SPILLS	Lower	4106, South
81	HOME DEPOT	421 ALAKAWA ST	SHWS, ENG CONTROLS, INST CONTROL	Lower	4163, South
82	DOLE IWILEI	801 DILLINGHAM BLVD	SHWS, SPILLS, INST CONTROL	Lower	4198, SSE
83	HART STREET WWPS	1031 N NIMITZ HWY	SHWS, UIC	Lower	4315, South
84	GTE HAWAIIAN TEL - C	ALAKAWA ST & NIMITZ	SHWS, SPILLS, ENG CONTROLS, INST CONTROL	Lower	4525, South
85	OTS KALIHI-PALAMA BU	811 MIDDLE ST	SHWS, LUST, UST, Financial Assurance	Lower	4627, WNW
86	KAMEHAMEHA SCOOLS	1887 MAKUAKANE ST	RCRA-CESQG, FINDS, SHWS, SPILLS, ENG CONTROLS,...	Higher	4670, NE
87	IWILEI BUSINESS CENT	501 SUMNER ST	SHWS, SPILLS, INST CONTROL	Lower	4737, SSE
88	BHP GASCO BENZENE SI	616 IWILEI RD	SHWS, SPILLS, INST CONTROL, AIRS	Lower	4781, SSE
R89	HAWAII STEVEDORES	965 N NIMITZ HWY	SHWS, SPILLS, ENG CONTROLS	Lower	4794, South
90	HAWAIIAN MISO AND SO	1714 MARY ST	SHWS, SPILLS	Lower	4813, SW
91	HAWAII MEAT COMPANY	711 MIDDLE ST	SHWS, SPILLS, ENG CONTROLS, INST CONTROL	Lower	4831, WNW
S92	LONGS DRUG STORES WA	2270 HOONEE PL	SHWS, SPILLS, ENG CONTROLS, INST CONTROL	Lower	4862, West
S93	HAGADONE PRINTING CO	2278 HOONEE PL	SHWS, INST CONTROL	Lower	4890, West
94	HAWAIIAN BITUMULS &	248 SAND ISLAND ACCE	SHWS, LUST, UST, INST CONTROL, AIRS	Lower	4890, WSW
R95	CHEVRON HONOLULU TRA	933 N NIMITZ HWY	SHWS, ENG CONTROLS, Financial Assurance	Lower	4903, South
96	HAWAIIAN GAS PRODUCT	516-520 KUWILI ST	EDR MGP	Lower	4956, SSE
97	YEE HOP PROPERTY	621 MIDDLE ST	SHWS, SPILLS	Lower	4962, WNW
T98	BHP GASCO	432 PACIFIC STREET	EDR MGP	Lower	4982, South
99	TRAVEL PLAZA TRANSPO	818 PINE ST	SHWS, LUST, UST, Financial Assurance	Lower	4996, SSE
100	611 MIDDLE STREET WA	611 MIDDLE ST	SHWS, SPILLS, ENG CONTROLS, INST CONTROL	Lower	5044, WNW
T101	UNOCAL 76 HONOLULU L	411 PACIFIC ST	RCRA NonGen / NLR, FINDS, SHWS, UST, SPILLS, VCP,...	Lower	5075, South
U102	VON HAMM TEXTILES	546 KAAAHI ST	SHWS, SPILLS, ENG CONTROLS, INST CONTROL	Lower	5148, SE
U103	NUUANU AUTO COMPANY	545 KAAAHI ST	SHWS	Lower	5152, SE
V104	WEYERHAEUSER	900 N NIMITZ HWY	SHWS, SPILLS	Lower	5159, South
105	TRANS HAWAIIAN - OAH	124 PUUHALE RD	SHWS, LUST, UST	Lower	5177, WSW
106	356 PACIFIC STREET B	356 PACIFIC ST	SHWS, SPILLS	Lower	5257, South
V107	861-869 NORTH NIMITZ	861-869 N NIMITZ HWY	SHWS, ENG CONTROLS, INST CONTROL	Lower	5269, South

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 7 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
KAMEHAMEHA HOUSING P 1629 HAKA DR HONOLULU, HI 96817	FINDS	N/A
KAMEHAMEHA HOUSING P 1629 HAKA DR HONOLULU, HI 96817	LUST Facility Status: Site Cleanup Completed (NFA) UST	N/A
KAMEHAMEHA HOUSING P 1629 HAKA DR HONOLULU, HI	RGA LUST	N/A

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal CERCLIS list

CERCLIS: A review of the CERCLIS list, as provided by EDR, and dated 10/25/2013 has revealed that there are 2 CERCLIS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
FARRINGTON HIGH SCHO	1564 N. KING STREET	NNE 0 - 1/8 (0.067 mi.)	B5	8

Lower Elevation	Address	Direction / Distance	Map ID	Page
TAKAMIYA PROPERTY	850 MOOWAA ST.	SE 1/4 - 1/2 (0.324 mi.)	I32	14

EXECUTIVE SUMMARY

Federal CERCLIS NFRAP site List

CERC-NFRAP: A review of the CERC-NFRAP list, as provided by EDR, and dated 10/25/2013 has revealed that there is 1 CERC-NFRAP site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
FACTORY STREET SITE	2003 N. KING STREET	NW 1/4 - 1/2 (0.324 mi.)	J34	15

Federal RCRA generators list

RCRA-CESQG: A review of the RCRA-CESQG list, as provided by EDR, and dated 12/09/2014 has revealed that there are 3 RCRA-CESQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CHEVRON 93183	***1715 N KING ST***	***NNW 0 - 1/8 (0.118 mi.)***	***C7***	***8***

Lower Elevation	Address	Direction / Distance	Map ID	Page
CHEVRON 95023	***909 WAIAKAMILO RD***	***SE 1/8 - 1/4 (0.203 mi.)***	***D14***	***10***
MARSHALL'S SHELL SS	***1029 HOUGHTAILING ST***	***ESE 1/8 - 1/4 (0.228 mi.)***	***F19***	***11***

State- and tribal - equivalent CERCLIS

SHWS: A review of the SHWS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 57 SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
FARRINGTON HIGH SCHO	***1564 N KING ST***	***NNE 0 - 1/8 (0.067 mi.)***	***B4***	***8***
FACTORY STREET LEAD	***2003 N KING ST***	***NW 1/4 - 1/2 (0.324 mi.)***	***J35***	***15***
KUHIO PARK TERRACE T	***LINAPUNI ST***	***N 1/2 - 1 (0.624 mi.)***	***63***	***22***
CHANG-CHOW PROPERTY,	2161 N SCHOOL ST	N 1/2 - 1 (0.695 mi.)	67	23
KUHIO PARK TERRACE C	***1475 LINAPUNI ST***	***NNW 1/2 - 1 (0.722 mi.)***	***71***	***23***
2343 NORTH KING STRE	***2343 N KING ST***	***NW 1/2 - 1 (0.727 mi.)***	***73***	***24***
KAMEHAMEHA SCOOLS	***1887 MAKUAKANE ST***	***NE 1/2 - 1 (0.884 mi.)***	***86***	***26***

Lower Elevation	Address	Direction / Distance	Map ID	Page
ROSS TRUSTS	***819 MOOWAA ST***	***SSE 1/4 - 1/2 (0.323 mi.)***	***H29***	***14***
TAKAMIYA PROPERTY	***850 MOOWAA ST***	***SE 1/4 - 1/2 (0.324 mi.)***	***I33***	***15***
KAPALAMA INCINERATOR	***757 KOKEA ST***	***WNW 1/4 - 1/2 (0.397 mi.)***	***42***	***17***
DILLINGHAM BOULEVARD	***DILLINGHAM BLVD & MO***	***WSW 1/4 - 1/2 (0.427 mi.)***	***K45***	***18***
KAMEHAMEHA SCHOOLS -	***1336 DILLINGHAM BLVD***	***S 1/4 - 1/2 (0.440 mi.)***	***48***	***18***
GTE-HAWAIIAN TEL EMP	***1138 N KING ST***	***SE 1/4 - 1/2 (0.444 mi.)***	***L49***	***19***
GENERAL TIRE	***505 WAIAKAMILO RD***	***SSW 1/4 - 1/2 (0.458 mi.)***	***M50***	***19***
1385 COLBURN STREET	***1385 COLBURN ST***	***SSW 1/4 - 1/2 (0.463 mi.)***	***M52***	***19***
JBL HAWAII, LTD	***905 KOKEA ST***	***SE 1/4 - 1/2 (0.495 mi.)***	***N58***	***21***
CLASSIC BOWL	1190 DILLINGHAM BLVD	S 1/2 - 1 (0.501 mi.)	60	21
1305 HART STREET	***1305 HART ST***	***SSW 1/2 - 1 (0.598 mi.)***	***61***	***22***

Lower Elevation	Address	Direction / Distance	Map ID	Page
PACIFIC POULTRY	1804 KANAKANUI ST	WSW 1/2 - 1 (0.601 mi.)	62	22
YOUNG BROTHERS REFRI	1331 N NIMITZ HWY	SSW 1/2 - 1 (0.652 mi.)	64	22
HONOLULU COMMUNITY C	874 DILLINGHAM BLVD	SSE 1/2 - 1 (0.679 mi.)	O65	22
THEO DAVIES CATERPIL	935 DILLINGHAM BLVD	SSE 1/2 - 1 (0.693 mi.)	O66	22
PIER 51 HONOLULU HAR	925 DILLINGHAM BLVD	SSE 1/2 - 1 (0.699 mi.)	O68	23
YUE-FUNG KWAN CONSTR	2004-2008 REPUBLICAN	WSW 1/2 - 1 (0.701 mi.)	69	23
LENAKONA DEVELOPMENT	2305 KAMEHAMEHA HWY	WNW 1/2 - 1 (0.712 mi.)	70	23
1950 HOMERULE STREET	1950 HOMERULE ST	WSW 1/2 - 1 (0.726 mi.)	72	24
DOMESTIC COMMERCIAL	1133 N NIMITZ HWY	S 1/2 - 1 (0.732 mi.)	74	24
COSTCO GAS STATION	520 ALAKAWA ST	SSE 1/2 - 1 (0.747 mi.)	P75	24
COSTCO WAREHOUSE	525 ALAKAWA ST	SSE 1/2 - 1 (0.749 mi.)	P76	24
MCCABE, HAMILTON, &	1130 N NIMITZ HWY	S 1/2 - 1 (0.752 mi.)	Q77	24
CHEVRON KAPALAMA TER	1105 N NIMITZ HWY	S 1/2 - 1 (0.767 mi.)	Q78	25
HAWAII DAIRY HOLDING	2277 KAMEHAMEHA HWY	W 1/2 - 1 (0.772 mi.)	79	25
BEST BUY	ALAKAWA ST & NIMITZ	S 1/2 - 1 (0.778 mi.)	80	25
HOME DEPOT	421 ALAKAWA ST	S 1/2 - 1 (0.788 mi.)	81	25
DOLE IWILEI	801 DILLINGHAM BLVD	SSE 1/2 - 1 (0.795 mi.)	82	25
HART STREET WWPS	1031 N NIMITZ HWY	S 1/2 - 1 (0.817 mi.)	83	26
GTE HAWAIIAN TEL - C	ALAKAWA ST & NIMITZ	S 1/2 - 1 (0.857 mi.)	84	26
OTS KALIHI-PALAMA BU	811 MIDDLE ST	WNW 1/2 - 1 (0.876 mi.)	85	26
IWILEI BUSINESS CENT	501 SUMNER ST	SSE 1/2 - 1 (0.897 mi.)	87	27
BHP GASCO BENZENE SI	616 IWILEI RD	SSE 1/2 - 1 (0.905 mi.)	88	27
HAWAII STEVEDORES	965 N NIMITZ HWY	S 1/2 - 1 (0.908 mi.)	R89	27
HAWAIIAN MISO AND SO	1714 MARY ST	SW 1/2 - 1 (0.912 mi.)	90	27
HAWAII MEAT COMPANY	711 MIDDLE ST	WNW 1/2 - 1 (0.915 mi.)	91	27
LONGS DRUG STORES WA	2270 HOONEE PL	W 1/2 - 1 (0.921 mi.)	S92	27
HAGADONE PRINTING CO	2278 HOONEE PL	W 1/2 - 1 (0.926 mi.)	S93	28
HAWAIIAN BITUMULS &	248 SAND ISLAND ACCE	WSW 1/2 - 1 (0.926 mi.)	94	28
CHEVRON HONOLULU TRA	933 N NIMITZ HWY	S 1/2 - 1 (0.929 mi.)	R95	28
YEE HOP PROPERTY	621 MIDDLE ST	WNW 1/2 - 1 (0.940 mi.)	97	28
TRAVEL PLAZA TRANSPO	818 PINE ST	SSE 1/2 - 1 (0.946 mi.)	99	29
611 MIDDLE STREET WA	611 MIDDLE ST	WNW 1/2 - 1 (0.955 mi.)	100	29
UNOCAL 76 HONOLULU L	411 PACIFIC ST	S 1/2 - 1 (0.961 mi.)	T101	29
VON HAMM TEXTILES	546 KAAAHI ST	SE 1/2 - 1 (0.975 mi.)	U102	30
NUUANU AUTO COMPANY	545 KAAAHI ST	SE 1/2 - 1 (0.976 mi.)	U103	30
WEYERHAEUSER	900 N NIMITZ HWY	S 1/2 - 1 (0.977 mi.)	V104	30
TRANS HAWAIIAN - OAH	124 PUUHALE RD	WSW 1/2 - 1 (0.980 mi.)	105	30
356 PACIFIC STREET B	356 PACIFIC ST	S 1/2 - 1 (0.996 mi.)	106	30
861-869 NORTH NIMITZ	861-869 N NIMITZ HWY	S 1/2 - 1 (0.998 mi.)	V107	31

State and tribal leaking storage tank lists

LUST: A review of the LUST list, as provided by EDR, and dated 12/16/2014 has revealed that there are 30 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
KALIHI CHEVRON SELF Facility Status: Site Cleanup Completed (NFA)	1715 N KING ST	NNW 0 - 1/8 (0.118 mi.)	C8	8
C&CH KALIHI FIRE STA Facility Status: Site Cleanup Completed (NFA)	1742 N KING ST	NW 1/8 - 1/4 (0.145 mi.)	C10	9
ISLAND MINI-MART NOR Facility Status: Active Remediation	1860 N KING ST	NW 1/8 - 1/4 (0.216 mi.)	E16	10

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PACIFIC TIRE Facility Status: Site Cleanup Completed (NFA)	1955 N KING ST	NW 1/4 - 1/2 (0.289 mi.)	26	13
MORRIS ANGELO Facility Status: Site Cleanup Completed (NFA)	905 FACTORY ST	WNW 1/4 - 1/2 (0.347 mi.)	38	16
RAKUYO KEN U.S.A. Facility Status: Site Cleanup Completed (NFA)	804 GULICK AVE	WNW 1/4 - 1/2 (0.438 mi.)	47	18

Lower Elevation	Address	Direction / Distance	Map ID	Page
CLASSIC RUSTPROOFING Facility Status: Site Cleanup Completed (NFA)	1437 N KING ST	ESE 1/8 - 1/4 (0.172 mi.)	11	9
ALPAC CORPORATION Facility Status: Site Cleanup Completed (NFA)	815 WAIAKAMILO RD	SSE 1/8 - 1/4 (0.223 mi.)	17	11
MARSHALL'S SHELL SS Facility Status: Site Cleanup Completed (NFA)	1029 HOUGHTAILING ST	ESE 1/8 - 1/4 (0.228 mi.)	F18	11
ISLAND PAINTING Facility Status: Site Cleanup Completed (NFA)	1353 MOOKAULA ST	SE 1/8 - 1/4 (0.238 mi.)	G24	12
FUTURE HONOLULU FORD Facility Status: Site Cleanup Completed (NFA)	CORNER OF HOUGHTAILI	ESE 1/8 - 1/4 (0.240 mi.)	F25	12
HAWAIIAN CANDIES & N Facility Status: Site Cleanup Completed (NFA)	707 WAIAKAMILO RD	S 1/4 - 1/2 (0.309 mi.)	27	13
OKADA TRUCKING CO., Facility Status: Site Cleanup Completed (NFA)	818 MOOWAA ST	SSE 1/4 - 1/2 (0.321 mi.)	H28	13
SEN PLEX CORPORATION Facility Status: Site Cleanup Completed (NFA)	819 MOOWAA ST	SSE 1/4 - 1/2 (0.323 mi.)	H30	14
I. STEVEN SUNADA Facility Status: Site Cleanup Completed (NFA)	850 MOOWAA ST	SE 1/4 - 1/2 (0.324 mi.)	I31	14
U.S. POSTAL SERVICE Facility Status: Site Cleanup Completed (NFA)	1271 N KING ST	ESE 1/4 - 1/2 (0.325 mi.)	36	15
TESORO 2GO #61012 Facility Status: Site Cleanup Completed (NFA)	1529 DILLINGHAM BLVD	SW 1/4 - 1/2 (0.345 mi.)	37	15
AIM DILLINGHAM Facility Status: Site Cleanup Completed with EHMP Facility Status: Site Cleanup Completed (NFA)	1701 DILLINGHAM BLVD	WSW 1/4 - 1/2 (0.363 mi.)	39	16
OAHU PLUMBING & SHEE Facility Status: Site Cleanup Completed (NFA)	1217 N KING ST	SE 1/4 - 1/2 (0.367 mi.)	40	16
PROPERTY 64 WAREHOUS Facility Status: Site Assessment Ongoing	609 WAIAKAMILO ROAD	S 1/4 - 1/2 (0.378 mi.)	41	17
JOHIRO BROTHERS, INC Facility Status: Site Cleanup Completed (NFA)	1240 MOOKAULA ST	SE 1/4 - 1/2 (0.409 mi.)	43	17
BOB'S BAR B QUE Facility Status: Site Cleanup Completed (NFA)	1366 DILLINGHAM BLVD	S 1/4 - 1/2 (0.422 mi.)	44	17
KEN T SERVICE Facility Status: Site Cleanup Completed (NFA)	1901 DILLINGHAM BLVD	WSW 1/4 - 1/2 (0.427 mi.)	K46	18
OAHU PLUMBING & SHEE Facility Status: Site Cleanup Completed (NFA)	926 KOHOU ST	SE 1/4 - 1/2 (0.460 mi.)	51	19
7-11 KAPALAMA Facility Status: Site Cleanup Completed (NFA)	1136 N KING ST.	SE 1/4 - 1/2 (0.464 mi.)	L53	19

Lower Elevation	Address	Direction / Distance	Map ID	Page
SHIMAYA SHOTEN, LTD.	*710 KOHOU ST*	*SSE 1/4 - 1/2 (0.468 mi.)*	*54*	*20*
Facility Status: Site Cleanup Completed (NFA)				
KALIHI STREAM CHEVRO	*2160 N. KING ST.*	*NW 1/4 - 1/2 (0.470 mi.)*	*55*	*20*
Facility Status: Site Cleanup Completed (NFA)				
LOOMIS ARMORED INC.	*1540 KALANI ST*	*SW 1/4 - 1/2 (0.476 mi.)*	*56*	*20*
Facility Status: Site Cleanup Completed (NFA)				
BENIYA SHOKUDO CATER	*1448 KALANI ST*	*SSW 1/4 - 1/2 (0.487 mi.)*	*57*	*21*
Facility Status: Site Cleanup Completed (NFA)				
JBL HAWAII LTD	*905 KOKEA ST*	*SE 1/4 - 1/2 (0.495 mi.)*	*N59*	*21*
Facility Status: Site Cleanup Completed (NFA)				

State and tribal registered storage tank lists

UST: A review of the UST list, as provided by EDR, and dated 12/18/2014 has revealed that there are 11 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
KALIHI CHEVRON SELF	*1715 N KING ST*	*NNW 0 - 1/8 (0.118 mi.)*	*C8*	*8*
C&CH KALIHI FIRE STA	*1742 N KING ST*	*NW 1/8 - 1/4 (0.145 mi.)*	*C10*	*9*
ISLAND MINI-MART NOR	*1860 N KING ST*	*NW 1/8 - 1/4 (0.216 mi.)*	*E16*	*10*
KALIHI CENTRAL OFFIC	*1025 KAILI ST*	*NW 1/8 - 1/4 (0.232 mi.)*	*21*	*12*

Lower Elevation	Address	Direction / Distance	Map ID	Page
CLASSIC RUSTPROOFING	*1437 N KING ST*	*ESE 1/8 - 1/4 (0.172 mi.)*	*11*	*9*
CHEVRON 95023	*909 WAIAKAMILO RD*	*SE 1/8 - 1/4 (0.203 mi.)*	*D14*	*10*
ALPAC CORPORATION	*815 WAIAKAMILO RD*	*SSE 1/8 - 1/4 (0.223 mi.)*	*17*	*11*
MARSHALL'S SHELL SS	*1029 HOUGHTAILING ST*	*ESE 1/8 - 1/4 (0.228 mi.)*	*F18*	*11*
KALIHI PUMP STATION	1381 N KING ST	ESE 1/8 - 1/4 (0.229 mi.)	F20	11
ISLAND PAINTING	*1353 MOOKAULA ST*	*SE 1/8 - 1/4 (0.238 mi.)*	*G24*	*12*
FUTURE HONOLULU FORD	*CORNER OF HOUGHTAILI*	*ESE 1/8 - 1/4 (0.240 mi.)*	*F25*	*12*

State and tribal institutional control / engineering control registries

ENG CONTROLS: A review of the ENG CONTROLS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 4 ENG CONTROLS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
FACTORY STREET LEAD	*2003 N KING ST*	*NW 1/4 - 1/2 (0.324 mi.)*	*J35*	*15*

Lower Elevation	Address	Direction / Distance	Map ID	Page
DILLINGHAM BOULEVARD	*DILLINGHAM BLVD & MO*	*WSW 1/4 - 1/2 (0.427 mi.)*	*K45*	*18*
GTE-HAWAIIAN TEL EMP	*1138 N KING ST*	*SE 1/4 - 1/2 (0.444 mi.)*	*L49*	*19*
JBL HAWAII, LTD	*905 KOKEA ST*	*SE 1/4 - 1/2 (0.495 mi.)*	*N58*	*21*

INST CONTROL: A review of the INST CONTROL list, as provided by EDR, and dated 12/02/2014 has revealed that there are 5 INST CONTROL sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
FACTORY STREET LEAD	*2003 N KING ST*	*NW 1/4 - 1/2 (0.324 mi.)*	*J35*	*15*

Lower Elevation	Address	Direction / Distance	Map ID	Page
KAPALAMA INCINERATOR	*757 KOKEA ST*	*WNW 1/4 - 1/2 (0.397 mi.)*	*42*	*17*
DILLINGHAM BOULEVARD	*DILLINGHAM BLVD & MO*	*WSW 1/4 - 1/2 (0.427 mi.)*	*K45*	*18*
GTE-HAWAIIAN TEL EMP	*1138 N KING ST*	*SE 1/4 - 1/2 (0.444 mi.)*	*L49*	*19*
JBL HAWAII, LTD	*905 KOKEA ST*	*SE 1/4 - 1/2 (0.495 mi.)*	*N58*	*21*

State and tribal voluntary cleanup sites

VCP: A review of the VCP list, as provided by EDR, and dated 12/02/2014 has revealed that there is 1 VCP site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ROSS TRUSTS	*819 MOOWAA ST*	*SSE 1/4 - 1/2 (0.323 mi.)*	*H29*	*14*

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

RCRA NonGen / NLR: A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 12/09/2014 has revealed that there is 1 RCRA NonGen / NLR site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ISLAND PAINTING	*1353 MOOKAULA ST*	*SE 1/8 - 1/4 (0.238 mi.)*	*G23*	*12*

DOD: A review of the DOD list, as provided by EDR, and dated 12/31/2005 has revealed that there are 2 DOD sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAND ISLAND MILITARY		SSW 1/2 - 1 (0.704 mi.)	0	7
FORT SHAFTER		NW 1/4 - 1/2 (0.496 mi.)	0	7

EXECUTIVE SUMMARY

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: A review of the EDR MGP list, as provided by EDR, has revealed that there are 2 EDR MGP sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
HAWAIIAN GAS PRODUCT	516-520 KUWILI ST	SSE 1/2 - 1 (0.939 mi.)	96	28
BHP GASCO	432 PACIFIC STREET	S 1/2 - 1 (0.944 mi.)	T98	29

EDR US Hist Auto Stat: A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there are 6 EDR US Hist Auto Stat sites within approximately 0.25 miles of the target property.

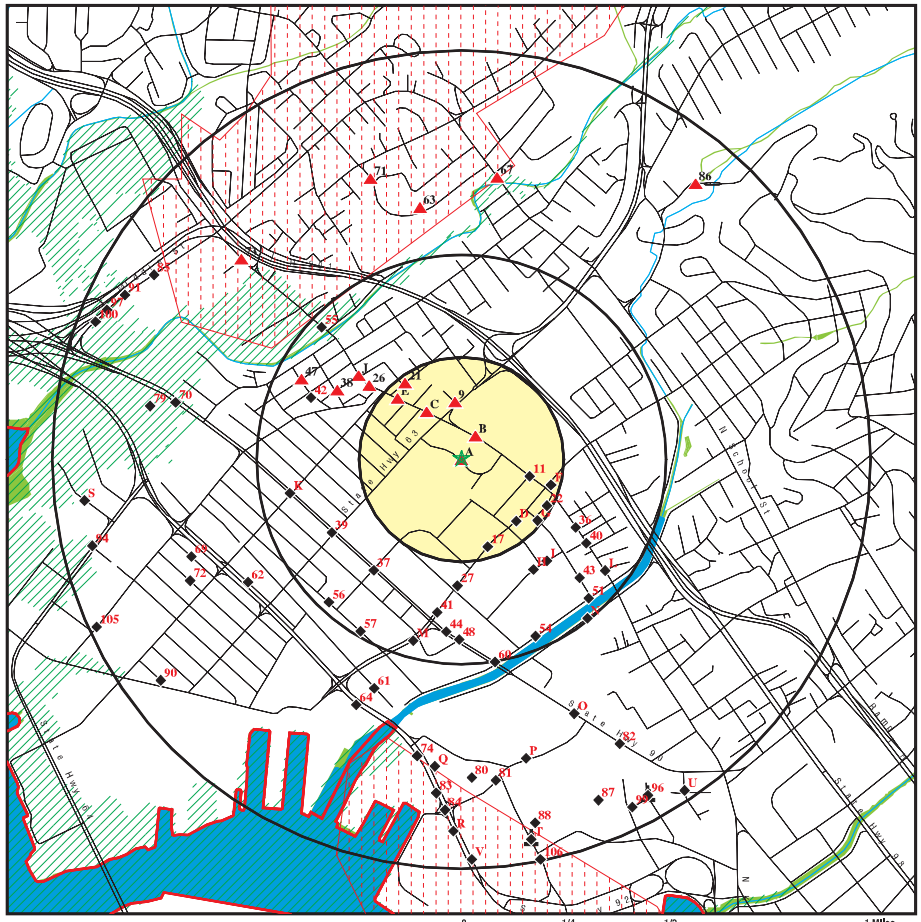
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	1715 N KING ST	NNW 0 - 1/8 (0.118 mi.)	C6	8
Not reported	1714 DAY PL	N 1/8 - 1/4 (0.142 mi.)	9	9
Not reported	1860 N KING ST	NW 1/8 - 1/4 (0.216 mi.)	E15	10

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	908 WAIAKAMILO RD	SE 1/8 - 1/4 (0.200 mi.)	D12	9
Not reported	909 WAIAKAMILO RD	SE 1/8 - 1/4 (0.202 mi.)	D13	10
Not reported	957 KAMENANI ST	ESE 1/8 - 1/4 (0.238 mi.)	22	12

Count: 10 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
HONOLULU	S117391417	1339 SCHOOL STREET	1339, 1341, 1343 N SCHOOL ST		SHWS, ENG CONTROLS, INST CONT
HONOLULU	S108008549	KALANI, HART, MOKUAEA STREET, HONO	HART ST & KALANI ST & MOKUAEA		SHWS
HONOLULU	1006819301	KEEHI LAGOON CANOE FACILITY, INCRE	HOONEE PL	96819	SHWS, ENG CONTROLS, INST CONT
HONOLULU	S115488703	KALIHI AND KALAEPAA INTERSECTION	KALAEPAA DR AND KALIHI ST		SHWS, SPILLS
HONOLULU	1006820337	ABC DISPOSAL COMPANY	2760 KAMEHAMEHA HWY	96819	SHWS
HONOLULU	S111704706	FORMER KAPALAMA MILITARY RESERVATI	N NIMITZ HWY		SHWS
HONOLULU	S108008765	CITIZENS ENERGY SERVICES PIER 38	NIMITZ HWY		SHWS, SPILLS, ENG CONTROLS, INS CONTROL
HONOLULU	S106819311	NIMITZ HIGHWAY WATER IMPROVEMENT P	N NIMITZ HWY	96817	SHWS
HONOLULU	1006820220	DLNR BURIED DRUM SITE	SAND ISLAND ACCESS RD	96819	SHWS, SPILLS, INST CONTROL
HONOLULU	S108859926	KOKUA KALIHI VALLEY ACTIVE LIVING	UPPER KALIHI ST		SHWS, BROWNFIELDS

OVERVIEW MAP - 4237094.34S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Kamehameha Homes ADDRESS: 1629 Haka Dr. Honolulu HI 96817 LAT/LONG: 21.3295 / 157.8747	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.34s DATE: March 17, 2015 5:38 pm

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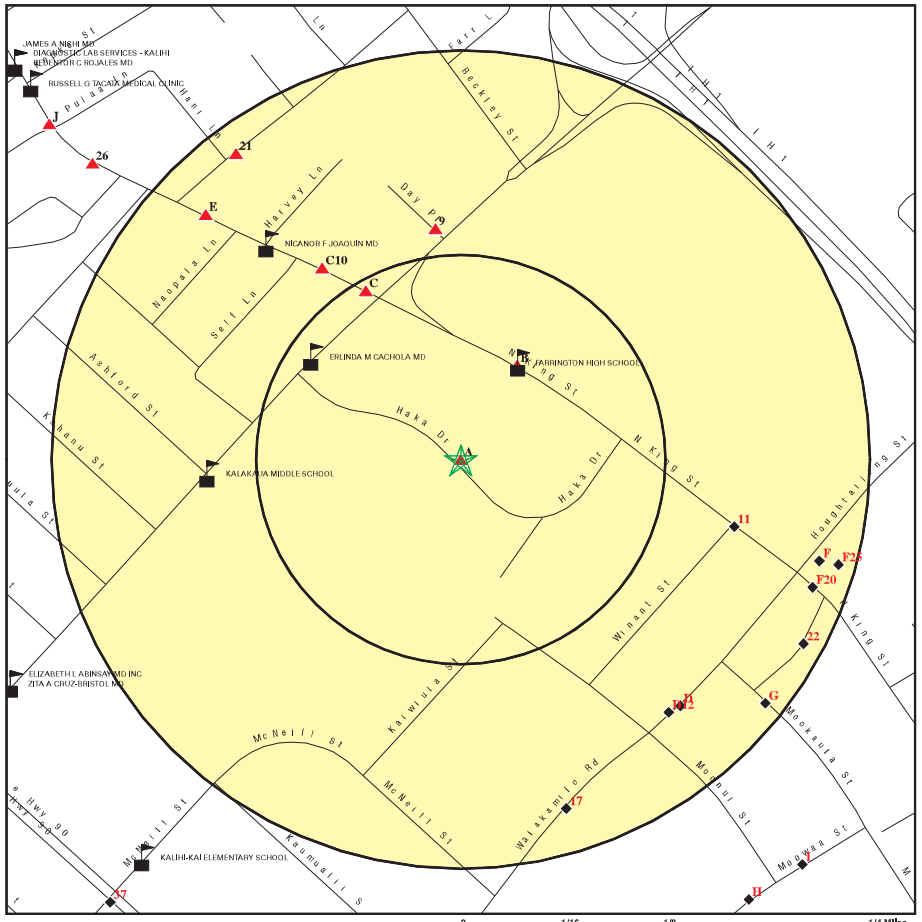
DETAIL MAP - 4237094.34S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Kamehameha Homes ADDRESS: 1629 Haka Dr. Honolulu HI 96817 LAT/LONG: 21.3295 / 157.8747	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.34s DATE: March 17, 2015 5:39 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		1	0	1	NR	NR	2
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	1	NR	NR	1
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		1	2	NR	NR	NR	3
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
SHWS	1.000		1	0	10	46	NR	57
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500	1	1	7	22	NR	NR	31
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250	1	1	10	NR	NR	NR	12

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		0	0	4	NR	NR	4
INST CONTROL	0.500		0	0	5	NR	NR	5
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	1	NR	NR	1
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	1	NR	NR	NR	1
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	1	1	NR	2
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP	1	NR	NR	NR	NR	NR	1
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	2	NR	2
EDR US Hist Auto Stat	0.250		1	5	NR	NR	NR	6
EDR US Hist Cleaners	0.250		0	0	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP	1	NR	NR	NR	NR	NR	1
RGA HWS	TP		NR	NR	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
A1 Target Property	**KAMEHAMEHA HOUSING PROJECT** **1629 HAKA DR** **HONOLULU, HI 96817**	**FINDS**	**1016368703** **N/A**
Actual: 39 ft.	Click here for full text details		
A2 Target Property	**KAMEHAMEHA HOUSING PROJECT** **1629 HAKA DR** **HONOLULU, HI 96817**	**LUST** **UST**	**U003221882** **N/A**
Actual: 39 ft.	Click here for full text details **LUST** Facility Id: 9-103126 Facility Status: Site Cleanup Completed (NFA) **UST** Facility Id: 9-103126 Tank Status: Permanently Out of Use		
A3 Target Property	**KAMEHAMEHA HOUSING PROJECT** **1629 HAKA DR** **HONOLULU, HI**	**RGA LUST**	**S116402341** **N/A**
Actual: 39 ft.	Click here for full text details		
DOD Region SSW 1/2-1 3717 ft.	**SAND ISLAND MILITARY RESERVATION** **SAND ISLAND MILITARY RESE (County), HI**	**DOD**	**CUSA147757** **N/A**
	Click here for full text details		
DOD Region NW 1/4-1/2 2621 ft.	**FORT SHAFTER** **FORT SHAFTER (County), HI**	**DOD**	**CUSA147753** **N/A**
	Click here for full text details		

B4
NNE
< 1/8
0.067 mi.
355 ft.

Relative: Higher

FARRINGTON HIGH SCHOOL
1564 N KING ST
HONOLULU, HI 96817

FTTS
HIST FTTS
SHWS
SPILLS

1007277849
N/A

Click here for full text details

B5
NNE
< 1/8
0.067 mi.
355 ft.

Relative: Higher

FARRINGTON HIGH SCHOOL
1564 N. KING STREET
HONOLULU, HI 96819

CERCLIS

1000885453
HID984467050

Click here for full text details

CERCLIS
EPA Id: HID984467050

C6
NNW
< 1/8
0.118 mi.
621 ft.

Relative: Higher

1715 N KING ST
HONOLULU, HI 96819

EDR US Hist Auto Stat

1015268581
N/A

Click here for full text details

C7
NNW
< 1/8
0.118 mi.
625 ft.

Relative: Higher

CHEVRON 93183
1715 N KING ST
HONOLULU, HI 96819

RCRA-CESQG
FINDS

1008880412
HIR000136895

Click here for full text details

RCRA-CESQG
EPA Id: HIR000136895

C8
NNW
< 1/8
0.118 mi.
625 ft.

Relative: Higher

KALIHI CHEVRON SELF SERVE 93183
1715 N KING ST
HONOLULU, HI 96819

LUST
UST
Financial Assurance

U001235428
N/A

Click here for full text details

LUST
Facility Id: 9-101236
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-101236
Tank Status: Currently in Use

9
North
1/8-1/4
0.142 mi.
749 ft.

Relative: Higher

1714 DAY PL
HONOLULU, HI 96819

EDR US Hist Auto Stat

1015268382
N/A

Click here for full text details

C10
NW
1/8-1/4
0.145 mi.
763 ft.

Relative: Higher

C&CH KALIHI FIRE STATION
1742 N KING ST
HONOLULU, HI 96819

LUST
UST

1006843326
N/A

Click here for full text details

LUST
Facility Id: 9-100079
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-100079
Tank Status: Permanently Out of Use

11
ESE
1/8-1/4
0.172 mi.
908 ft.

Relative: Lower

CLASSIC RUSTPROOFING
1437 N KING ST
HONOLULU, HI 96817

LUST
UST

U003732579
N/A

Click here for full text details

LUST
Facility Id: 9-103539
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-103539
Tank Status: Permanently Out of Use

D12
SE
1/8-1/4
0.200 mi.
1056 ft.

Relative: Lower

908 WAIAKAMILO RD
HONOLULU, HI 96817

EDR US Hist Auto Stat

1015670693
N/A

Click here for full text details

D13
SE
1/8-1/4
0.202 mi.
1064 ft.

Relative: Lower

909 WAIAKAMILO RD
HONOLULU, HI 96817

EDR US Hist Auto Stat — **1015671002**, **N/A**

Click here for full text details

D14
SE
1/8-1/4
0.203 mi.
1072 ft.

Relative: Lower

CHEVRON 95023
909 WAIAKAMILO RD
HONOLULU, HI 96817

RCRA-CESQG — **1000393804**
UST — **HID981628894**
Financial Assurance

Click here for full text details

RCRA-CESQG
EPA Id: HID981628894

UST
Facility Id: 9-101238
Tank Status: Temporarily out of Use
Tank Status: Currently In Use
Tank Status: Permanently Out of Use

E15
NW
1/8-1/4
0.216 mi.
1141 ft.

Relative: Higher

1860 N KING ST
HONOLULU, HI 96819

EDR US Hist Auto Stat — **1015285777**, **N/A**

Click here for full text details

E16
NW
1/8-1/4
0.216 mi.
1141 ft.

Relative: Higher

ISLAND MINI-MART NORTH KING
1860 N KING ST
HONOLULU, HI 96819

LUST — **U004223403**
UST — **N/A**
Financial Assurance

Click here for full text details

LUST
Facility Id: 9-101186
Facility Status: Active Remediation

UST
Facility Id: 9-101186
Tank Status: Permanently Out of Use
Tank Status: Permanently out of Use
Tank Status: Currently In Use
Tank Status: Currently in Use

17
SSE
1/8-1/4
0.223 mi.
1176 ft.

Relative: Lower

ALPAC CORPORATION
815 WAIAKAMILO RD
HONOLULU, HI 96800

LUST — **U003221749**
UST — **N/A**

Click here for full text details

LUST
Facility Id: 9-102546
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-102546
Tank Status: Permanently Out of Use

F18
ESE
1/8-1/4
0.228 mi.
1202 ft.

Relative: Lower

MARSHALL'S SHELL SS
1029 HOUGHTAILING ST
HONOLULU, HI 96817

LUST — **U003402806**
UST — **N/A**
Financial Assurance

Click here for full text details

LUST
Facility Id: 9-100783
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-100783
Tank Status: Permanently Out of Use
Tank Status: Currently in Use

F19
ESE
1/8-1/4
0.228 mi.
1202 ft.

Relative: Lower

MARSHALL'S SHELL SS
1029 HOUGHTAILING ST
HONOLULU, HI 96817

RCRA-CESQG — **1004689079**
FINDS — **HIR000110882**

Click here for full text details

RCRA-CESQG
EPA Id: HIR000110882

F20
ESE
1/8-1/4
0.229 mi.
1207 ft.

Relative: Lower

KALIHI PUMP STATION
1381 N KING ST
HONOLULU, HI 96817

UST — **U001236006**
N/A

Click here for full text details

UST
Facility Id: 9-102663
Tank Status: Permanently Out of Use

21 NW 1/8-1/4 0.232 mi. 1225 ft. Relative: Higher

KALIHI CENTRAL OFFICE — UST, Financial Assurance — U001235192, N/A
1025 KAILI ST
HONOLULU, HI 96819

Click here for full text details

UST
Facility Id: 9-100508
Tank Status: Currently In Use
Tank Status: Permanently Out of Use

---

22 ESE 1/8-1/4 0.238 mi. 1255 ft. Relative: Lower

957 KAMENANI ST — EDR US Hist Auto Stat — 1015684014, N/A
HONOLULU, HI 96817

Click here for full text details

G23 SE 1/8-1/4 0.238 mi. 1258 ft. Relative: Lower

ISLAND PAINTING — RCRA NonGen / NLR, FINDS — 1000601457, HID984466862
1353 MOOKAULA ST
HONOLULU, HI 96817

Click here for full text details

RCRA NonGen / NLR
EPA Id: HID984466862

G24 SE 1/8-1/4 0.238 mi. 1258 ft. Relative: Lower

ISLAND PAINTING — LUST, UST, Financial Assurance — U001235756, N/A
1353 MOOKAULA ST
HONOLULU, HI 96817

Click here for full text details

LUST
Facility Id: 9-102161
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-102161
Tank Status: Permanently Out of Use

F25 ESE 1/8-1/4 0.240 mi. 1265 ft. Relative: Lower

FUTURE HONOLULU FORD PROPERTY — LUST, UST — U003986422, N/A
CORNER OF HOUGHTAILING AND KING ST
HONOLULU, HI 96819

Click here for full text details

LUST
Facility Id: 9-103785

FUTURE HONOLULU FORD PROPERTY (Continued) — U003986422

Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-103785
Tank Status: Permanently Out of Use

---

26 NW 1/4-1/2 0.289 mi. 1524 ft. Relative: Higher

PACIFIC TIRE — LUST, UST — U003541731, N/A
1955 N KING ST
HONOLULU, HI 96819

Click here for full text details

LUST
Facility Id: 9-101450
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-101450
Tank Status: Permanently Out of Use

---

27 South 1/4-1/2 0.309 mi. 1629 ft. Relative: Lower

HAWAIIAN CANDIES & NUTS. LTD — LUST, UST — U001235654, N/A
707 WAIAKAMILO RD
HONOLULU, HI 96817

Click here for full text details

LUST
Facility Id: 9-101980
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-101980
Tank Status: Permanently Out of Use

H28 SSE 1/4-1/2 0.321 mi. 1696 ft. Relative: Lower

OKADA TRUCKING CO., LTD. — LUST, UST, Financial Assurance — U001235137, N/A
818 MOOWAA ST
HONOLULU, HI 96817

Click here for full text details

LUST
Facility Id: 9-100285
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-100285
Tank Status: Currently in Use
Tank Status: Permanently Out of Use

H29
SSE
1/4-1/2
0.323 mi.
1706 ft.

Relative: Lower

ROSS TRUSTS
819 MOOWAA ST
HONOLULU, HI 96817

SHWS **S103290154**
VCP **N/A**

Click here for full text details

H30
SSE
1/4-1/2
0.323 mi.
1706 ft.

Relative: Lower

SEN PLEX CORPORATION
819 MOOWAA ST
HONOLULU, HI 96817

LUST **U003346385**
UST **N/A**

Click here for full text details

LUST
Facility Id: 9-103359
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-103359
Tank Status: Permanently Out of Use

I31
SE
1/4-1/2
0.324 mi.
1709 ft.

Relative: Lower

I. STEVEN SUNADA
850 MOOWAA ST
HONOLULU, HI 96817

LUST **U001235118**
UST **N/A**

Click here for full text details

LUST
Facility Id: 9-100251
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-100251
Tank Status: Permanently Out of Use

I32
SE
1/4-1/2
0.324 mi.
1709 ft.

Relative: Lower

TAKAMIYA PROPERTY
850 MOOWAA ST.
HONOLULU, HI 96817

CERCLIS **1000707614**
HID984468371

Click here for full text details

CERCLIS
EPA Id: HID984468371

I33
SE
1/4-1/2
0.324 mi.
1709 ft.

Relative: Lower

TAKAMIYA PROPERTY
850 MOOWAA ST
HONOLULU, HI 96817

SHWS **S106820561**
SPILLS **N/A**

Click here for full text details

J34
NW
1/4-1/2
0.324 mi.
1713 ft.

Relative: Higher

FACTORY STREET SITE
2003 N. KING STREET
HONOLULU, HI 96812

CERC-NFRAP **1003879898**
HI0000049775

Click here for full text details

CERC-NFRAP
EPA Id: HI0000049775

J35
NW
1/4-1/2
0.324 mi.
1713 ft.

Relative: Higher

FACTORY STREET LEAD
2003 N KING ST
HONOLULU, HI 96819

SHWS **1006820199**
SPILLS **N/A**
ENG CONTROLS
INST CONTROL

Click here for full text details

36
ESE
1/4-1/2
0.325 mi.
1716 ft.

Relative: Lower

U.S. POSTAL SERVICE - KAPALAMA
1271 N KING ST
HONOLULU, HI 96817

LUST **U001235585**
UST **N/A**
Financial Assurance

Click here for full text details

LUST
Facility Id: 9-101773
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-101773
Tank Status: Permanently Out of Use

37
SW
1/4-1/2
0.345 mi.
1821 ft.

Relative: Lower

TESORO 2GO #61012
1529 DILLINGHAM BLVD
HONOLULU, HI 96817

LUST **U003402811**
UST **N/A**
Financial Assurance

Click here for full text details

LUST
Facility Id: 9-100915
Facility Status: Site Cleanup Completed (NFA)

UST

TESORO 2GO #61012 (Continued) — **U003402811**

Facility Id: 9-100915
Tank Status: Currently in Use
Tank Status: Currently In Use
Tank Status: Permanently Out of Use

---

38 WNW 1/4-1/2 0.347 mi. 1834 ft. Relative: Higher

MORRIS ANGELO
905 FACTORY ST
HONOLULU, HI 96819

Database(s): **LUST, UST**
EDR ID Number: **U003711688**
EPA ID Number: **N/A**

Click here for full text details

LUST
Facility Id: 9-103511
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-103511
Tank Status: Permanently Out of Use

---

39 WSW 1/4-1/2 0.363 mi. 1917 ft. Relative: Lower

AIM DILLINGHAM
1701 DILLINGHAM BLVD.
HONOLULU, HI 96819

Database(s): **LUST, UST, Financial Assurance**
EDR ID Number: **U001235160**
EPA ID Number: **N/A**

Click here for full text details

LUST
Facility Id: 9-100322
Facility Status: Site Cleanup Completed with EHMP
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-100322
Tank Status: Permanently Out of Use
Tank Status: Currently In Use

---

40 SE 1/4-1/2 0.367 mi. 1938 ft. Relative: Lower

OAHU PLUMBING & SHEETMETAL
1217 N KING ST
HONOLULU, HI 96819

Database(s): **LUST, UST**
EDR ID Number: **U003221928**
EPA ID Number: **N/A**

Click here for full text details

LUST
Facility Id: 9-103346
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-103346
Tank Status: Permanently Out of Use

41 South 1/4-1/2 0.378 mi. 1995 ft. Relative: Lower

PROPERTY 64 WAREHOUSE
609 WAIAKAMILO ROAD
HONOLULU, HI 96817

Database(s): **LUST, UST**
EDR ID Number: **U004130651**
EPA ID Number: **N/A**

Click here for full text details

LUST
Facility Id: 9-103873
Facility Status: Site Assessment Ongoing

UST
Facility Id: 9-103873
Tank Status: Permanently out of Use

---

42 WNW 1/4-1/2 0.397 mi. 2098 ft. Relative: Lower

KAPALAMA INCINERATOR
757 KOKEA ST
HONOLULU, HI 96817

Database(s): **RCRA-SQG, SHWS, SPILLS, INST CONTROL**
EDR ID Number: **1001116173**
EPA ID Number: **HIR000001008**

Click here for full text details

RCRA-SQG
EPA Id: HIR000001008

---

43 SE 1/4-1/2 0.409 mi. 2158 ft. Relative: Lower

JOHIRO BROTHERS, INC.
1240 MOOKAULA ST
HONOLULU, HI 96817

Database(s): **LUST, UST**
EDR ID Number: **U003154457**
EPA ID Number: **N/A**

Click here for full text details

LUST
Facility Id: 9-100258
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-100258
Tank Status: Permanently Out of Use

---

44 South 1/4-1/2 0.422 mi. 2228 ft. Relative: Lower

BOB'S BAR B QUE
1366 DILLINGHAM BLVD
HONOLULU, HI 96817

Database(s): **LUST, UST**
EDR ID Number: **U004130649**
EPA ID Number: **N/A**

Click here for full text details

LUST
Facility Id: 9-103867
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-103867
Tank Status: Permanently out of Use

K45
WSW
1/4-1/2
0.427 mi.
2253 ft.
Relative: Lower

DILLINGHAM BOULEVARD & MOKAUEA STREET
DILLINGHAM BLVD & MOKAUEA ST
HONOLULU, HI 96819

SHWS — **S106816881**
ENG CONTROLS — **N/A**
INST CONTROL

Click here for full text details

K46
WSW
1/4-1/2
0.427 mi.
2254 ft.
Relative: Lower

KEN T SERVICE
1901 DILLINGHAM BLVD
HONOLULU, HI 96819

LUST — **U003402816**
UST — **N/A**
Financial Assurance

Click here for full text details

LUST
Facility Id: 9-101112
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-101112
Tank Status: Permanently Out of Use

47
WNW
1/4-1/2
0.438 mi.
2310 ft.
Relative: Higher

RAKUYO KEN U.S.A.
804 GULICK AVE
HONOLULU, HI 96819

LUST — **U003346378**
UST — **N/A**

Click here for full text details

LUST
Facility Id: 9-103254
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-103254
Tank Status: Permanently Out of Use

48
South
1/4-1/2
0.440 mi.
2323 ft.
Relative: Lower

KAMEHAMEHA SCHOOLS - 1336 DILLINGHAM BOULEVARD
1336 DILLINGHAM BLVD
HONOLULU, HI 96813

SHWS — **S110061575**
SPILLS — **N/A**

Click here for full text details

L49
SE
1/4-1/2
0.444 mi.
2344 ft.
Relative: Lower

GTE-HAWAIIAN TEL EMPLOYEES FEDERAL CREDIT UNION (HTEFCU)
1138 N KING ST
HONOLULU, HI 96817

SHWS — **1006820922**
ENG CONTROLS — **N/A**
INST CONTROL

Click here for full text details

M50
SSW
1/4-1/2
0.458 mi.
2419 ft.
Relative: Lower

GENERAL TIRE
505 WAIAKAMILO RD
HONOLULU, HI 96817

SHWS — **S106817180**
SPILLS — **N/A**

Click here for full text details

51
SE
1/4-1/2
0.460 mi.
2427 ft.
Relative: Lower

OAHU PLUMBING & SHEET METAL, LTD
926 KOHOU ST
HONOLULU, HI 96817

LUST — **U001235455**
UST — **N/A**
Financial Assurance

Click here for full text details

LUST
Facility Id: 9-101367
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-101367
Tank Status: Permanently Out of Use

M52
SSW
1/4-1/2
0.463 mi.
2447 ft.
Relative: Lower

1385 COLBURN STREET
1385 COLBURN ST
KAPALAMA, HI 96817

SHWS — **S115488666**
SPILLS — **N/A**

Click here for full text details

L53
SE
1/4-1/2
0.464 mi.
2451 ft.
Relative: Lower

7-11 KAPALAMA
1136 N KING ST.
HONOLULU, HI 96817

LUST — **U003154444**
UST — **N/A**
Financial Assurance

Click here for full text details

LUST
Facility Id: 9-100028
Facility Status: Site Cleanup Completed (NFA)

UST

7-11 KAPALAMA (Continued) — **U003154444**

Facility Id: 9-100028
Tank Status: Permanently Out of Use
Tank Status: Currently In Use

---

54 SSE 1/4-1/2 0.468 mi. 2470 ft. Relative: Lower

SHIMAYA SHOTEN, LTD.
710 KOHOU ST
HONOLULU, HI 96817

LUST — U001235478
UST — N/A

Click here for full text details

LUST
Facility Id: 9-101425
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-101425
Tank Status: Permanently Out of Use

---

55 NW 1/4-1/2 0.470 mi. 2484 ft. Relative: Lower

KALIHI STREAM CHEVRON
2160 N. KING ST.
HONOLULU, HI 96813

LUST — 1000316728
UST — N/A
Financial Assurance

Click here for full text details

LUST
Facility Id: 9-101225
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-101225
Tank Status: Permanently Out of Use
Tank Status: Currently In Use

---

56 SW 1/4-1/2 0.476 mi. 2512 ft. Relative: Lower

LOOMIS ARMORED INC.
1540 KALANI ST
HONOLULU, HI 96817

LUST — U003541704
UST — N/A

Click here for full text details

LUST
Facility Id: 9-100268
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-100268
Tank Status: Permanently Out of Use

57 SSW 1/4-1/2 0.487 mi. 2569 ft. Relative: Lower

BENIYA SHOKUDO CATERING
1448 KALANI ST
HONOLULU, HI 96817

LUST — U003402841
UST — N/A

Click here for full text details

LUST
Facility Id: 9-103435
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-103435
Tank Status: Permanently Out of Use

N58 SE 1/4-1/2 0.495 mi. 2616 ft. Relative: Lower

JBL HAWAII, LTD
905 KOKEA ST
HONOLULU, HI 96817

SHWS — 1006820832
ENG CONTROLS — N/A
INST CONTROL

Click here for full text details

N59 SE 1/4-1/2 0.495 mi. 2616 ft. Relative: Lower

JBL HAWAII LTD
905 KOKEA ST
HONOLULU, HI 96817

LUST — U001235921
UST — N/A

Click here for full text details

LUST
Facility Id: 9-102462
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-102462
Tank Status: Permanently Out of Use

---

60 South 1/2-1 0.501 mi. 2646 ft. Relative: Lower

CLASSIC BOWL
1190 DILLINGHAM BLVD
HONOLULU, HI

SHWS — S117391422
N/A

Click here for full text details

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
61 SSW 1/2-1 0.598 mi. 3160 ft. Relative: Lower	1305 HART STREET 1305 HART ST HONOLULU, HI 96814 Click here for full text details	SHWS SPILLS INST CONTROL	S106815169 N/A
62 WSW 1/2-1 0.601 mi. 3173 ft. Relative: Lower	PACIFIC POULTRY 1804 KANAKANUI ST HONOLULU, HI 96819 Click here for full text details	SHWS SPILLS	1006819073 N/A
63 North 1/2-1 0.624 mi. 3297 ft. Relative: Higher	KUHIO PARK TERRACE TOWERS LINAPUNI ST HONOLULU, HI 96819 Click here for full text details	SHWS ENG CONTROLS INST CONTROL BROWNFIELDS	S108008570 N/A
64 SSW 1/2-1 0.652 mi. 3441 ft. Relative: Lower	YOUNG BROTHERS REFRIGERATE RELEASE 1331 N NIMITZ HWY HONOLULU, HI 96817 Click here for full text details	SHWS SPILLS	S108009312 N/A
O65 SSE 1/2-1 0.679 mi. 3586 ft. Relative: Lower	HONOLULU COMMUNITY COLLEGE GAS STATION 874 DILLINGHAM BLVD HONOLULU, HI 96817 Click here for full text details	SHWS	1006820629 N/A
O66 SSE 1/2-1 0.693 mi. 3658 ft. Relative: Lower	THEO DAVIES CATERPILLAR REPAIR SITE 935 DILLINGHAM BLVD HONOLULU, HI 96817 Click here for full text details	SHWS ENG CONTROLS INST CONTROL	S109096031 N/A

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
67 North 1/2-1 0.695 mi. 3671 ft. Relative: Higher	CHANG-CHOW PROPERTY, NORTH SCHOOL STREET 2161 N SCHOOL ST HONOLULU, HI 96817 Click here for full text details	SHWS	1006820024 N/A
O68 SSE 1/2-1 0.699 mi. 3690 ft. Relative: Lower	PIER 51 HONOLULU HARBOR, OIL/DIESEL LEAK TO OCEAN 925 DILLINGHAM BLVD HONOLULU, HI 96817 Click here for full text details	FINDS SHWS ENG CONTROLS INST CONTROL VCP	1006819934 N/A
69 WSW 1/2-1 0.701 mi. 3701 ft. Relative: Lower	YUE-FUNG KWAN CONSTRUCTION SITE 2004-2008 REPUBLICAN ST HONOLULU, HI 96819 Click here for full text details	SHWS SPILLS	S110061865 N/A
70 WNW 1/2-1 0.712 mi. 3761 ft. Relative: Lower	LENAKONA DEVELOPMENT, LTD 2305 KAMEHAMEHA HWY HONOLULU, HI 96800 Click here for full text details LUST Facility Id: 9-102588 Facility Status: Site Cleanup Completed (NFA) UST Facility Id: 9-102588 Tank Status: Permanently Out of Use	SHWS LUST UST	U001237397 N/A
71 NNW 1/2-1 0.722 mi. 3810 ft. Relative: Higher	KUHIO PARK TERRACE COMMUNITY CENTER 1475 LINAPUNI ST HONOLULU, HI 96819 Click here for full text details	SHWS ENG CONTROLS INST CONTROL	S115488710 N/A

72 WSW 1/2-1 0.726 mi. 3833 ft. Relative: Lower
1950 HOMERULE STREET
1950 HOMERULE ST
HONOLULU, HI 96819
SHWS S113230429
SPILLS N/A

Click here for full text details

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73 NW 1/2-1 0.727 mi. 3841 ft. Relative: Higher
2343 NORTH KING STREET
2343 N KING ST
HONOLULU, HI 96819
SHWS S115488667
INST CONTROL N/A

Click here for full text details

---

74 South 1/2-1 0.732 mi. 3864 ft. Relative: Lower
DOMESTIC COMMERCIAL FISHING VILLAGE
1133 N NIMITZ HWY
HONOLULU, HI 96817
SHWS S111677154
SPILLS N/A
ENG CONTROLS
INST CONTROL

Click here for full text details

P75 SSE 1/2-1 0.747 mi. 3943 ft. Relative: Lower
COSTCO GAS STATION
520 ALAKAWA ST
HONOLULU, HI 96817
SHWS S108859910
ENG CONTROLS N/A
INST CONTROL
VCP

Click here for full text details

P76 SSE 1/2-1 0.749 mi. 3956 ft. Relative: Lower
COSTCO WAREHOUSE
525 ALAKAWA ST
HONOLULU, HI 96817
SHWS S108008497
ENG CONTROLS N/A
INST CONTROL
VCP

Click here for full text details

Q77 South 1/2-1 0.752 mi. 3972 ft. Relative: Lower
MCCABE, HAMILTON, & RENNY COMPANY, LTD
1130 N NIMITZ HWY
HONOLULU, HI 96817
SHWS 1006818946
SPILLS N/A

Click here for full text details

Q78 South 1/2-1 0.767 mi. 4049 ft. Relative: Lower
CHEVRON KAPALAMA TERMINAL
1105 N NIMITZ HWY
HONOLULU, HI 96817
SHWS S108008763
SPILLS N/A
INST CONTROL

Click here for full text details

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79 West 1/2-1 0.772 mi. 4074 ft. Relative: Lower
HAWAII DAIRY HOLDINGS, INC DBA FOREMOST DAIRIES
2277 KAMEHAMEHA HWY
HONOLULU, HI 96819
SHWS 1000934769
LUST N/A
UST
VCP
Financial Assurance

Click here for full text details

LUST
Facility Id: 9-100210
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-100210
Tank Status: Permanently Out of Use

---

80 South 1/2-1 0.778 mi. 4106 ft. Relative: Lower
BEST BUY
ALAKAWA ST & NIMITZ HWY
HONOLULU, HI 96817
SHWS S108008729
SPILLS N/A

Click here for full text details

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81 South 1/2-1 0.788 mi. 4163 ft. Relative: Lower
HOME DEPOT
421 ALAKAWA ST
HONOLULU, HI 96817
SHWS S105887731
ENG CONTROLS N/A
INST CONTROL

Click here for full text details

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82 SSE 1/2-1 0.795 mi. 4198 ft. Relative: Lower
DOLE IWILEI
801 DILLINGHAM BLVD
HONOLULU, HI 96817
SHWS S106816902
SPILLS N/A
INST CONTROL

Click here for full text details

83 South 1/2-1 0.817 mi. 4315 ft. Relative: Lower

HART STREET WWPS
1031 N NIMITZ HWY
HONOLULU, HI 96817

SHWS
UIC

U003154453
N/A

Click here for full text details

UIC
Facility Id/Lat Long Min Coord: 3-1952.05.1-2

---

84 South 1/2-1 0.857 mi. 4525 ft. Relative: Lower

GTE HAWAIIAN TEL - CONTAMINATED SOIL
ALAKAWA ST & NIMITZ HWY
HONOLULU, HI 96817

SHWS
SPILLS
ENG CONTROLS
INST CONTROL

S106817210
N/A

Click here for full text details

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85 WNW 1/2-1 0.876 mi. 4627 ft. Relative: Lower

OTS KALIHI-PALAMA BUS FACILITY
811 MIDDLE ST
HONOLULU, HI 96819

SHWS
LUST
UST
Financial Assurance

U003541805
N/A

Click here for full text details

LUST
Facility Id: 9-102498
Facility Id: 9-101884
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-102498
Facility Id: 9-103189
Facility Id: 9-101884
Tank Status: Currently in Use
Tank Status: Permanently Out of Use

---

86 NE 1/2-1 0.884 mi. 4670 ft. Relative: Higher

KAMEHAMEHA SCOOLS
1887 MAKUAKANE ST
HONOLULU, HI 96817

RCRA-CESQG
FINDS
SHWS
SPILLS
ENG CONTROLS
INST CONTROL

1000202706
HID981616469

Click here for full text details

RCRA-CESQG
EPA Id: HID981616469

87 SSE 1/2-1 0.897 mi. 4737 ft. Relative: Lower

IWILEI BUSINESS CENTER
501 SUMNER ST
HONOLULU, HI 96814

SHWS
SPILLS
INST CONTROL

S106817968
N/A

Click here for full text details

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88 SSE 1/2-1 0.905 mi. 4781 ft. Relative: Lower

BHP GASCO BENZENE SITE
616 IWILEI RD
HONOLULU, HI 96817

SHWS
SPILLS
INST CONTROL
AIRS

S110277531
N/A

Click here for full text details

AIRS
Facility Id: 0551-01-N

R89 South 1/2-1 0.908 mi. 4794 ft. Relative: Lower

HAWAII STEVEDORES
965 N NIMITZ HWY
HONOLULU, HI 96817

SHWS
SPILLS
ENG CONTROLS

S106817380
N/A

Click here for full text details

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90 SW 1/2-1 0.912 mi. 4813 ft. Relative: Lower

HAWAIIAN MISO AND SOY CO., LTD
1714 MARY ST
HONOLULU, HI 96819

SHWS
SPILLS

1006821063
N/A

Click here for full text details

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91 WNW 1/2-1 0.915 mi. 4831 ft. Relative: Lower

HAWAII MEAT COMPANY LTD
711 MIDDLE ST
HONOLULU, HI 96819

SHWS
SPILLS
ENG CONTROLS
INST CONTROL

1006820927
N/A

Click here for full text details

S92 West 1/2-1 0.921 mi. 4862 ft. Relative: Lower

LONGS DRUG STORES WAREHOUSE
2270 HOONEE PL
HONOLULU, HI 96819

SHWS
SPILLS
ENG CONTROLS
INST CONTROL

S106818797
N/A

Click here for full text details

S93
West
1/2-1
0.926 mi.
4890 ft.
Relative: Lower

HAGADONE PRINTING COMPANY SAND ISLAND
2278 HOONEE PL
HONOLULU, HI 96819

SHWS — **S106817239**
INST CONTROL — **N/A**

Click here for full text details

94
WSW
1/2-1
0.926 mi.
4890 ft.
Relative: Lower

HAWAIIAN BITUMULS & PAVING
248 SAND ISLAND ACCESS RD
HONOLULU, HI 96819

SHWS — **U001235221**
LUST — **N/A**
UST
INST CONTROL
AIRS

Click here for full text details

LUST
Facility Id: 9-100764
Facility Status: Site Cleanup Completed with EHMP

UST
Facility Id: 9-100764
Tank Status: Permanently Out of Use

AIRS
Facility Id: 0540-01-C

R95
South
1/2-1
0.929 mi.
4903 ft.
Relative: Lower

CHEVRON HONOLULU TRANSPORTATION TERMINAL
933 N NIMITZ HWY
HONOLULU, HI 96817

SHWS — **U003154454**
ENG CONTROLS — **N/A**
Financial Assurance

Click here for full text details

96
SSE
1/2-1
0.939 mi.
4956 ft.
Relative: Lower

HAWAIIAN GAS PRODUCTS LTD
516-520 KUWILI ST
HONOLULU, HI 96817

EDR MGP — **1008409006**
N/A

Click here for full text details

97
WNW
1/2-1
0.940 mi.
4962 ft.
Relative: Lower

YEE HOP PROPERTY
621 MIDDLE ST
HONOLULU, HI 96819

SHWS — **1006819624**
SPILLS — **N/A**

Click here for full text details

T98
South
1/2-1
0.944 mi.
4982 ft.
Relative: Lower

BHP GASCO
432 PACIFIC STREET
HONOLULU, HI 96817

EDR MGP — **1008409005**
N/A

Click here for full text details

99
SSE
1/2-1
0.946 mi.
4996 ft.
Relative: Lower

TRAVEL PLAZA TRANSPORTATION, LLC
818 PINE ST
HONOLULU, HI 96817

SHWS — **U003154753**
LUST — **N/A**
UST
Financial Assurance

Click here for full text details

LUST
Facility Id: 9-102991
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-102991
Tank Status: Currently In Use
Tank Status: Permanently Out of Use

100
WNW
1/2-1
0.955 mi.
5044 ft.
Relative: Lower

611 MIDDLE STREET WAREHOUSE
611 MIDDLE ST
HONOLULU, HI 96819

SHWS — **S106815670**
SPILLS — **N/A**
ENG CONTROLS
INST CONTROL

Click here for full text details

T101
South
1/2-1
0.961 mi.
5075 ft.
Relative: Lower

UNOCAL 76 HONOLULU LRNG CTR
411 PACIFIC ST
HONOLULU, HI 96817

RCRA NonGen / NLR — **1000167494**
FINDS — **HID981652696**
SHWS
UST
SPILLS
VCP
Financial Assurance

Click here for full text details

RCRA NonGen / NLR
EPA Id: HID981652696

UST
Facility Id: 9-100108
Tank Status: Permanently Out of Use

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
U102 **SE** **1/2-1** **0.975 mi.** **5148 ft.** **Relative:** **Lower**	**VON HAMM TEXTILES** **546 KAAAHI ST** **HONOLULU, HI 96817** Click here for full text details	**SHWS** **SPILLS** **ENG CONTROLS** **INST CONTROL**	**S106820929** **N/A**
U103 **SE** **1/2-1** **0.976 mi.** **5152 ft.** **Relative:** **Lower**	**NUUANU AUTO COMPANY LTD** **545 KAAAHI ST** **HONOLULU, HI 96817** Click here for full text details	**SHWS**	**S111704825** **N/A**
V104 **South** **1/2-1** **0.977 mi.** **5159 ft.** **Relative:** **Lower**	**WEYERHAEUSER** **900 N NIMITZ HWY** **HONOLULU, HI 96817** Click here for full text details	**SHWS** **SPILLS**	**S106821137** **N/A**
105 **WSW** **1/2-1** **0.980 mi.** **5177 ft.** **Relative:** **Lower**	**TRANS HAWAIIAN - OAHU, INC.** **124 PUUHALE RD** **HONOLULU, HI 96819** Click here for full text details **LUST** Facility Id: 9-100804 Facility Status: Site Cleanup Completed (NFA) **UST** Facility Id: 9-100804 Tank Status: Permanently Out of Use	**SHWS** **LUST** **UST**	**U003221615** **N/A**
106 **South** **1/2-1** **0.996 mi.** **5257 ft.** **Relative:** **Lower**	**356 PACIFIC STREET BWS TRENCHING SHEEN** **356 PACIFIC ST** **HONOLULU, HI** Click here for full text details	**SHWS** **SPILLS**	**S110169069** **N/A**

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
V107 **South** **1/2-1** **0.998 mi.** **5269 ft.** **Relative:** **Lower**	**861-869 NORTH NIMITZ HIGHWAY** **861-869 N NIMITZ HWY** **HONOLULU, HI 96817** Click here for full text details	**SHWS** **ENG CONTROLS** **INST CONTROL**	**S108859941** **N/A**

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
HI	AIRS	List of Permitted Facilities	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	BROWNFIELDS	Brownfields Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	CDL	Clandestine Drug Lab Listing	Department of Health	08/04/2010	09/10/2010	10/22/2010
HI	DRYCLEANERS	Permitted Drycleaner Facility Listing	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	ENG CONTROLS	Engineering Control Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	Financial Assurance	Financial Assurance Information Listing	Department of Health	12/01/2014	12/19/2014	01/28/2015
HI	INST CONTROL	Sites with Institutional Controls	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	LUST	Leaking Underground Storage Tank Database	Department of Health	12/16/2014	12/19/2014	01/28/2015
HI	RGA HWS	Recovered Government Archive State Hazardous Waste Facilitie	Department of Health		07/01/2013	01/08/2014
HI	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Health		07/01/2013	01/17/2014
HI	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	Department of Health		07/01/2013	01/03/2014
HI	SHWS	Sites List	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	SPILLS	Release Notifications	Department of Health	12/02/2014	12/22/2014	01/28/2015
HI	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	03/10/2012	01/03/2013	02/11/2013
HI	SWF/LF	Permitted Landfills in the State of Hawaii	Department of Health	09/17/2012	04/03/2013	05/10/2013
HI	UIC	Underground Injection Wells Listing	Department of Health	02/07/2013	02/12/2013	04/09/2013
HI	UST	Underground Storage Tank Database	Department of Health	12/18/2014	12/19/2014	01/28/2015
HI	VCP	Voluntary Response Program Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	04/22/2013	03/03/2015	03/09/2015
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2011	02/26/2013	04/19/2013
US	CERCLIS	Comprehensive Environmental Response, Compensation, and Liab	EPA	10/25/2013	11/11/2013	02/13/2014
US	CERCLIS-NFRAP	CERCLIS No Further Remedial Action Planned	EPA	10/25/2013	11/11/2013	02/13/2014
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	07/01/2014	09/10/2014	10/20/2014
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	01/23/2015	02/13/2015	03/09/2015
US	CORRACTS	Corrective Action Report	EPA	12/09/2014	12/29/2014	01/29/2015
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DELISTED NPL	National Priority List Deletions	EPA	12/16/2014	01/08/2015	02/09/2015
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	07/31/2012	08/07/2012	09/18/2012
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EDR US Hist Auto Stat	EDR Exclusive Historic Gas Stations	EDR, Inc.			
US	EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	09/29/2014	09/30/2014	11/06/2014
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	07/21/2014	10/07/2014	10/20/2014
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
US	FEMA UST	Underground Storage Tank Listing	FEMA	01/01/2010	02/16/2010	04/12/2010
US	FINDS	Facility Index System/Facility Registry System	EPA	08/16/2014	09/10/2014	10/20/2014
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	06/06/2014	09/10/2014	09/18/2014
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	12/29/2014	12/30/2014	03/09/2015
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	01/23/2015	02/06/2015	03/09/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	02/01/2013	05/01/2013	11/01/2013

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	01/30/2015	02/05/2015	03/09/2015
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/10/2015	03/13/2015
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	01/28/2015	01/30/2015	03/13/2015
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	01/08/2015	01/08/2015	02/09/2015
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2005	12/08/2006	01/11/2007
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	02/01/2013	05/01/2013	01/27/2014
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	01/30/2015	02/05/2015	03/13/2015
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/13/2015	03/13/2015
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	01/29/2015	01/30/2015	03/13/2015
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	12/14/2014	02/13/2015	03/13/2015
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	09/29/2014	10/01/2014	11/06/2014
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	11/25/2014	11/26/2014	01/29/2015
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	02/18/2014	03/18/2014	04/24/2014
US	LUCIS	Land Use Control Information System	Department of the Navy	12/03/2014	12/12/2014	01/29/2015
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	12/29/2014	01/08/2015	01/29/2015
US	NPL	National Priority List	EPA	12/16/2014	01/08/2015	02/09/2015
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	07/01/2014	10/15/2014	11/17/2014
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	02/01/2011	10/19/2011	01/10/2012
US	PRP	Potentially Responsible Parties	EPA	10/25/2013	10/17/2014	10/20/2014
US	Proposed NPL	Proposed National Priority List Sites	EPA	12/16/2014	01/08/2015	02/09/2015
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	10/07/2014	10/08/2014	10/20/2014
US	RCRA NonGen / NLR	RCRA - Non Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RMP	Risk Management Plans	Environmental Protection Agency	08/01/2014	08/12/2014	11/06/2014
US	ROD	Records Of Decision	EPA	11/25/2013	12/12/2013	02/24/2014
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	03/07/2011	03/09/2011	05/02/2011
US	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2011	07/31/2013	09/13/2013
US	TSCA	Toxic Substances Control Act	EPA	12/31/2012	01/15/2015	01/29/2015
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	09/14/2010	10/07/2011	03/01/2012
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/16/2014	10/31/2014	11/17/2014
US	US AIRS MINOR	Air Facility System Data	EPA	10/16/2014	10/31/2014	11/17/2014

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	12/22/2014	12/22/2014	01/29/2015
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	11/19/2014	11/21/2014	01/29/2015
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	12/30/2014	12/31/2014	01/29/2015
US	Oil/Gas Pipelines	GeoData Digital Line Graphs from 1:100,000-Scale Maps	USGS			
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
US	USGS 7.5' Topographic Map	Scanned Digital USGS 7.5' Topographic Map (DRG)	USGS			

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

KAMEHAMEHA HOMES
1629 HAKA DR.
HONOLULU, HI 96817

TARGET PROPERTY COORDINATES

Latitude (North):	21.3295 - 21˚ 19' 46.20''
Longitude (West):	157.8747 - 157˚ 52' 28.92''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	616699.9
UTM Y (Meters):	2358893.0
Elevation:	39 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	21157-C7 HONOLULU, HI
Most Recent Revision:	Not reported
West Map:	21157-C8 PEARL HARBOR, HI
Most Recent Revision:	Not reported

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

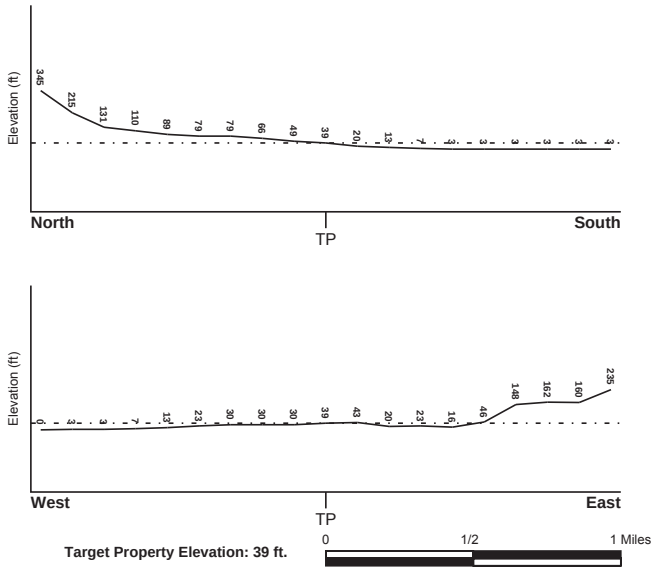
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General South

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Target Property Elevation: 39 ft.

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
HONOLULU, HI	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 15003C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
NOT AVAILABLE	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

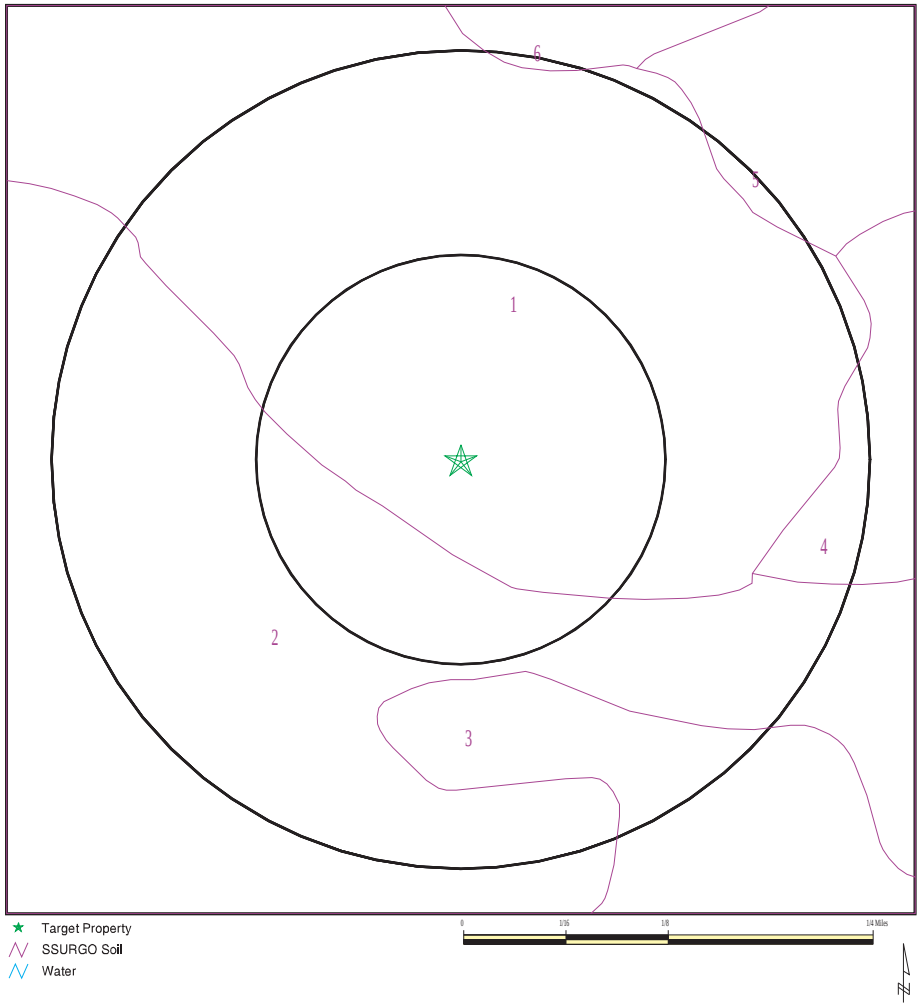
Era: -
System: -
Series: -
Code: N/A *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: -

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4237094.34s



★ Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME: Kamehameha Homes ADDRESS: 1629 Haka Dr. Honolulu HI 96817 LAT/LONG: 21.3295 / 157.8747	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.34s DATE: March 17, 2015 5:39 pm

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DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Honouliuli

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	14 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4 Min: 0.42	Max: 7.3 Min: 6.6
2	14 inches	68 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 7.8 Min: 6.6

Soil Map ID: 2

Soil Component Name: Ewa

Soil Surface Texture: silty clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6
2	7 inches	29 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6
3	29 inches	38 inches	bedrock	Not reported	Not reported	Max: 42 Min: 1	Max: Min:

Soil Map ID: 3

Soil Component Name: Pearl Harbor

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 30 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4.23 Min: 0.42	Max: 7.3 Min: 6.6
2	11 inches	31 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 8.4 Min: 6.6
3	31 inches	48 inches	muck	A-8	Highly organic soils, Peat.	Max: 0.42 Min: 0.01	Max: 7.8 Min: 7.4

Soil Map ID: 4

Soil Component Name: Kawaihapai

Soil Surface Texture: stony clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	22 inches	stony clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 42.34 Min: 4.23	Max: 7.3 Min: 6.6

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	22 inches	31 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.14 Min: 14.11	Max: 7.3 Min: 6.6
3	31 inches	53 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.14 Min: 14.11	Max: 7.3 Min: 6.6

Soil Map ID: 5

Soil Component Name: Ewa

Soil Surface Texture: silty clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	18 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	18 inches	59 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6

Soil Map ID: 6

Soil Component Name: Kaena

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Poorly drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 107 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4.23 Min: 0.42	Max: 7.3 Min: 6.6
2	9 inches	37 inches	stony clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 7.3 Min: 6.6

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
3	37 inches	53 inches	stony clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 7.3 Min: 6.6

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A11	USGS40000269867	1/8 - 1/4 Mile ESE
A12	USGS40000269866	1/8 - 1/4 Mile ESE
A13	USGS40000269865	1/8 - 1/4 Mile ESE
A14	USGS40000269868	1/8 - 1/4 Mile ESE
A15	USGS40000269871	1/8 - 1/4 Mile ESE
A16	USGS40000269870	1/8 - 1/4 Mile ESE
A17	USGS40000269869	1/8 - 1/4 Mile ESE
A18	USGS40000269864	1/8 - 1/4 Mile ESE
B20	USGS40000269880	1/8 - 1/4 Mile West
A21	USGS40000269855	1/4 - 1/2 Mile ESE
C22	USGS40000269894	1/4 - 1/2 Mile ENE
C24	USGS40000269900	1/4 - 1/2 Mile ENE
B27	USGS40000269889	1/4 - 1/2 Mile West
D28	USGS40000269908	1/4 - 1/2 Mile NW
E30	USGS40000269893	1/4 - 1/2 Mile ENE
F32	USGS40000269910	1/4 - 1/2 Mile WNW
G35	USGS40000269834	1/4 - 1/2 Mile SW

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
H39	USGS40000269821	1/2 - 1 Mile SSW
I40	USGS40000269919	1/2 - 1 Mile NE
H41	USGS40000269819	1/2 - 1 Mile SSW
H42	USGS40000269820	1/2 - 1 Mile SSW
J44	USGS40000269888	1/2 - 1 Mile East
J46	USGS40000269899	1/2 - 1 Mile ENE
K55	USGS40000269815	1/2 - 1 Mile SSE
K56	USGS40000269816	1/2 - 1 Mile SSE
K57	USGS40000269817	1/2 - 1 Mile SSE
58	USGS40000269830	1/2 - 1 Mile SW
K59	USGS40000269814	1/2 - 1 Mile SSE
K60	USGS40000269813	1/2 - 1 Mile SSE
I61	USGS40000269923	1/2 - 1 Mile NE
K62	USGS40000269811	1/2 - 1 Mile SSE
K63	USGS40000269812	1/2 - 1 Mile SSE
L65	USGS40000269939	1/2 - 1 Mile NW
M67	USGS40000269881	1/2 - 1 Mile West
I69	USGS40000269937	1/2 - 1 Mile NE
N71	USGS40000269854	1/2 - 1 Mile East
N73	USGS40000269863	1/2 - 1 Mile East
N75	USGS40000269853	1/2 - 1 Mile East
N77	USGS40000269850	1/2 - 1 Mile ESE
P80	USGS40000269856	1/2 - 1 Mile West
P81	USGS40000269857	1/2 - 1 Mile West
P82	USGS40000269858	1/2 - 1 Mile West
O83	USGS40000269913	1/2 - 1 Mile WNW
Q85	USGS40000269810	1/2 - 1 Mile SE
R87	USGS40000269822	1/2 - 1 Mile ESE
T89	USGS40000269945	1/2 - 1 Mile NW
S91	USGS40000269802	1/2 - 1 Mile SSE
93	USGS40000269940	1/2 - 1 Mile WNW
S95	USGS40000269801	1/2 - 1 Mile SSE
S96	USGS40000269800	1/2 - 1 Mile SSE
U98	USGS40000269852	1/2 - 1 Mile East
S101	USGS40000269799	1/2 - 1 Mile SSE
102	USGS40000269791	1/2 - 1 Mile South
S103	USGS40000269796	1/2 - 1 Mile SSE
V106	USGS40000269789	1/2 - 1 Mile South
V108	USGS40000269788	1/2 - 1 Mile SSE
V111	USGS40000269786	1/2 - 1 Mile SSE
113	USGS40000269904	1/2 - 1 Mile WNW
X114	USGS40000269790	1/2 - 1 Mile SSE
Y118	USGS40000269795	1/2 - 1 Mile SSE
V119	USGS40000269781	1/2 - 1 Mile SSE
Z123	USGS40000269773	1/2 - 1 Mile SSE
X124	USGS40000269778	1/2 - 1 Mile SSE
X125	USGS40000269779	1/2 - 1 Mile SSE
X126	USGS40000269780	1/2 - 1 Mile SSE
Z128	USGS40000269772	1/2 - 1 Mile SSE
AA130	USGS40000269794	1/2 - 1 Mile SE
131	USGS40000269764	1/2 - 1 Mile South
132	USGS40000269771	1/2 - 1 Mile SSE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A10	HI0000331	1/8 - 1/4 Mile ESE

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

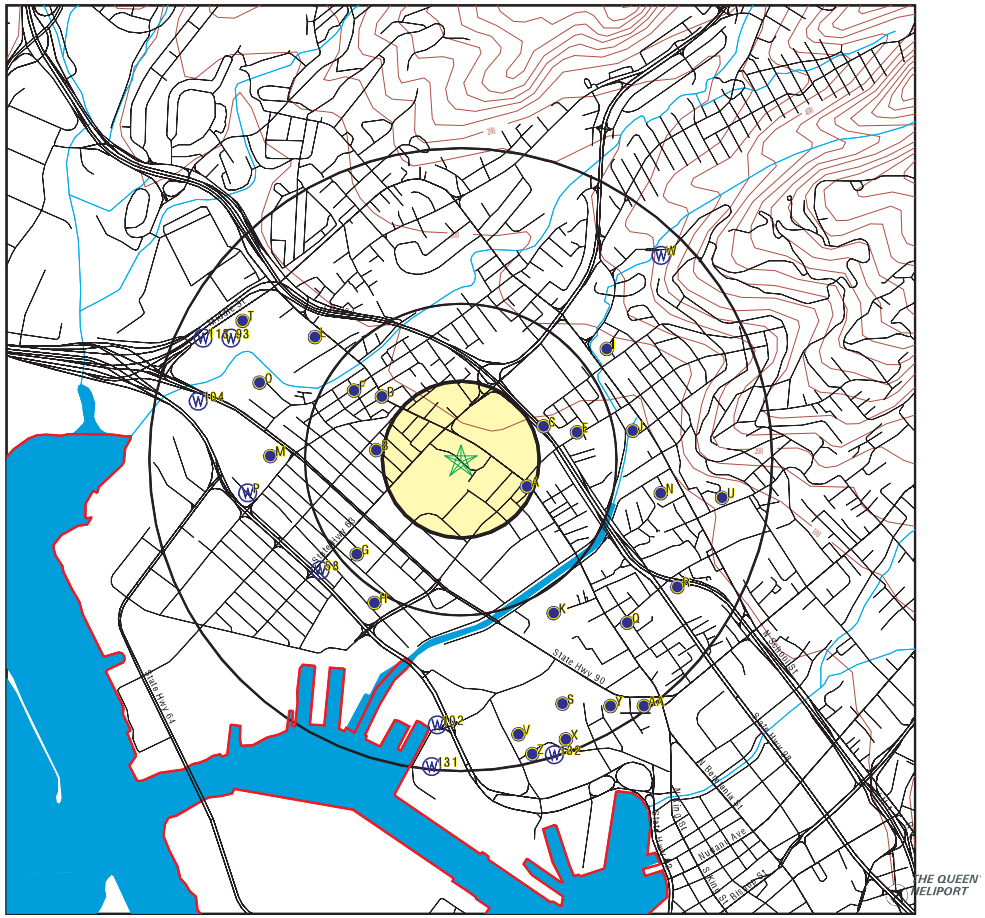
MAP ID	WELL ID	LOCATION FROM TP
A1	HI8000000002441	1/8 - 1/4 Mile ESE
A2	HI8000000002442	1/8 - 1/4 Mile ESE
A3	HI8000000002439	1/8 - 1/4 Mile ESE
A4	HI8000000002440	1/8 - 1/4 Mile ESE
A5	HI8000000002443	1/8 - 1/4 Mile ESE
A6	HI8000000002446	1/8 - 1/4 Mile ESE
A7	HI8000000002447	1/8 - 1/4 Mile ESE
A8	HI8000000002444	1/8 - 1/4 Mile ESE
A9	HI8000000002445	1/8 - 1/4 Mile ESE
B19	HI8000000002461	1/8 - 1/4 Mile West
C23	HI8000000002477	1/4 - 1/2 Mile ENE
C25	HI8000000002484	1/4 - 1/2 Mile ENE
B26	HI8000000002471	1/4 - 1/2 Mile West
D29	HI8000000002496	1/4 - 1/2 Mile NW
E31	HI8000000002478	1/4 - 1/2 Mile ENE
F33	HI8000000002501	1/4 - 1/2 Mile WNW
G34	HI8000000002412	1/4 - 1/2 Mile SW
H36	HI8000000002387	1/2 - 1 Mile SSW
H37	HI8000000002385	1/2 - 1 Mile SSW
H38	HI8000000002386	1/2 - 1 Mile SSW
I43	HI8000000002519	1/2 - 1 Mile NE
J45	HI8000000002481	1/2 - 1 Mile ENE
K47	HI8000000002379	1/2 - 1 Mile SSE
K48	HI8000000002380	1/2 - 1 Mile SSE
K49	HI8000000002377	1/2 - 1 Mile SSE
K50	HI8000000002378	1/2 - 1 Mile SSE
K51	HI8000000002383	1/2 - 1 Mile SSE
K52	HI8000000002384	1/2 - 1 Mile SSE
K53	HI8000000002381	1/2 - 1 Mile SSE
K54	HI8000000002382	1/2 - 1 Mile SSE
I64	HI8000000002534	1/2 - 1 Mile NE
M66	HI8000000002460	1/2 - 1 Mile West
L68	HI8000000002540	1/2 - 1 Mile NW
I70	HI8000000002537	1/2 - 1 Mile NE
N72	HI8000000002435	1/2 - 1 Mile East
N74	HI8000000002450	1/2 - 1 Mile East
N76	HI8000000002436	1/2 - 1 Mile East
N78	HI8000000002429	1/2 - 1 Mile ESE
O79	HI8000000002502	1/2 - 1 Mile WNW
Q84	HI8000000002375	1/2 - 1 Mile SE
R86	HI8000000002389	1/2 - 1 Mile ESE
S88	HI8000000002362	1/2 - 1 Mile SSE
T90	HI8000000002547	1/2 - 1 Mile NW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
S92	HI8000000002363	1/2 - 1 Mile SSE
T94	HI8000000002539	1/2 - 1 Mile WNW
S97	HI8000000002364	1/2 - 1 Mile SSE
U99	HI8000000002430	1/2 - 1 Mile East
S100	HI8000000002357	1/2 - 1 Mile SSE
104	HI8000000002494	1/2 - 1 Mile WNW
V105	HI8000000002352	1/2 - 1 Mile South
V107	HI8000000002353	1/2 - 1 Mile SSE
V109	HI8000000002347	1/2 - 1 Mile SSE
S110	HI8000000002354	1/2 - 1 Mile SSE
W112	HI8000000002565	1/2 - 1 Mile NE
V115	HI8000000002341	1/2 - 1 Mile SSE
Y116	HI8000000002358	1/2 - 1 Mile SSE
W117	HI8000000002579	1/2 - 1 Mile NE
X120	HI8000000002344	1/2 - 1 Mile SSE
X121	HI8000000002342	1/2 - 1 Mile SSE
X122	HI8000000002343	1/2 - 1 Mile SSE
Z127	HI8000000002337	1/2 - 1 Mile SSE
AA129	HI8000000002359	1/2 - 1 Mile SE

PHYSICAL SETTING SOURCE MAP - 4237094.34s



- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location

SITE NAME: Kamehameha Homes ADDRESS: 1629 Haka Dr. Honolulu HI 96817 LAT/LONG: 21.3295 / 157.8747	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.34s DATE: March 17, 2015 5:39 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
A1 **ESE** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002441**
A2 **ESE** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002442**
A3 **ESE** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002439**
A4 **ESE** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002440**
A5 **ESE** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002443**
A6 **ESE** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002446**
A7 **ESE** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002447**
A8 **ESE** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002444**
A9 **ESE** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002445**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
A10 **ESE** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**FRDS PWS**	**HI0000331**
A11 **ESE** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269867**
A12 **ESE** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269866**
A13 **ESE** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269865**
A14 **ESE** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269868**
A15 **ESE** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269871**
A16 **ESE** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269870**
A17 **ESE** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269869**
A18 **ESE** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269864**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
B19 **West** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002461**
B20 **West** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269880**
A21 **ESE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269855**
C22 **ENE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269894**
C23 **ENE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002477**
C24 **ENE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269900**
C25 **ENE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002484**
B26 **West** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002471**
B27 **West** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269889**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
D28 **NW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269908**
D29 **NW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002496**
E30 **ENE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269893**
E31 **ENE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002478**
F32 **WNW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269910**
F33 **WNW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002501**
G34 **SW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002412**
G35 **SW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269834**
H36 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002387**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
H37 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002385**
H38 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002386**
H39 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269821**
I40 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269919**
H41 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269819**
H42 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269820**
I43 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002519**
J44 **East** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269888**
J45 **ENE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002481**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
J46 **ENE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269899**
K47 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002379**
K48 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002380**
K49 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002377**
K50 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002378**
K51 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002383**
K52 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002384**
K53 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002381**
K54 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002382**

Map ID Direction Distance Elevation		Database	EDR ID Number
K55 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269815**
K56 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269816**
K57 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269817**
58 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269830**
K59 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269814**
K60 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269813**
I61 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269923**
K62 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269811**
K63 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269812**

Map ID Direction Distance Elevation		Database	EDR ID Number
I64 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002534**
L65 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269939**
M66 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002460**
M67 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269881**
L68 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002540**
I69 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269937**
I70 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002537**
N71 **East** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269854**
N72 **East** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002435**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
N73 **East** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269863**
N74 **East** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002450**
N75 **East** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269853**
N76 **East** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002436**
N77 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269850**
N78 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002429**
O79 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002502**
P80 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269856**
P81 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269857**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
P82 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269858**
O83 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269913**
Q84 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002375**
Q85 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269810**
R86 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002389**
R87 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269822**
S88 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002362**
T89 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269945**
T90 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002547**

Map ID Direction Distance Elevation		Database	EDR ID Number
S91 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269802**
S92 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002363**
93 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269940**
T94 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002539**
S95 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269801**
S96 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269800**
S97 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002364**
U98 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269852**
U99 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002430**

Map ID Direction Distance Elevation		Database	EDR ID Number
S100 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002357**
S101 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269799**
102 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269791**
S103 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269796**
104 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002494**
V105 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002352**
V106 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269789**
V107 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002353**
V108 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269788**

Map ID Direction Distance Elevation		Database	EDR ID Number
V109 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002347**
S110 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002354**
V111 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269786**
W112 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002565**
113 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269904**
X114 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269790**
V115 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002341**
Y116 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002358**
W117 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002579**

Map ID Direction Distance Elevation		Database	EDR ID Number
Y118 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269795**
V119 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269781**
X120 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002344**
X121 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002342**
X122 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002343**
Z123 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269773**
X124 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269778**
X125 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269779**
X126 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269780**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
Z127 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002337**
Z128 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269772**
AA129 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002359**
AA130 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269794**
131 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269764**
132 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269771**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for HONOLULU County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 96817

Number of sites tested: 10

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.110 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	0.200 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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HAWAII PUBLIC HOUSING AUTHORITY

ENVIRONMENTAL REVIEW

MAKUA ALI`I

Honolulu, O`ahu

AMP 34
HPHA No. 1012

Prepared for:

State of Hawaii
Hawaii Public Housing Authority

Prepared by:

HHF PLANNERS
places for people

U.S. Department of Housing and Urban Development
451 Seventh Street, SW
Washington, DC 20410
www.hud.gov

espanol.hud.gov

Environmental Review for Activity/Project that is Categorically Excluded Subject to Section 58.5

Pursuant to 24 CFR 58.35(a)

Project Information

Project Name: Makua Aliʻi (AMP 34)

Responsible Entity: Hawaii Public Housing Authority
1002 North School Street
Honolulu, HI 96817

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

State/Local Identifier: State of Hawaiʻi

Preparer: Mr. Scott Ezer, Vice President
HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaiʻi 96813

Certifying Officer Name and Title: Mr. David Y. Ige
Governor, State of Hawaiʻi

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

Consultant (if applicable): HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaiʻi 96813

Direct Comments to: Mr. Hakim Ouansafi, Executive Director
Hawaii Public Housing Authority
1002 North School Street
Honolulu, Hawaiʻi 96817

Project Location: 1541 Kalākaua Avenue
Honolulu, Hawaiʻi 96826

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]**:**

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a "major construction activity" and would involve one or a combination of several HUD designated categories of actions.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent;
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons;
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland;
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation;
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls);
7. Interior and exterior renovations and rehabilitation;
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site;
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Level of Environmental Review Determination:

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.5. Compliance with and completion of conformance determinations for other statute, executive order, or regulation has been completed and support the Categorical Exclusion.

Funding Information

Grant Number	HUD Program	Funding Amount
	Capital Fund Grants	To be determined
	Economic Development Initiative Special Project Grant	To be determined
	Other Grants	To be determined

Estimated Total HUD Funded Amount:

To be determined by HUD in coordination with HPHA.

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]**:**

To be determined by HUD in coordination with HPHA.

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	*The project is not within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.*
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☒	*Hawai'i has no coastal barriers (http://www.fws.gov/CBRA/Maps/Mapper.html)*
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes ☐ No ☒	*As indicated in the Flood Insurance Rate Map Panel 15003C0362G, the project site is located in Zone X and is determined to have minimal flood hazard and is outside the 500-year flood zone. Based on the project description the project includes no activities that would require further evaluation under this section. The project does not require flood insurance or is exempt from flood insurance. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with Flood Insurance requirements*

STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5		
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes ☐ No ☒	*The State of Hawai'i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. EPA's Green Book for currently designated "nonattainment areas" as of June 2015. Planned repair and rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.*
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes ☐ No ☒	*Documentation from the Office of Planning determined that projects receiving federal funds from HUD's Public Housing Capital Fund do not require review for consistency with Hawai'i's CZM program.*
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☐ No ☒	*Based on the results of the EDR report and site visit, there are no known hazardous materials, contamination, or toxic chemicals, gasses or radioactive substances in the immediate vicinity which could affect the health or safety of occupants or conflict with intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gasses, etc.*
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes ☒ No ☐	*The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (USFWS) in their letter dated September 28, 2015 which is included in the Appendices, while project-specific mitigation measures are identified in the following section.*
Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes ☐ No ☒	*There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site.*
Farmlands Protection **Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658**	Yes ☐ No ☒	*The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. The project is located within the*

		State Land Use Urban District. The existing development is located on urbanized property. No farmlands will be impacted by repair or rehabilitation improvements implemented.
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes ☐ No ☒	*As indicated in the Flood Insurance Rate Map Panel 15003C0362G, the project site is located in Zone X and is determined to have minimal flood hazard and is outside the 500-year flood zone. The project is in compliance with Executive Order 11988.*
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes ☒ No ☐	*Makua Ali`i is 48 years old and was constructed in 1967. The housing project has been renovated twice, in 1972 and 1984. A 2015 Architectural Inventory Survey (AIS) notes that Makua Ali`i is significant at the State level for its associations with the history of the HHA and for its high quality of design, being the work of a master. It also meets the criteria for listing in the National Register of Historic Places due to its association with Hawai`i's public housing history. In a letter dated December 2, 2015, the State Historic Preservation Officer concurred with the HPHA's determination that repair and rehabilitation improvements for this housing project would have "no adverse effect" on historic properties pursuant to NHPA Section 106 and subject to certain mitigative measures*
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes ☐ No ☒	*The project site is not situated along a highway or major arterial roadway that has a high volume of vehicular traffic that may generate significant noise. The HUD noise level calculator estimated noise levels at the project site to be 61.9 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.*
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes ☐ No ☒	*The housing project is located within the O'ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation.*

Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☐ No ☒	*There are no known wetlands within the housing project's property, and therefore, no wetlands will be adversely impacted by the project improvements (http://www.fws.gov/wetlands/data/mapper.HTML)*
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes ☐ No ☒	*There are no Wild and Scenic Rivers in Hawai'i, which excludes this project from mitigation or formal consultation requirements (http://www.rivers.gov/map.php) .*
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes ☐ No ☒	*Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, these improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects on minority populations and low-income populations. Improvements should benefit low-income and minority populations living within this housing project.*

Field Inspection (Date and completed by)**:** June 2, 2015, Glenn Tadaki

Summary of Findings and Conclusions:

Repair and rehabilitation improvements implemented for this existing housing project by HPHA should not result in significant environmental impacts based upon research data collected, a field inspection, consultation with the site manager and maintenance staff, consultation with pertinent resource agencies, and prior HPHA experience implementing repair and rehabilitation improvements. Therefore, repair and rehabilitation improvements would comply and be consistent with the statutes, executive orders, and regulations addressed. Furthermore, HPHA would evaluate improvements planned to ensure the work is consistent with the designated categories of actions described under the project description section. Compliance with these factors evaluated are further addressed in the attached Source Documentation Statutory Worksheet along with relevant technical reports/assessments.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Law, Authority, or Factor	Mitigation Measure
Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	*Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.* *Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.* *Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.* *Newell's shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.* *Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.* *Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo'i, impoundments or other vegetated water bodies.*

	1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols. *2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.* *3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.* *In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.* *<u>Additional Measures</u>: The following additional measures would be implemented:* *1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.*
National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	*1.When considering rehabilitation improvements or building modifications: 1) the buildings' character-defining features shall be retained to the extent practicable; and 2) the renovations shall adhere to the Secretary of the Interior's (SOI) Standards for Rehabilitation.* *2. If rehabilitation improvements or building modifications cannot retain the character-defining features or adhere to the SOI's Standards, a Historic American Buildings Survey (HABS) will be conducted subject to the following conditions:* *a. Level II HABS documentation will be conducted in accordance with the National Park Service standards; and* *b. A representative sample of multiple building types would be selected for HABS documentation due to the multiple types of buildings constructed for housing projects.* *3. If ground disturbing activity is anticipated, HPHA must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation.* *a. Submit detailed plans, specifications and a detailed scope of work once the plans have been developed.*

	b. Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation. *c. Submit a TMK map showing the full extent of the project area within the affected parcel/s.* *d. Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area.* *e. Summary of land use history, such as previous intensive cultivation, grubbing or grading.* *f. Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.* *In addition to these mitigation measures, the HPHA would enter into a Programmatic Agreement with the SHPO to address the implementation of future repair and rehabilitation improvements to State housing projects after the current Section 106 review process is completed and prior to the next environmental review process in approximately five years. Furthermore, should subsurface human remains or other traces of human activity greater than 50 years old be encountered during construction, all work in the vicinity of the find would immediately stop and the SHPD would be promptly notified. The treatment of any human remains that are encountered would be conducted in accordance with applicable requirements of Chapter 6E, Hawai'i Revised Statutes (Historic Preservation) and Chapter 13-300, Hawai'i Administrative Rules (Rules of Practice and Procedure Relating to Burial Sites and Human Remains).*

Determination:

☐ This categorically excluded activity/project converts to **EXEMPT** per Section 58.34(a)(12), because it does not require any mitigation for compliance with any listed statutes or authorities, nor requires any formal permit or license; **Funds may be committed and drawn down after certification of this part** for this (now) EXEMPT project; OR

☒ This categorically excluded activity/project cannot convert to Exempt status because one or more statutes or authorities listed at Section 58.5 requires formal consultation or mitigation. Complete consultation/mitigation protocol requirements, **publish NOI/RROF and obtain "Authority to Use Grant Funds"** (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR

☐ This project is not categorically excluded OR, if originally categorically excluded, is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

Preparer Signature: Scott Ezer Date: 12-17-15

Name/Title/Organization: Mr. Scott Ezer, Vice President
HHF Planners

Responsible Entity Agency Official Signature:

David Y Ige Date: APR 28 2016

Name/Title: Mr. David Y. Ige, Governor

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

MAKUA ALI`I (HA # 1012)

TMK: (1) 2-3-019: 004

Hawai‘i Public Housing Authority (HPHA) Environmental Review

SOURCE DOCUMENTATION (SD) STATUTORY WORKSHEET

Site Visit Date: June 2, 2015
Prepared By: Glenn Tadaki

PROJECT DESCRIPTION

The Makua Ali‘i elderly housing project is located within the McCully-Mo‘ili‘ili community in the Honolulu district on the island of O‘ahu. McCully-Mo‘ili‘ili is located in urban Honolulu, northeast of Ala Moana Shopping Center.

The project site is situated between Kalākaua Avenue and Kāheka Street and is located on the same tax parcel as the Kalākaua Homes and Paoakalani housing projects. Makua Ali‘i is approximately 400 feet west of Washington Middle School and lies within HPHA’s Asset Management Project (AMP) 34 which includes the other two housing projects.

Makua Ali‘i was first occupied in 1967 and has a street address of 1541 Kalākaua Avenue. The property covers 2.6 acres, and it is identified by Tax Map Key (1) 2-3-019: 004. The housing project includes a single 19-story high-rise apartment building with 210 one-bedroom units and a single three-bedroom unit reserved for live-in maintenance staff. The property is designated for “Urban” use by the State Land Use Commission and is zoned for “A-3 High Density Apartment” use by the City and County of Honolulu.

The project site is not located within a tsunami evacuation zone, and the entire site is located in Flood Zone X based upon the Flood Insurance Rate Map (Community Panel Numbers 15003C0362G and 15003C0366G, Revised January 19, 2011. Zone X is an area determined to be outside the 0.2% annual chance floodplain.

The following figures in Exhibit A provide supporting information on this housing project:

Figure 1: Location Map
Figure 2: TMK Map
Figure 3: Site Map
Figure 4: Flood Map

COMPLIANCE FACTORS

I. AIRPORT CLEAR ZONES AND ACCIDENT POTENTIAL ZONES (24 CFR PART 51D)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The housing project does not lie within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: 24 CFR 51 (D).

Honolulu International Airport Master Plan - 2010 (August 1994), State Department of Transportation, Airports Division; and

*Hawai`i Airports and Flying Safety Guide (2012-13, Fifth Edition, Revision 1)* Hawai`i Department of Transportation, Airports Division.

HDOT website at: http://hidot.hawaii.gov/airports/files/2013/01/Airport-Safety-Guide-2012-2013-5rev1.pdf

II. COASTAL BARRIER RESOURCES (COASTAL BARRIER IMPROVEMENT ACT OF 1990 [16 USC 3501])

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i does not have any designated coastal barrier resource units.

SUPPORTING DOCUMENTATION:

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/cbra/maps/mapper.html (Date accessed: 6/30/15).

III. FLOOD INSURANCE (FLOOD DISASTER PROTECTION ACT OF 1973 AND NATIONAL FLOOD INSURANCE REFORM ACT OF 1994 [42 USC 4001-4128 AND 42 USC 5154a])

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program

The project site is located in Zone X (area of minimal flood hazard) and is located outside the 500-year flood zone. A field inspection and information obtained from the site manager confirmed no major flooding issues within the site. Based on its description, the Makua Ali`i housing project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal any signs of previous flooding problems. An interview with the maintenance supervisor also determined that no major ponding or flooding issues have occurred on the project site.

Printed: City and County of Honolulu, Flood Insurance Rate Map, Hawai‘i Community Panel Numbers 15003C0362G and 15003C0366G, Revised January 19, 2011.

Hawai`i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 6/30/15)

IV. CLEAN AIR ACT (40 CFR PARTS 6, 51, 93)

SUPPORTING DOCUMENTS	
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. Environmental Protection Agency's Green Book for currently designated "nonattainment areas" as of June 2015. Planned rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.

SUPPORTING DOCUMENTATION:

Printed: *State of Hawai‘i Annual Summary 2013 Air Quality Data*. State of Hawai'i, Department of Health, July 2014.

U.S. Environmental Protection Agency website at: http://epa.gov/airquality/greenbk/

V. COASTAL ZONE MANAGEMENT ACT (16 USC 1451, SECTIONS 307 (C), (D)

CONTACT:
Mr. John Nakagawa
Office of Planning
Department of Business, Economic Development & Tourism
State of Hawai‘i
P.O. Box 2359
Honolulu, Hawai'i, 96804-2359

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai‘i's Coastal Zone Management (CZM) program.

SUPPORTING DOCUMENTATION:

Contact: In an e-mail to the Office of Planning (OP) dated July 27, 2015, the HPHA determined that the use of HUD funds for the implementation of repair and rehabilitation improvements does not require review for consistency with Hawai‘i's CZM program. The OP confirmed this determination in an e-mail dated July 28, 2015 and included in the Appendices.

Experience: As part of past environmental reviews in December 2010, a letter from the OP dated July 20, 2005 determined that their review for consistency with Hawai‘i's CZM program was not required. A copy of this letter is included in the Appendices.

VI. CONTAMINATION AND TOXIC SUBSTANCES (24 CFR PART 50.3 & 58.5(I)(2))

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Project Not Affected

There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.

SUPPORTING DOCUMENTATION:

Field: A site inspection and interview with the site manager and maintenance supervisor revealed no presence of any toxic or radioactive materials on the project site that warrant any concern. A secure storage building behind Makua Ali`i is used to store flammable and hazardous materials for the three housing projects on this tax parcel. The storage building is in acceptable condition and labeled with signage.

Study: Environmental Data Resources, Inc. (EDR), conducted a search of available environmental records and prepared a Radius Map Report (Inquiry Number 4237094.38s, March 18, 2015). EDR reviewed more than 25 federal and statewide regulatory databases for information regarding the treatment, storage, disposal and release of toxic chemicals at the project site and within specific radii (generally 1 mile) of the site. A Detail Map within the EDR report documents those sites identified within a 0.25 mile radius of the project site. Some of the sites contain underground storage tanks (UST) that are currently in use or are permanently out of use. The EDR report in Exhibit B includes the results of their research findings.

The EDR report notes that the nearby Kalākaua Homes housing project was inspected for asbestos in 2005 and that the inspection resulted in no violation or enforcement action. It also notes that Kalākaua Homes is classified as a small, small quantity generator because it produces between 100 to 1,000 kilograms (kg) of hazardous waste per month and accumulates less than 6,000 kg of hazardous waste at any time. No violations were reported for Kalākaua Homes as a small, small quantity generator.

In the vicinity of the project site, the report notes that a former gas station at 1505 S. King Street closed around 2007 and its four gasoline UST (total 36,500 gallons) and one oil UST (550 gallons) are permanently out of use. It also notes that cleanup for a leaking UST at a gas station on 1549 S. King Street was conducted in 2010 and that a drug store at 966 Kaheka Street is a conditionally exempt small quantity generator because it produces 100 kilograms (kg) or less of hazardous waste per month and accumulates 1,000 kg or less of hazardous waste at any time. No violations have been reported for the drug store as a conditionally exempt small quantity generator.

The project site was not identified as a Formerly Used Defense Site (FUDS) by the U.S. Army Corps of Engineers and is not subject to any cleanup actions for Department of Defense-generated contamination.

VII. ENDANGERED SPECIES (50 CFR PART 402)

CONTACT:	SUPPORTING DOCUMENTS	
Mr. Loyal Mehrhoff, Field Supervisor		Field
Pacific Islands Administrator	X	Contact
Fish and Wildlife Services		Printed
U.S. Department of the Interior	X	Experience
300 Ala Moana Boulevard, Room 3-122, Box 50088		Study
Honolulu, Hawai'i 96813		
Tel. #: 792-9400		

DETERMINATION:

Status Category: No Adverse Effect Subject to Mitigation

The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received by the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices.

SUPPORTING DOCUMENTATION:

Contact: A letter from the HPHA dated July 24, 2015 was submitted to the Pacific Island Administrator for the FWS determining that repair and rehabilitation improvements that may be implemented using HUD funds for this housing project would have no likelihood of effect on any listed species or proposed species, or existing or proposed designated critical habitat subject to certain measures. Concurrence with this determination along with proposed minimization and avoidance measures was received from the FWS in a letter dated September 28, 2015 which is included in the Appendices. This housing project is subject to the following minimization and avoidance measures.

Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.

Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.

Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.

Newell's shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the

proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.

Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.

Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo‘i, impoundments or other vegetated water bodies.

1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS’s recommended Hawaiian Waterbird Survey Protocols.
2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.
3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.

In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.

Additional Measures: The following additional measures would be implemented:

1. No vegetation or soil disturbance shall be conducted outside a project’s previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.

Experience: The FWS was previously consulted as part of environmental reviews that were completed in 2005 (39 housing projects) and 2010 (70 housing projects) which supported the determination that repair and rehabilitation improvements would either: 1) have no likelihood of effect for certain housing projects; or 2) not likely adversely affect federally listed species or critical habitat for certain housing projects subject to mitigative measures. A summary of these consultation efforts follows.

2005 Consultation: In a letter dated July 15, 2005, the Housing and Community Development Corporation of Hawai'i (predecessor to the HPHA), determined that the implementation of minor repair and rehabilitation improvements for 39 housing projects would not have an adverse effect on federally-listed species or critical habitat. In a letter dated August 11, 2005, the FWS concurred with the HCDCH determination.

2010 Consultation: In a letter dated May 17, 2010, the HPHA informed the FWS that HUD funds would be used to immediately implement repair and rehabilitation improvements for six housing projects on O'ahu and the island of Hawai`i. In a subsequent letter dated May 21, 2010, the FWS was informed that HPHA would be using HUD funds to implement minor repair and rehabilitation improvements for 64 projects throughout the State. In both letters, the HPHA determined that the repair and rehabilitation improvements were not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat. Based on further consultation and a meeting with FWS staff on June 24, 2010, the HPHA determined that repair and rehabilitation improvements for most of their housing projects would not likely adversely affect any listed or proposed species, or existing or proposed designated habitat, subject to various mitigative measures for certain housing projects.

VIII. EXPLOSIVE AND FLAMMABLE OPERATIONS (24 CFR PART 51C)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

SUPPORTING DOCUMENTATION:

Field: Field inspection was limited to the exterior of residential buildings and associated structures for this housing project. No above-ground explosive or flammable material storage containers in excess of 100 gallons were observed at the site.

Printed: 24 CFR Part 51, Subpart C addresses acceptable separation distance from above-ground explosive or flammable fuels or chemical containers. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

IX. FARMLANDS PROTECTION (7 CFR PART 658)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. Since the property consists of an existing housing development within an urbanized area, no farmlands would be impacted by the implementation of repair and rehabilitation improvements.

Printed: The property is designated for "Urban" use by the State Land Use Commission and is zoned for "A-3 High Density Apartment" use by the City and County of Honolulu.

Hawai`i Office of Planning website at: http://planning.hawaii.gov/gis/
(Date accessed: 6/30/2015)

X. FLOODPLAIN MANAGEMENT (EXECUTIVE ORDER 11988, 24 CFR PART 55)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program

The project site is located in Zone X, an area of minimal flooding (i.e., 0.2% annual chance flood), and is located outside the 500-year flood zone. A field inspection and information obtained from the site manager confirmed no major flooding issues within the project site.

SUPPORTING DOCUMENTATION:

Field: A site visit of the housing project did not visually reveal any signs of previous flooding problems. An interview with the maintenance supervisor also determined that no major ponding or flooding issues have occurred on the project site.

Printed: City and County of Honolulu, Flood Insurance Rate Map, Hawai'i Community Panel Numbers 15003C0362G and 15003C0366G, Revised January 19, 2011.

Hawai`i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 6/30/15)

XI. HISTORIC PRESERVATION (NATIONAL HISTORIC PRESERVATION ACT OF 1966; SECTIONS 106 AND 110; 36 CFR, PART 800)

CONTACT:

Ms. Suzanne Case, Chairperson
Department of Land and Natural Resources (DLNR)
State of Hawai'i
1151 Punchbowl Street
Honolulu, Hawai'i 96813
Tel. #: 587-0400

SUPPORTING DOCUMENTS

X	Field
X	Contact
X	Printed
X	Experience
X	Study

DETERMINATION:

Status Category: No Adverse Effect on Historic Properties with Mitigation

Makua Ali`i is 48 years old and was constructed in 1967. The housing project has been renovated twice, in 1972 and 1984. In May 2015, Fung Associates conducted an Architectural Inventory Survey (AIS) for Makua Ali`i. The 2015 AIS notes that Makua Ali`i was the second elderly housing project undertaken by the Hawai`i Housing Authority (HHA), a predecessor to the HPHA. In addition, it was the first immediately successful, large scale, low-cost, senior housing project in the State. Makua Ali`i is significant at the State level for its associations with the history of the HHA and for its high quality of design, being the work of a master, Honolulu architect Frank Slavsky. It also appears to meet the significance criteria for listing in the National Register of Historic Places (NRHP) due to its association with Hawai`i's public housing history. To be considered eligible, a property must meet the National Register criteria for evaluation which involves examining its integrity, significance, and age (generally at least 50 years old). In a letter to the State Historic Preservation Officer (SHPO) dated August 20, 2015, the HPHA determined that repair and rehabilitation improvements for this housing project would have "no adverse effect" on historic properties subject to certain mitigative measures. In a letter dated December 2, 2015, the SHPO concurred with the HPHA's determination and provided additional conditions for ground-disturbing activities. In responding to this letter, the HPHA concurred with the conditions set forth by the SHPO.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the Makua Ali`i housing project did not locate any existing or potential archaeological sites (e.g., heiau) or cultural features on the property. The project site has undergone extensive ground-altering activities since it was initially developed and improved with buildings, driveways, parking lots, sidewalks, and other related improvements. An interview with the site manager and maintenance supervisor indicates that no known sites or features are present on the property.

Contact: Based on the findings and recommendations of the 2015 AIS, the HPHA submitted a letter to the State Historic Preservation Officer dated August 20, 2015 regarding 28 housing projects, which is included in the Appendix. Of this total, 15 housing projects did not meet National Register eligibility criteria, therefore, a "no historic properties affected" determination was proposed for these repair and rehabilitation improvements. Repair and rehabilitation improvements for the other 13 housing projects (including Makua Ali`i) were determined to meet National Register eligibility criteria and were proposed to have "no adverse effect" on historic properties subject to certain mitigative measures.

In a letter dated December 2, 2015, the SHPO concurred with the HPHA's determination that repair and rehabilitation improvements for this housing project would have "no adverse effect" on historic properties pursuant to NHPA Section 106 and subject to the following mitigative measures. . In response to this letter, the HPHA concurred with the conditions set forth by the SHPO. A copy of these letters are included in Exhibit C.

1. When considering rehabilitation improvements or building modifications: 1) the buildings' character-defining features shall be retained to the extent practicable; and 2) the renovations shall adhere to the Secretary of the Interior's (SOI) Standards for Rehabilitation.

2. If rehabilitation improvements or building modifications cannot retain the character-defining features or adhere to the SOI's Standards, a Historic American Buildings Survey (HABS) will be conducted subject to the following conditions:

    a. Level II HABS documentation will be conducted in accordance with the National Park Service standards; and

    b. A representative sample of multiple building types would be selected for HABS documentation due to the multiple types of buildings constructed for housing projects.

3. If ground disturbing activity is anticipated, HPHA must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation.

    a. Submit detailed plans, specifications and a detailed scope of work once the plans have been developed.

    b. Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation.

    c. Submit a TMK map showing the full extent of the project area within the affected parcel/s.

    d. Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area.

    e. Summary of land use history, such as previous intensive cultivation, grubbing or grading.

    f. Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

In addition to these mitigation measures, the HPHA would enter into a Programmatic Agreement with the SHPO to address the implementation of future repair and rehabilitation improvements to State housing projects after the current Section 106 review process is completed and prior to the next environmental review process in approximately five years. Furthermore, should subsurface human remains or other traces of human activity greater than 50 years old be encountered during construction, all work in the vicinity of the find would immediately stop and the SHPD would be promptly notified. The treatment of any human remains that are encountered would be conducted in accordance with applicable requirements of Chapter 6E, Hawai'i Revised Statutes (Historic Preservation) and Chapter 13-300, Hawai'i Administrative Rules **(**Rules of Practice and Procedure Relating to Burial Sites and Human Remains).

Printed: A review of the U.S. National Parks Service website for the National Register of Historic Places did not identify any historic properties within the limits of this housing project. A similar review of the State DLNR website for the State Register of Historic Places revealed that there are no historic properties within the project site.

National Register: U.S. National Park Service website at:
http://www.nps.gov/nr/research/ (Date accessed: 7/2/15).

State Register: Hawai`i Department of Land and Natural Resources website at:
http://dlnr.hawaii.gov/shpd/state-register/ (Date accessed: 7/2/15).

Experience: In a letter to the SHPD dated July 15, 2005, the Housing and Community Development Corporation of Hawai`i (HCDCH), a predecessor to the HPHA, proposed minor repair and rehabilitation improvement at 39 public housing projects throughout Hawai`i and believed this work would have "no effect" on significant historic sites. The HCDCH also asked the SHPD to: (1) define the area of potential effect for the housing projects; (2) identify and evaluate historic properties within the housing projects; and (3) assess and resolve any adverse effects of the housing projects per Section 106 of the National Historic Preservation Act of 1966.

In a letter to the HCDCH dated September 27, 2005, the SHPO responded by requesting that a programmatic agreement (PA) with the HCDCH be developed that would also address the recordation of housing projects that have not yet reached the 50-year milestone but may face possible adverse effects from the proposed work.

Based on follow up discussions with the SHPD, Mason Architects prepared a historic property evaluation (HPE) on behalf of the HCDCH in April 2006 for six public housing projects on Hawai`i Island and O`ahu. The six projects covered by the HPE met, or would soon meet, the 50-year age criteria to become eligible for listing in the NRHP. At the time, only two of the projects were over 50 years old and only two met NRHP eligibility criteria. The HPE was submitted to the SHPD for review and comment on June 6, 2006. The SHPO had no comments or objections on the 2006 HPE or the "no effect" determination set forth in the HCDCH letter dated July 15, 2005.

In a letter to the SHPO dated July 14, 2010, the HPHA proposed a "no adverse effect" determination for minor repair and rehabilitation improvement for three out of five public housing projects on Hawai`i Island and O`ahu. This determination was based on an HPE that Mason Architects prepared on behalf of the HPHA in June 2010. The five projects covered by the HPE met, or would soon meet, the 50-year age criteria to become eligible for listing in the NRHP. At the time, all five projects were over 50 years old but only three

met NRHP eligibility criteria. The SHPO had no comments or objections on the 2010 HPE or the "no adverse effect" determination set forth in the HPHA letter dated July 14, 2010.

In letter to the SHPO dated April 19, 2011, the HPHA determined that minor repair and rehabilitation improvement at 57 public housing projects throughout Hawai`i (including Makua Ali`i) would have "no effect" on historic properties. The SHPO had no comments or objections on the "no effect" determination.

Study: The 2015 AIS evaluated 17 HPHA housing projects, including Makua Ali`i. The purpose of the AIS was to evaluate certain previously-evaluated housing projects along with other housing projects in order to determine if they would meet NRHP eligibility criteria. The section of the AIS that covers this housing project is included in Exhibit C, while the entire document is included in the Appendices.
Two of the 17 housing projects are over 50 years old, while the remaining 15 are over 45 years old and will be at least 50 years old when repair and rehabilitation improvements are implemented. In addition, eight of the 17 projects met the eligibility criteria for listing in the NRHP and were considered significant for their role in the social history of Hawai'i, for representing the efforts of a territorial and statewide housing reform, and for their architecture, which reflected a type, style, method of construction, and materials used during the period in which they were constructed. The housing projects that were not considered NRHP eligible were evaluated as such because of their loss of integrity due to prior renovations.

Major character-defining features of Makua Ali`i include a 19-story building that is comprised of two offset connected towers with vertical circulation provided at the intersection. Other key features include the interplay of horizontal bands formed by the pre-cast spandrels of the lanai corridors which run across the face of the building and the vertical, reinforced concrete structural columns that are set 20 feet on center. Open, concrete stairways are at either end of the building along with a flat, built-up roof with a three-foot-high parapet. The Makua Ali`i housing project has won a national award from HUD for excellence in architecture, and an award from the Hawai`i chapter of the American Institute of Architects. The housing project retains a high degree of historic integrity and appears to meet the criteria for listing in the NRHP as excellent examples of high-rise public housing and public housing for the elderly. It also appears to have met the eligibility criteria for listing in the State Register of Historic Places since it embodies the distinctive characteristics of its type, period, and method of construction, and has high artistic values that represent the work of a master, architect Frank Slavsky.

XII. NOISE ABATEMENT CONTROL (24 CFR PART 51B)

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Within HUD Noise Standards

The project site is not situated along a highway or major arterial roadway that has a high volume of vehicular traffic that may generate significant noise. Kalākaua Avenue is a major City roadway along the project site serving vehicular traffic entering and exiting Waikiki along with providing access to other surrounding urban areas. The HUD noise level calculator estimated noise levels at the project site to be 61.9 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

SUPPORTING DOCUMENTATION:

Field: The project site is situated within a block generally surrounded by other existing condominiums and commercial buildings. Noise from surrounding areas and roadways are also mitigated at the project site to some extent from these other concrete buildings and structures serving as barriers from roadways. No significant noise generating sources were identified within the project site during the site inspection. Noise sources are predominantly associated with vehicular traffic along adjacent roadways and voices from surrounding activities.

Study: The HUD day/night noise level calculator was used to estimate approximate traffic noise levels at the project site. Kalākaua Avenue is a major City roadway generally running in a north-south direction along the project site serving vehicular traffic entering and exiting Waikiki along with providing access to other surrounding urban areas. Kāheka Street is located to the west of the project site running in a north-south direction, and provides access to existing uses along that street. Kalākaua Avenue has about 43,900 vehicles a day based upon State Department of Transportation 2013 traffic data. Given the distance of the center lines of this roadway from the project site (about 140 feet), the estimated noise levels at the project site using this HUD calculator was 61.9 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

XIII. SOLE SOURCE AQUIFER (40 CFR PART 149)

	SUPPORTING DOCUMENTS
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact on Sole Source Aquifer

The housing project is located within the O‘ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified

sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation. However, if exceptional circumstances require compliance steps with any of these authorities, such compliance must be established and documented prior to approving the site-specific loan or grant.

SUPPORTING DOCUMENTATION:

Printed: This determination was based upon review of the Sole Source Aquifer Memorandum of 4/30/90 (Sections II.B.1 and II.B.2) and consideration of the type of rehabilitation related improvements that would be conducted for this project.

XIV. WETLANDS PROTECTION (EXECUTIVE ORDER 11990)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the property did not identify the presence of any wetlands.

Printed: U.S Fish and Wildlife Service website at: http://www.fws.gov/wetlands/data/mapper.html (Date accessed 6/30/2015).

XV. WILD AND SCENIC RIVERS ACT (16 USC 1271, SECTION 7 (B), (C))

SUPPORTING DOCUMENTS	
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no Wild and Scenic Rivers in Hawai‘i, which excludes this project from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: National Wild and Scenic Rivers System website at: http://www.rivers.gov/index.php (Date accessed: 6/30/2015).

XVI. ENVIRONMENTAL JUSTICE (EXECUTIVE ORDER NO. 12898)

	SUPPORTING DOCUMENTS
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact on Requirements

Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, repair and rehabilitation improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations. Repair and rehabilitation improvements should benefit low-income and minority populations living within this housing project.

SUPPORTING DOCUMENTATION:

Printed: Executive Order 12898.

U.S. Department of Housing and Urban Development website at: https://www.hudexchange.info/environmental-review/environmental-justice/

EXHIBIT A

Location Map, TMK Map, Site Map, Flood Map, and Site Photos

Source: State of Hawaiʻi GIS Data and Google Earth Pro - 1/12/13

HONOLULU RAIL TRANSIT

Transit Corridor

Transit Station

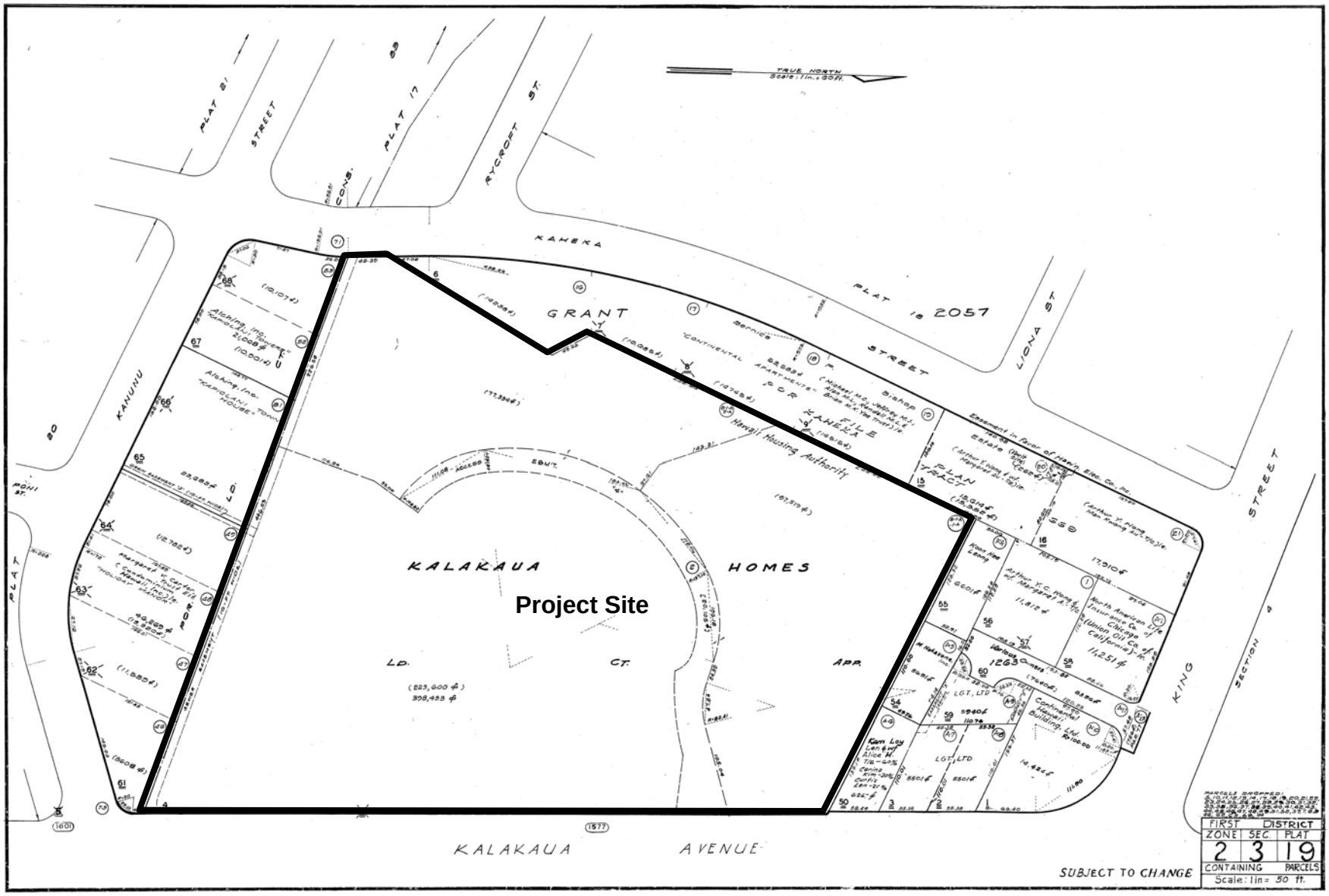
HPHA No. 1012 - Makua Aliʻi (AMP 34)

Figure 1 - Project Location Map

Honolulu, Oʻahu

2,000 FT

HHF PLANNERS
places for people

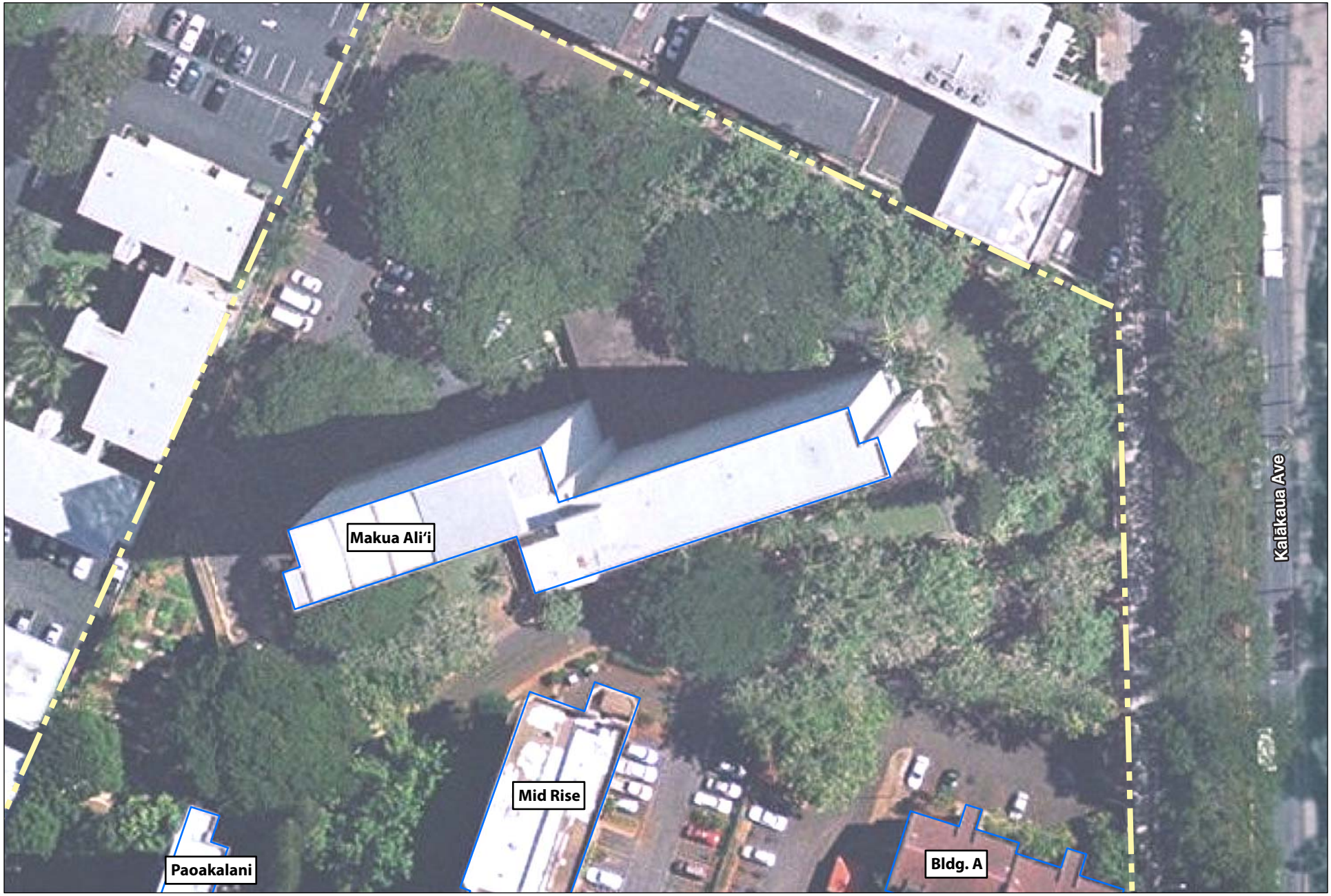


HPHA No. 1012 - Makua Aliʻi (AMP 34)

Figure 2 - TMK Map

Honolulu, Oʻahu

HHF PLANNERS
places for people



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1012 - Makua Ali'i (AMP 34)

Figure 3 - Site Map

Honolulu, O'ahu

50 FEET

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

LEGEND

- Zone AO - 1% Annual Chance of Shallow Flooding
- Zone X - Outside the 0.2% Annual Chance of Flood

HPHA No. 1012 - Makua Ali'i (AMP 34)

Figure 4 - Flood Map

Honolulu, O'ahu

50 FEET

HHF PLANNERS
places for people

MAKUA ALI'I
SITE PHOTOS

Kalakaua Avenue, fronting housing site, looking north

Entrance; subject housing site to the right (not shown)

Landscaping fronting housing site; housing site in background

Kalakaua Avenue, fronting housing site, looking south

Open space and housing site main entry

Project's northern boundary. Housing project at left, adjacent proerty at right

MAKUA ALIʻI, PAOAKALANI, KALĀKAUA HOMES
SITE PHOTOS

Storage Area

Storage Area

Bulky items pending disposal

Drain inlet

Trash chute

Backup generator

EXHIBIT B

EDR Radius Map Report

Kalakaua Homes
1545 Kalakaua Ave.
Honolulu, HI 96814

Inquiry Number: 4237094.38s
March 18, 2015

EDR Summary Radius Map Report

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

FORM-NULL-PVC

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

1545 KALAKAUA AVE.
HONOLULU County, HI 96814

COORDINATES

Latitude (North):	21.2956000 - 21˚ 17' 44.16''
Longitude (West):	157.8377000 - 157˚ 50' 15.72''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	620565.1
UTM Y (Meters):	2355168.5
Elevation:	7 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	USGS 7.5 min quad index

MAPPED SITES SUMMARY

Target Property Address:
1545 KALAKAUA AVE.
, HI 96814

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
A1	KALAKAUA HOMES - 17T	1545 KALAKUA AVE,	FTTS, HIST FTTS		TP
A2	KALAKAUA HOMES	1545 KALAKAUA AVE.	RCRA-SQG, FINDS		TP
A3	KALAKAUA HOMES #1910	1545 KALAKAUA AVE.	FTTS, HIST FTTS		TP
4		920 PUNAHOU ST	EDR US Hist Auto Stat	Higher	504, East
B5	LIONELS SERVICE INC	1505 S KING ST	RCRA-SQG	Higher	618, North
B6		1505 S KING ST	EDR US Hist Auto Stat	Higher	618, North
B7	MID PAC PETROLEUM 25	1505 S. KING ST.	LUST, UST, Financial Assurance	Higher	618, North
8	LONGS DRUG STORE NO	966 KAHEKA ST	RCRA-CESQG	Higher	622, NNW
C9	TESORO 2GO 61018	1549 S KING ST	LUST, UST, Financial Assurance	Higher	671, NE
10	GAS PLUS	1524 S KING ST	LUST, UST	Higher	685, NNE
C11		1549 S KING ST	EDR US Hist Auto Stat	Higher	715, NE
C12	O'REILLY AUTO PARTS	1550 SOUTH KING STRE	RCRA-CESQG	Higher	716, NE
C13		1558 S KING ST	EDR US Hist Auto Stat	Higher	722, NE
C14	PUNAHOU REPAIR SHOP	1558 S KING ST	RCRA-CESQG, FINDS	Higher	722, NE
C15	PUNAHOU REPAIR SHOP	1558 S KING ST	LUST, UST	Higher	722, NE
D16		801 KAHEKA ST	EDR US Hist Cleaners	Lower	908, SW
D17		801 KAHEKA ST	EDR US Hist Auto Stat	Lower	908, SW
D18	FIRESTONE STORE	801 KAHEKA ST	LUST, UST, Financial Assurance	Lower	908, SW
D19	HOLIDAY ACTION GAS	801 KAHEKA ST	RCRA-SQG	Lower	908, SW
E20	ALOHA/KING SELF STOR	1414 KALAKAUA AVE	SHWS, ENG CONTROLS, INST CONTROL, VCP	Higher	948, NNE
21	MAUI DIVERS OF HAWAI	1520 LIONA STREET	RCRA-CESQG, FINDS	Higher	973, NW
F22	GAS 'N GLO INC	1670 MAKALOA ST	LUST, UST	Lower	1041, South
E23	7-11 KALAKAUA	1323 KALAKAUA AVE	SHWS, UST, Financial Assurance	Higher	1049, NNE
F24		1665 KALAKAUA AVE	EDR US Hist Auto Stat	Lower	1069, SSE
F25	FORMER KALAKAUA TRAN	1665 KALAKAUA AVE	SHWS, ENG CONTROLS, INST CONTROL	Lower	1069, SSE
F26	KALAKAUA TRANSMISSIO	1665 KALAKAUA AVE	UST	Lower	1069, SSE
F27	KALAKUA TRANSMISSION	1665 KALAKUA AVE	RCRA-CESQG, FINDS	Lower	1073, SSE
28	DEPT OF AGRICULTURE	1428 S KING ST	UST	Higher	1160, NNW
29	C&CH PAWAA FIRE STAT	1610 MAKALOA ST	LUST	Lower	1218, SSW
G30	LIKE LIKE PLAZA PETR	745 KEEAUMOKU ST	SHWS	Higher	1236, West
G31	LIKELIKE DRIVE IN	745 KEEAUMOKU ST	UST	Higher	1236, West
H32	OUTRIGGER HOTELS	1315 KALAKAUA AVE	UST	Higher	1296, NNE
G33	RED BAG 3, LLC	750 KEEAUMOKU ST	RCRA-CESQG, FINDS	Higher	1301, West
H34	ONE KALAKAUA PARTNER	1314 KALAKAUA AVE	UST	Higher	1304, NNE
I35	ROGERS REPAIR INC	1687 KALAKAUA AVE	RCRA-CESQG, FINDS	Lower	1305, SSE
I36	ROGER'S REPAIR INC	1687 KALAKAUA AVE	SHWS	Lower	1305, SSE
37	HECO SUBSTATION: MAK	1544 MAKALOA ST	SHWS, SPILLS, INST CONTROL	Lower	1368, SW
38	MEADOW GOLD DAIRIES	1418 YOUNG ST	SHWS, SPILLS	Higher	1434, NNW
39	YAJIMA OIL OF USA IN	1375 S KING ST	LUST, UST, Financial Assurance	Higher	1449, NW

MAPPED SITES SUMMARY

Target Property Address:
1545 KALAKAUA AVE.
, HI 96814

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
40	HONOLULU STATION - P	1455 S BERETANIA ST	LUST, UST, Financial Assurance	Higher	1493, North
41	WENS LIFE CO., INC	808 SHERIDAN ST	LUST, UST	Higher	1553, WNW
42	NEW OFFICE LOUNGE	1551 KAPIOLANI BLVD	SHWS, LUST, UST	Lower	1558, SW
J43	MAKIKI SHELL	1436 S BERETANIA ST	LUST, UST, Financial Assurance	Higher	1594, North
J44	MID PAC PETROLEUM 25	1406 S BERETANIA ST	LUST, UST, Financial Assurance	Higher	1712, NNW
K45	SUPERBLOCK PROPERTIE	NORTH BLOCK (BLDG N8	LUST, UST	Lower	1777, West
L46	HAKUYOSHA HAWAII, IN	730 SHERIDAN ST	SHWS, SPILLS, INST CONTROL, AIRS	Lower	1806, West
L47	MOTOR SUPPLY	726 SHERIDAN ST	SHWS, INST CONTROL	Lower	1806, West
48	WALGREENS KEEAMOKU	1460 KAPIOLANI BLVD	SHWS	Lower	1824, WSW
L49	SUPERBLOCK PROPERTIE	SOUTH BLOCK (BLDG S1	LUST, UST	Lower	1841, West
K50	SUPERBLOCK PROPERTIE	SOUTH BLOCK (BLDG S2	LUST, UST	Lower	1851, WSW
51	BERETANIA CHEVRON 04	1378 S BERETANIA ST	LUST, UST, Financial Assurance	Higher	1898, NNW
M52	SHRINERS HOSPITALS F	1310 PUNAHOU ST	LUST, UST, Financial Assurance	Higher	1901, NE
N53	FIRST DEVELOPMENT IN	1777 KAPIOLANI BLVD	CERC-NFRAP, RCRA-CESQG, FINDS	Lower	1906, SSE
N54	ALOHA MOTORS 1777 KA	1777 KAPIOLANI BLVD	SHWS, SPILLS	Lower	1906, SSE
O55	HAWAII CONVENTION CE	1801 KALAKAUA AVE	SHWS, SPILLS	Lower	1984, SSE
56	SUPERBLOCK PROPERTIE	SOUTH BLOCK (BLDG S1	LUST, UST	Lower	1995, West
57	SUPERBLOCK PROPERTIE	SOUTH BLOCK (BLDG S2	LUST, UST	Lower	1997, West
O58	FUNAI'S UNION SERVIC	1810 KAPIOLANI BLVD	LUST, UST, Financial Assurance	Lower	1998, SSE
M59	KAPIOLANI WOMEN'S &	1319 PUNAHOU ST	SHWS, UST, AIRS, Financial Assurance	Higher	2013, NE
N60	ALOHA MOTORS	KAPIOLANI BLVD X KAL	LUST, UST	Lower	2039, SSE
61	ALEXANDER TOWER	1226 ALEXANDER ST	LUST, UST	Higher	2096, ENE
62	SUPERBLOCK PROPERTIE	NORTH BLOCK (BLDG N1	LUST, UST	Lower	2108, West
63	CONTINENTAL AUTO SER	1918 ALGAROBA ST	SHWS, SPILLS	Higher	2206, East
64	CARTWRIGHT NEIGHBORH	KEEAUMOKU ST & MATLO	SHWS	Higher	2275, North
65	CUTTER CHEVROLET	1391 KAPIOLANI BLVD	SHWS, LUST, UST, Financial Assurance	Lower	2333, WSW
66	TEXACO STATION 61100	1239 S KING ST	RCRA NonGen / NLR, LUST, UST, SPILLS, Financial...	Higher	2386, NW
67	GRACE OTSUKA APARTME	1233 YOUNG ST	SHWS, ENG CONTROLS, INST CONTROL	Higher	2435, NW
68	WALLYS GARDEN CENTER	1935 S BERETANIA ST	SHWS, SPILLS	Higher	2464, ENE
69	ARCADIA RETIREMENT	1434 PUNAHOU ST	LUST, UST	Higher	2525, NE
70	ALA MOANA UNOCAL	1322 KAPIOLANI BLVD	LUST, UST	Lower	2578, West
71	1012 PIIKOI STREET,	1012 PIIKOI ST	SHWS, SPILLS	Higher	2677, NW
72	YACHT HARBOR TOWERS	1600 ALA MOANA BLVD	SHWS, SPILLS, ENG CONTROLS, INST CONTROL	Lower	2701, SSW
73	SCHUMAN CARRIAGE MOT	1234 S BERETANIA ST	SHWS, LUST, UST, SPILLS, INST CONTROL, Financial...	Higher	2745, NW
74	1609 ALA WAI DIESEL	1609 ALA WAI BLVD	SHWS, SPILLS	Lower	2789, South
75	CENPAC PROPERTIES -	615 PIIKOI ST	SHWS, LUST, UST, SPILLS, Financial Assurance	Lower	2875, West
76	MCCULLY UNION SERVIC	2105 S KING ST	SHWS, LUST, UST, ENG CONTROLS, INST CONTROL,...	Higher	3032, East
77	EVERSHINE X	1230 KAPIOLANI BLVD	SHWS, VCP	Lower	3280, West
78	SEARS ALA MOANA	1450 ALA MOANA BLVD	SHWS	Lower	3380, SW

MAPPED SITES SUMMARY

Target Property Address:
1545 KALAKAUA AVE.
, HI 96814

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
79	DURANT PROPERTIES	1235 KONA ST	SHWS, INST CONTROL	Lower	3436, West
80	HOBRON HOTEL	1744 KAIOO DR	SHWS	Lower	3633, South
81	1310 PENSACOLA STREE	1310 PENSACOLA ST	SHWS	Higher	3654, NW
82	THE PAVILLION	1925 KALAKAUA AVE	SHWS, SPILLS	Lower	3710, SSE
83	PUNAHOU SCHOOL - MAI	1601 PUNAHOU ST	SHWS, LUST, UST, Financial Assurance	Higher	3791, NE
84	AUXILIARY SERVICES -	1039 S KING ST	SHWS, UST, Financial Assurance	Higher	3922, WNW
85	KOOLANI TOWER PROJEC	1189 WAIMANU ST	SHWS, SPILLS, ENG CONTROLS, INST CONTROL	Lower	4063, West
86	RESERVE HOUSING TOWE	1141 WAIMANU ST	SHWS, SPILLS	Lower	4251, West
87	CHEVRON U.S.A., INC.	2002 KALAKAUA AVE	SHWS, LUST	Lower	4291, SSE
88	1800 VANCOUVER DRIVE	1800 VANCOUVER DR	SHWS, INST CONTROL, CDL	Higher	4406, ENE
89	SELF STORAGE 1	438 KAMAKEE ST	SHWS, SPILLS	Lower	4529, West
90	JAS W GLOVER LTD	1046 WAIMAMU ST	RCRA NonGen / NLR, FINDS, SHWS, LUST, UST	Lower	4664, West
91	PACIFICA CONDOMINIUM	1009 KAPIOLANI BLVD	SHWS, LUST	Lower	4700, West
92	ROYAL GARDENS HOTEL	440 OLOHANA ST	SHWS, SPILLS	Lower	4909, SSE
93	ALA WAI COVE CONDOMI	509 UNIVERSITY AVE	SHWS, SPILLS	Lower	4995, SE
94	KING KALAKAUA PLAZA	2080 KALAKAUA AVE	SHWS, LUST, UST, SPILLS, INST CONTROL	Lower	5089, SSE
95	SYMPHONY PARK	850 KAPIOLANI BLVD	SHWS, SPILLS	Lower	5219, WNW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 7 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
KALAKAUA HOMES - 17T 1545 KALAKUA AVE, HONOLULU, HI 96815	FTTS HIST FTTS	N/A
KALAKAUA HOMES 1545 KALAKAUA AVE. HONOLULU, HI 96826	RCRA-SQG FINDS	HIP000142166
KALAKAUA HOMES #1910 1545 KALAKAUA AVE. HONOLULU, HI 96826	FTTS HIST FTTS	N/A

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal CERCLIS NFRAP site List

CERC-NFRAP: A review of the CERC-NFRAP list, as provided by EDR, and dated 10/25/2013 has revealed that there is 1 CERC-NFRAP site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
FIRST DEVELOPMENT IN	***1777 KAPIOLANI BLVD***	***SSE 1/4 - 1/2 (0.361 mi.)***	***N53***	***19***

EXECUTIVE SUMMARY

Federal RCRA generators list

RCRA-SQG: A review of the RCRA-SQG list, as provided by EDR, and dated 12/09/2014 has revealed that there are 2 RCRA-SQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LIONELS SERVICE INC	1505 S KING ST	N 0 - 1/8 (0.117 mi.)	B5	7

Lower Elevation	Address	Direction / Distance	Map ID	Page
HOLIDAY ACTION GAS	801 KAHEKA ST	SW 1/8 - 1/4 (0.172 mi.)	D19	11

RCRA-CESQG: A review of the RCRA-CESQG list, as provided by EDR, and dated 12/09/2014 has revealed that there are 7 RCRA-CESQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LONGS DRUG STORE NO	966 KAHEKA ST	NNW 0 - 1/8 (0.118 mi.)	8	8
O'REILLY AUTO PARTS	1550 SOUTH KING STRE	NE 1/8 - 1/4 (0.136 mi.)	C12	9
PUNAHOU REPAIR SHOP	***1558 S KING ST***	***NE 1/8 - 1/4 (0.137 mi.)***	***C14***	***9***
MAUI DIVERS OF HAWAI	***1520 LIONA STREET***	***NW 1/8 - 1/4 (0.184 mi.)***	***21***	***11***
RED BAG 3, LLC	***750 KEEAUMOKU ST***	***W 1/8 - 1/4 (0.246 mi.)***	***G33***	***13***

Lower Elevation	Address	Direction / Distance	Map ID	Page
KALAKUA TRANSMISSION	***1665 KALAKUA AVE***	***SSE 1/8 - 1/4 (0.203 mi.)***	***F27***	***12***
ROGERS REPAIR INC	***1687 KALAKAUA AVE***	***SSE 1/8 - 1/4 (0.247 mi.)***	***I35***	***14***

State- and tribal - equivalent CERCLIS

SHWS: A review of the SHWS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 44 SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ALOHA/KING SELF STOR	***1414 KALAKAUA AVE***	***NNE 1/8 - 1/4 (0.180 mi.)***	***E20***	***11***
7-11 KALAKAUA	***1323 KALAKAUA AVE***	***NNE 1/8 - 1/4 (0.199 mi.)***	***E23***	***11***
LIKE LIKE PLAZA PETR	745 KEEAUMOKU ST	W 1/8 - 1/4 (0.234 mi.)	G30	13
MEADOW GOLD DAIRIES	***1418 YOUNG ST***	***NNW 1/4 - 1/2 (0.272 mi.)***	***38***	***14***
KAPIOLANI WOMEN'S &	***1319 PUNAHOU ST***	***NE 1/4 - 1/2 (0.381 mi.)***	***M59***	***20***
CONTINENTAL AUTO SER	***1918 ALGAROBA ST***	***E 1/4 - 1/2 (0.418 mi.)***	***63***	***21***
CARTWRIGHT NEIGHBORH	KEEAUMOKU ST & MATLO	N 1/4 - 1/2 (0.431 mi.)	64	22
GRACE OTSUKA APARTME	***1233 YOUNG ST***	***NW 1/4 - 1/2 (0.461 mi.)***	***67***	***22***
WALLYS GARDEN CENTER	***1935 S BERETANIA ST***	***ENE 1/4 - 1/2 (0.467 mi.)***	***68***	***23***
1012 PIIKOI STREET,	***1012 PIIKOI ST***	***NW 1/2 - 1 (0.507 mi.)***	***71***	***23***
SCHUMAN CARRIAGE MOT	***1234 S BERETANIA ST***	***NW 1/2 - 1 (0.520 mi.)***	***73***	***24***
MCCULLY UNION SERVIC	***2105 S KING ST***	***E 1/2 - 1 (0.574 mi.)***	***76***	***25***
1310 PENSACOLA STREE	1310 PENSACOLA ST	NW 1/2 - 1 (0.692 mi.)	81	26
PUNAHOU SCHOOL - MAI	***1601 PUNAHOU ST***	***NE 1/2 - 1 (0.718 mi.)***	***83***	***26***
AUXILIARY SERVICES -	***1039 S KING ST***	***WNW 1/2 - 1 (0.743 mi.)***	***84***	***26***
1800 VANCOUVER DRIVE	***1800 VANCOUVER DR***	***ENE 1/2 - 1 (0.834 mi.)***	***88***	***27***

Lower Elevation	Address	Direction / Distance	Map ID	Page
FORMER KALAKAUA TRAN	***1665 KALAKAUA AVE***	***SSE 1/8 - 1/4 (0.202 mi.)***	***F25***	***12***
ROGER'S REPAIR INC	1687 KALAKAUA AVE	SSE 1/8 - 1/4 (0.247 mi.)	I36	14
HECO SUBSTATION: MAK	***1544 MAKALOA ST***	***SW 1/4 - 1/2 (0.259 mi.)***	***37***	***14***
NEW OFFICE LOUNGE	***1551 KAPIOLANI BLVD***	***SW 1/4 - 1/2 (0.295 mi.)***	***42***	***16***
HAKUYOSHA HAWAII, IN	***730 SHERIDAN ST***	***W 1/4 - 1/2 (0.342 mi.)***	***L46***	***17***
MOTOR SUPPLY	***726 SHERIDAN ST***	***W 1/4 - 1/2 (0.342 mi.)***	***L47***	***17***
WALGREENS KEEAMOKU	1460 KAPIOLANI BLVD	WSW 1/4 - 1/2 (0.345 mi.)	48	17
ALOHA MOTORS 1777 KA	***1777 KAPIOLANI BLVD***	***SSE 1/4 - 1/2 (0.361 mi.)***	***N54***	***19***
HAWAII CONVENTION CE	***1801 KALAKAUA AVE***	***SSE 1/4 - 1/2 (0.376 mi.)***	***O55***	***19***
CUTTER CHEVROLET	***1391 KAPIOLANI BLVD***	***WSW 1/4 - 1/2 (0.442 mi.)***	***65***	***22***
YACHT HARBOR TOWERS	***1600 ALA MOANA BLVD***	***SSW 1/2 - 1 (0.512 mi.)***	***72***	***24***
1609 ALA WAI DIESEL	***1609 ALA WAI BLVD***	***S 1/2 - 1 (0.528 mi.)***	***74***	***24***
CENPAC PROPERTIES -	***615 PIIKOI ST***	***W 1/2 - 1 (0.545 mi.)***	***75***	***24***
EVERSHINE X	***1230 KAPIOLANI BLVD***	***W 1/2 - 1 (0.621 mi.)***	***77***	***25***
SEARS ALA MOANA	1450 ALA MOANA BLVD	SW 1/2 - 1 (0.640 mi.)	78	25
DURANT PROPERTIES	***1235 KONA ST***	***W 1/2 - 1 (0.651 mi.)***	***79***	***25***
HOBRON HOTEL	1744 KAIOO DR	S 1/2 - 1 (0.688 mi.)	80	25
THE PAVILLION	***1925 KALAKAUA AVE***	***SSE 1/2 - 1 (0.703 mi.)***	***82***	***26***
KOOLANI TOWER PROJEC	***1189 WAIMANU ST***	***W 1/2 - 1 (0.770 mi.)***	***85***	***27***
RESERVE HOUSING TOWE	***1141 WAIMANU ST***	***W 1/2 - 1 (0.805 mi.)***	***86***	***27***
CHEVRON U.S.A., INC.	***2002 KALAKAUA AVE***	***SSE 1/2 - 1 (0.813 mi.)***	***87***	***27***
SELF STORAGE 1	***438 KAMAKEE ST***	***W 1/2 - 1 (0.858 mi.)***	***89***	***27***
JAS W GLOVER LTD	***1046 WAIMAMU ST***	***W 1/2 - 1 (0.883 mi.)***	***90***	***28***
PACIFICA CONDOMINIUM	***1009 KAPIOLANI BLVD***	***W 1/2 - 1 (0.890 mi.)***	***91***	***28***
ROYAL GARDENS HOTEL	***440 OLOHANA ST***	***SSE 1/2 - 1 (0.930 mi.)***	***92***	***28***
ALA WAI COVE CONDOMI	***509 UNIVERSITY AVE***	***SE 1/2 - 1 (0.946 mi.)***	***93***	***28***
KING KALAKAUA PLAZA	***2080 KALAKAUA AVE***	***SSE 1/2 - 1 (0.964 mi.)***	***94***	***29***
SYMPHONY PARK	***850 KAPIOLANI BLVD***	***WNW 1/2 - 1 (0.988 mi.)***	***95***	***29***

State and tribal leaking storage tank lists

LUST: A review of the LUST list, as provided by EDR, and dated 03/02/2015 has revealed that there are 28 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MID PAC PETROLEUM 25	***1505 S. KING ST.***	***N 0 - 1/8 (0.117 mi.)***	***B7***	***8***
Facility Status: Site Cleanup Completed (NFA)				
TESORO 2GO 61018	***1549 S KING ST***	***NE 1/8 - 1/4 (0.127 mi.)***	***C9***	***8***
Facility Status: LUST Cleanup Initiated				
GAS PLUS	***1524 S KING ST***	***NNE 1/8 - 1/4 (0.130 mi.)***	***10***	***9***
Facility Status: Site Cleanup Completed (NFA)				
PUNAHOU REPAIR SHOP	***1558 S KING ST***	***NE 1/8 - 1/4 (0.137 mi.)***	***C15***	***10***
Facility Status: Site Cleanup Completed (NFA)				
YAJIMA OIL OF USA IN	***1375 S KING ST***	***NW 1/4 - 1/2 (0.274 mi.)***	***39***	***15***
Facility Status: Site Cleanup Completed (NFA)				
HONOLULU STATION - P	***1455 S BERETANIA ST***	***N 1/4 - 1/2 (0.283 mi.)***	***40***	***15***
Facility Status: Site Cleanup Completed (NFA)				
WENS LIFE CO., INC	***808 SHERIDAN ST***	***WNW 1/4 - 1/2 (0.294 mi.)***	***41***	***15***
Facility Status: Site Cleanup Completed (NFA)				

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MAKIKI SHELL	***1436 S BERETANIA ST***	***N 1/4 - 1/2 (0.302 mi.)***	***J43***	***16***
Facility Status: Site Cleanup Completed (NFA)				
MID PAC PETROLEUM 25	***1406 S BERETANIA ST***	***NNW 1/4 - 1/2 (0.324 mi.)***	***J44***	***16***
Facility Status: Site Cleanup Completed (NFA)				
Facility Status: Site Cleanup Completed with EHMP				
BERETANIA CHEVRON 04	***1378 S BERETANIA ST***	***NNW 1/4 - 1/2 (0.359 mi.)***	***51***	***18***
Facility Status: Site Cleanup Completed (NFA)				
SHRINERS HOSPITALS F	***1310 PUNAHOU ST***	***NE 1/4 - 1/2 (0.360 mi.)***	***M52***	***18***
Facility Status: Site Cleanup Completed (NFA)				
ALEXANDER TOWER	***1226 ALEXANDER ST***	***ENE 1/4 - 1/2 (0.397 mi.)***	***61***	***21***
Facility Status: Site Cleanup Completed (NFA)				
TEXACO STATION 61100	***1239 S KING ST***	***NW 1/4 - 1/2 (0.452 mi.)***	***66***	***22***
Facility Status: Site Cleanup Completed (NFA)				
ARCADIA RETIREMENT	***1434 PUNAHOU ST***	***NE 1/4 - 1/2 (0.478 mi.)***	***69***	***23***
Facility Status: Site Cleanup Completed (NFA)				

Lower Elevation	Address	Direction / Distance	Map ID	Page
FIRESTONE STORE	***801 KAHEKA ST***	***SW 1/8 - 1/4 (0.172 mi.)***	***D18***	***10***
Facility Status: Site Cleanup Completed with EHE/EHMP				
Facility Status: Site Cleanup Completed (NFA)				
GAS 'N GLO INC	***1670 MAKALOA ST***	***S 1/8 - 1/4 (0.197 mi.)***	***F22***	***11***
Facility Status: Site Cleanup Completed (NFA)				
C&CH PAWAA FIRE STAT	1610 MAKALOA ST	SSW 1/8 - 1/4 (0.231 mi.)	29	13
Facility Status: Site Cleanup Completed (NFA)				
NEW OFFICE LOUNGE	***1551 KAPIOLANI BLVD***	***SW 1/4 - 1/2 (0.295 mi.)***	***42***	***16***
Facility Status: Site Cleanup Completed (NFA)				
SUPERBLOCK PROPERTIE	***NORTH BLOCK (BLDG N8***	***W 1/4 - 1/2 (0.337 mi.)***	***K45***	***17***
Facility Status: Site Cleanup Completed (NFA)				
SUPERBLOCK PROPERTIE	***SOUTH BLOCK (BLDG S1***	***W 1/4 - 1/2 (0.349 mi.)***	***L49***	***17***
Facility Status: Site Cleanup Completed (NFA)				
SUPERBLOCK PROPERTIE	***SOUTH BLOCK (BLDG S2***	***WSW 1/4 - 1/2 (0.351 mi.)***	***K50***	***18***
Facility Status: Site Cleanup Completed (NFA)				
SUPERBLOCK PROPERTIE	***SOUTH BLOCK (BLDG S1***	***W 1/4 - 1/2 (0.378 mi.)***	***56***	***19***
Facility Status: Site Cleanup Completed (NFA)				
SUPERBLOCK PROPERTIE	***SOUTH BLOCK (BLDG S2***	***W 1/4 - 1/2 (0.378 mi.)***	***57***	***20***
Facility Status: Site Cleanup Completed (NFA)				
FUNAI'S UNION SERVIC	***1810 KAPIOLANI BLVD***	***SSE 1/4 - 1/2 (0.378 mi.)***	***O58***	***20***
Facility Status: Site Cleanup Completed (NFA)				
ALOHA MOTORS	***KAPIOLANI BLVD X KAL***	***SSE 1/4 - 1/2 (0.386 mi.)***	***N60***	***20***
Facility Status: Site Cleanup Completed (NFA)				
SUPERBLOCK PROPERTIE	***NORTH BLOCK (BLDG N1***	***W 1/4 - 1/2 (0.399 mi.)***	***62***	***21***
Facility Status: Site Cleanup Completed (NFA)				
CUTTER CHEVROLET	***1391 KAPIOLANI BLVD***	***WSW 1/4 - 1/2 (0.442 mi.)***	***65***	***22***
Facility Status: Site Cleanup Completed (NFA)				
ALA MOANA UNOCAL	***1322 KAPIOLANI BLVD***	***W 1/4 - 1/2 (0.488 mi.)***	***70***	***23***
Facility Status: Site Cleanup Completed (NFA)				

State and tribal registered storage tank lists

UST: A review of the UST list, as provided by EDR, and dated 03/02/2015 has revealed that there are 12 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MID PAC PETROLEUM 25	***1505 S. KING ST.***	***N 0 - 1/8 (0.117 mi.)***	***B7***	***8***
TESORO 2GO 61018	***1549 S KING ST***	***NE 1/8 - 1/4 (0.127 mi.)***	***C9***	***8***
GAS PLUS	***1524 S KING ST***	***NNE 1/8 - 1/4 (0.130 mi.)***	***10***	***9***
PUNAHOU REPAIR SHOP	***1558 S KING ST***	***NE 1/8 - 1/4 (0.137 mi.)***	***C15***	***10***
7-11 KALAKAUA	***1323 KALAKAUA AVE***	***NNE 1/8 - 1/4 (0.199 mi.)***	***E23***	***11***
DEPT OF AGRICULTURE	1428 S KING ST	NNW 1/8 - 1/4 (0.220 mi.)	28	12
LIKELIKE DRIVE IN	745 KEEAUMOKU ST	W 1/8 - 1/4 (0.234 mi.)	G31	13
OUTRIGGER HOTELS	1315 KALAKAUA AVE	NNE 1/8 - 1/4 (0.245 mi.)	H32	13
ONE KALAKAUA PARTNER	1314 KALAKAUA AVE	NNE 1/8 - 1/4 (0.247 mi.)	H34	14

Lower Elevation	Address	Direction / Distance	Map ID	Page
FIRESTONE STORE	***801 KAHEKA ST***	***SW 1/8 - 1/4 (0.172 mi.)***	***D18***	***10***
GAS 'N GLO INC	***1670 MAKALOA ST***	***S 1/8 - 1/4 (0.197 mi.)***	***F22***	***11***
KALAKAUA TRANSMISSIO	1665 KALAKAUA AVE	SSE 1/8 - 1/4 (0.202 mi.)	F26	12

State and tribal institutional control / engineering control registries

ENG CONTROLS: A review of the ENG CONTROLS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 3 ENG CONTROLS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ALOHA/KING SELF STOR	***1414 KALAKAUA AVE***	***NNE 1/8 - 1/4 (0.180 mi.)***	***E20***	***11***
GRACE OTSUKA APARTME	***1233 YOUNG ST***	***NW 1/4 - 1/2 (0.461 mi.)***	***67***	***22***

Lower Elevation	Address	Direction / Distance	Map ID	Page
FORMER KALAKAUA TRAN	***1665 KALAKAUA AVE***	***SSE 1/8 - 1/4 (0.202 mi.)***	***F25***	***12***

INST CONTROL: A review of the INST CONTROL list, as provided by EDR, and dated 12/02/2014 has revealed that there are 6 INST CONTROL sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ALOHA/KING SELF STOR	***1414 KALAKAUA AVE***	***NNE 1/8 - 1/4 (0.180 mi.)***	***E20***	***11***
GRACE OTSUKA APARTME	***1233 YOUNG ST***	***NW 1/4 - 1/2 (0.461 mi.)***	***67***	***22***

Lower Elevation	Address	Direction / Distance	Map ID	Page
FORMER KALAKAUA TRAN	***1665 KALAKAUA AVE***	***SSE 1/8 - 1/4 (0.202 mi.)***	***F25***	***12***
HECO SUBSTATION: MAK	***1544 MAKALOA ST***	***SW 1/4 - 1/2 (0.259 mi.)***	***37***	***14***
HAKUYOSHA HAWAII, IN	***730 SHERIDAN ST***	***W 1/4 - 1/2 (0.342 mi.)***	***L46***	***17***
MOTOR SUPPLY	***726 SHERIDAN ST***	***W 1/4 - 1/2 (0.342 mi.)***	***L47***	***17***

State and tribal voluntary cleanup sites

VCP: A review of the VCP list, as provided by EDR, and dated 12/02/2014 has revealed that there is 1 VCP site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ALOHA/KING SELF STOR	***1414 KALAKAUA AVE***	***NNE 1/8 - 1/4 (0.180 mi.)***	***E20***	***11***

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Auto Stat: A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there are 6 EDR US Hist Auto Stat sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	920 PUNAHOU ST	E 0 - 1/8 (0.095 mi.)	4	7
Not reported	1505 S KING ST	N 0 - 1/8 (0.117 mi.)	B6	8
Not reported	1549 S KING ST	NE 1/8 - 1/4 (0.135 mi.)	C11	9
Not reported	1558 S KING ST	NE 1/8 - 1/4 (0.137 mi.)	C13	9

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	801 KAHEKA ST	SW 1/8 - 1/4 (0.172 mi.)	D17	10
Not reported	1665 KALAKAUA AVE	SSE 1/8 - 1/4 (0.202 mi.)	F24	12

EDR US Hist Cleaners: A review of the EDR US Hist Cleaners list, as provided by EDR, has revealed that there is 1 EDR US Hist Cleaners site within approximately 0.25 miles of the target property.

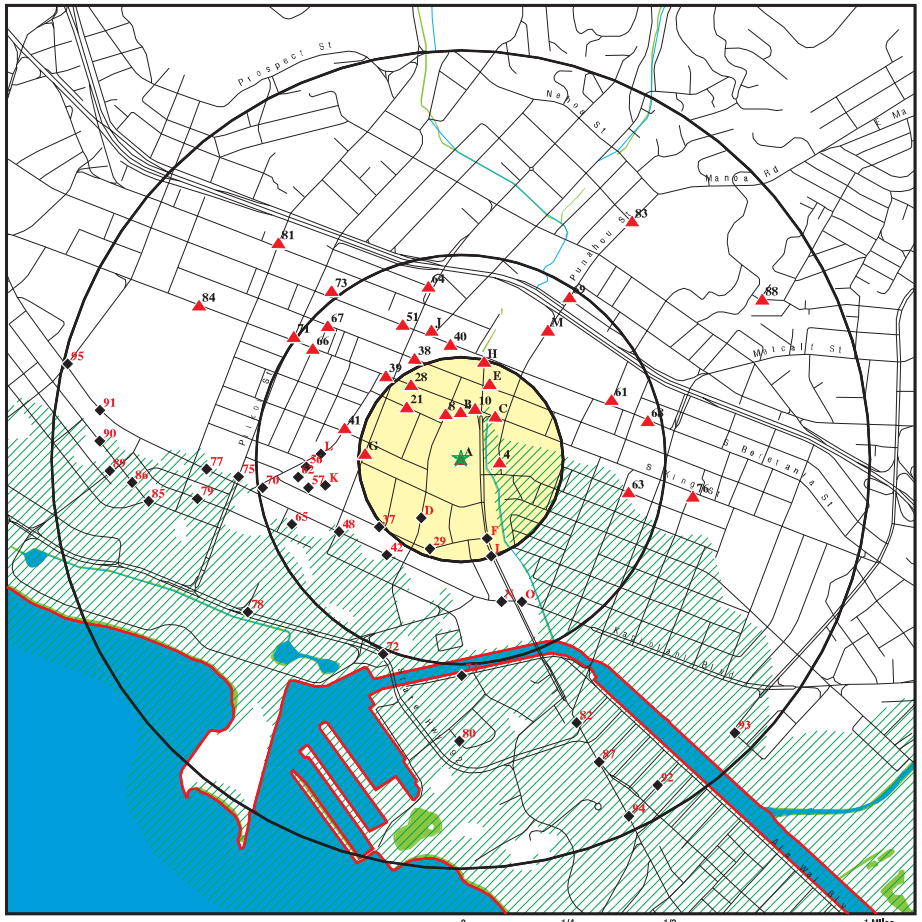
Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	801 KAHEKA ST	SW 1/8 - 1/4 (0.172 mi.)	D16	10

Count: 17 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
HONOLULU	S111704669	ALA WAI HARBOR BOAT REPAIR YARD	ALA MOANA BLVD		SHWS
HONOLULU	S112375188	MAKIKI STREAM KING STREET AND KALA	KALAKAUA ST AND KING ST	96826	SPILLS 90
HONOLULU	S107023655	MAKIKI STREAM AT KALAKAUA AVENUE	KALAKAUA AVE	96815	SPILLS
HONOLULU	1008919686	KALAKAUA AVENUE WATER SYSTEM IMPRO	KALAKAUA AVENUE	96815	FINDS
HONOLULU	S112375236	MAKIKI STREAM KING STREET AND KALA	KALAKAUA ST AND KING ST		SPILLS 90
HONOLULU	S106818084	KALAKAUA AVENUE, SEWAGE SPILL	KALAKAUA AVE	96815	SPILLS
HONOLULU	S107023352	MAKIKI STREAM, ALONG KALAKAUA AVEN	KALAKAUA AVE		SPILLS
HONOLULU	S107023711	KALAKAUA AVENUE, UNKNOWN CHEMICALS	KALAKAUA AVE	96815	SPILLS
HONOLULU	S107024027	KALAKAUA AVENUE & RYCROFT ST, WAIK	KALAKAUA AVE & RYCROFT ST	96815	SPILLS
HONOLULU	S115555360	MAKIKI STREAM, KING STREET AND KAL	KALAKAUA ST & KING ST		SPILLS
HONOLULU	S106818081	KALAKAUA AVENUE	KALAKAUA AVE		SPILLS
HONOLULU	S107023195	ALA WAI CANAL BY KALAKAUA AVENUE	KALAKAUA AVE	96815	SPILLS
HONOLULU	1008171358	KALAKAUA AVENUE BRIDGE	KALAKAUA AVENUE	96826	FINDS
HONOLULU	S109096053	JCRA INVESTMENTS	1685 KAPIOLANI PROPERTY	96814	LUST
HONOLULU	S106818337	KEEAUMOKU SUPERBLOCK PROJECT	KEEAUMOKU ST		SHWS, SPILLS
HONOLULU	1014696845	FY10/FY11 WAIKIKI IMPROVEMENTS - K	VARIOUS SECTIONS ALONG KALAKAU	96815	FINDS
MOKULEIA	S106817395	HAWAIIAN BITUMULS PAVING & PRECAST	FARRINGTON HWY	96826	SHWS

OVERVIEW MAP - 4237094.38S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Kalakaua Homes ADDRESS: 1545 Kalakaua Ave. Honolulu HI 96814 LAT/LONG: 21.2956 / 157.8377	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.38s DATE: March 18, 2015 7:44 am

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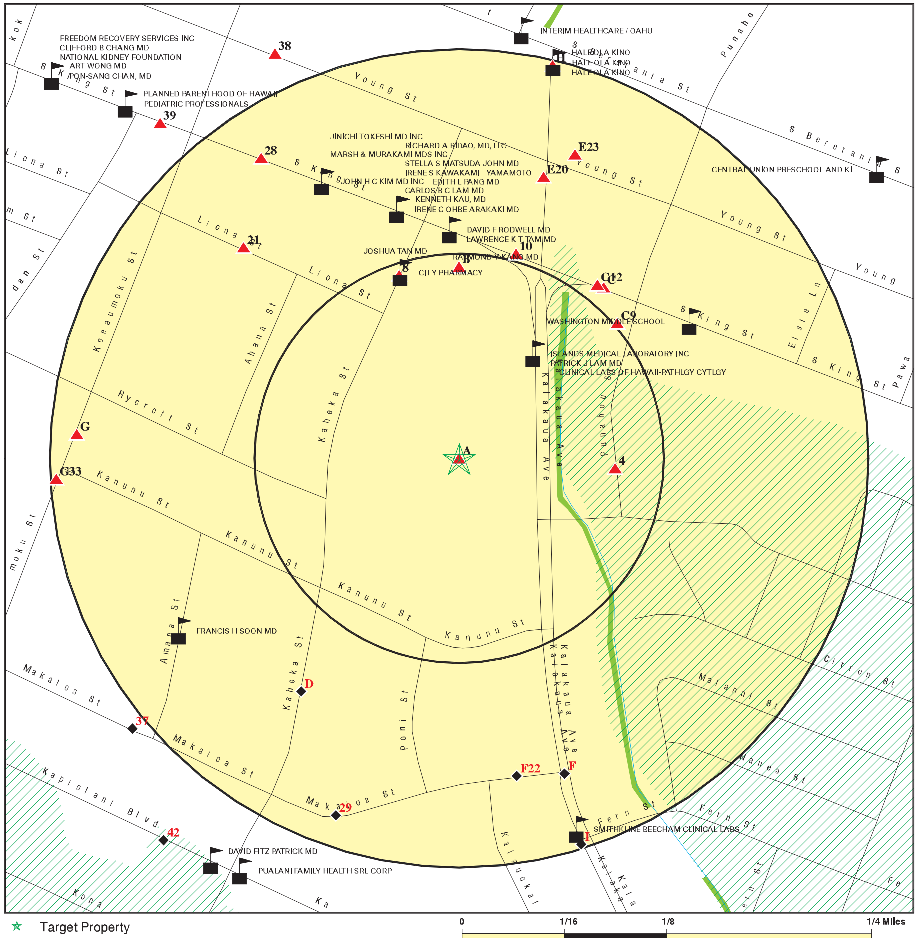
DETAIL MAP - 4237094.38S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Kalakaua Homes ADDRESS: 1545 Kalakaua Ave. Honolulu HI 96814 LAT/LONG: 21.2956 / 157.8377	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.38s DATE: March 18, 2015 7:44 am

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	1	NR	NR	1
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250	1	1	1	NR	NR	NR	3
RCRA-CESQG	0.250		1	6	NR	NR	NR	7
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
SHWS	1.000		0	5	14	25	NR	44
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		1	6	21	NR	NR	28
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250		1	11	NR	NR	NR	12

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		0	2	1	NR	NR	3
INST CONTROL	0.500		0	2	4	NR	NR	6
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	1	0	NR	NR	1
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP	2	NR	NR	NR	NR	NR	2
HIST FTTS	TP	2	NR	NR	NR	NR	NR	2
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP	1	NR	NR	NR	NR	NR	1
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		2	4	NR	NR	NR	6
EDR US Hist Cleaners	0.250		0	1	NR	NR	NR	1
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
RGA HWS	TP		NR	NR	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1
Target Property
Actual: 7 ft.

KALAKAUA HOMES - 17TH FLOOR
1545 KALAKUA AVE,
HONOLULU, HI 96815

FTTS **1008893467**
HIST FTTS **N/A**

Click here for full text details

A2
Target Property
Actual: 7 ft.

KALAKAUA HOMES
1545 KALAKAUA AVE.
HONOLULU, HI 96826

RCRA-SQG **1016675603**
FINDS **HIP000142166**

Click here for full text details

RCRA-SQG
EPA Id: HIP000142166

A3
Target Property
Actual: 7 ft.

KALAKAUA HOMES #1910 & #1911
1545 KALAKAUA AVE.
HONOLULU, HI 96826

FTTS **1008893509**
HIST FTTS **N/A**

Click here for full text details

4
East
< 1/8
0.095 mi.
504 ft.
Relative: Higher

920 PUNAHOU ST
HONOLULU, HI 96826

EDR US Hist Auto Stat **1015675164**
N/A

Click here for full text details

B5
North
< 1/8
0.117 mi.
618 ft.
Relative: Higher

LIONELS SERVICE INC
1505 S KING ST
HONOLULU, HI 96826

RCRA-SQG **1000823234**
HID984468736

Click here for full text details

RCRA-SQG
EPA Id: HID984468736

B6
North
< 1/8
0.117 mi.
618 ft.
Relative: Higher

1505 S KING ST
HONOLULU, HI 96826

EDR US Hist Auto Stat **1015239122**
N/A

Click here for full text details

B7
North
< 1/8
0.117 mi.
618 ft.
Relative: Higher

MID PAC PETROLEUM 253943 (PREV: LIONEL'S UNOCAL)
1505 S. KING ST.
HONOLULU, HI 96826

LUST **U001235016**
UST **N/A**
Financial Assurance

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100041

UST
Tank Status: Permanently Out of Use
Tank Status: Permanently out of Use
Facility Id: 9-100041

8
NNW
< 1/8
0.118 mi.
622 ft.
Relative: Higher

LONGS DRUG STORE NO 6889
966 KAHEKA ST
HONOLULU, HI 96814

RCRA-CESQG **1014389656**
HIR000140038

Click here for full text details

RCRA-CESQG
EPA Id: HIR000140038

C9
NE
1/8-1/4
0.127 mi.
671 ft.
Relative: Higher

TESORO 2GO 61018
1549 S KING ST
HONOLULU, HI 96826

LUST **U003402801**
UST **N/A**
Financial Assurance

Click here for full text details

LUST
Facility Status: LUST Cleanup Initiated
Facility Id: 9-100059

UST
Tank Status: Currently In Use
Tank Status: Permanently out of Use
Facility Id: 9-100059

10 NNE 1/8-1/4 0.130 mi. 685 ft.
Relative: Higher

GAS PLUS — LUST, UST — U001235103, N/A
1524 S KING ST
HONOLULU, HI 96826

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100224

UST
Tank Status: Permanently Out of Use
Facility Id: 9-100224

C11 NE 1/8-1/4 0.135 mi. 715 ft.
Relative: Higher

1549 S KING ST
HONOLULU, HI 96826

EDR US Hist Auto Stat — 1015246246, N/A

Click here for full text details

C12 NE 1/8-1/4 0.136 mi. 716 ft.
Relative: Higher

O'REILLY AUTO PARTS STORE 3479 — RCRA-CESQG — 1016675612, HIR000142000
1550 SOUTH KING STREET
HONOLULU, HI 96826

Click here for full text details

RCRA-CESQG
EPA Id: HIR000142000

C13 NE 1/8-1/4 0.137 mi. 722 ft.
Relative: Higher

1558 S KING ST
HONOLULU, HI 96826

EDR US Hist Auto Stat — 1015247485, N/A

Click here for full text details

C14 NE 1/8-1/4 0.137 mi. 722 ft.
Relative: Higher

PUNAHOU REPAIR SHOP INC — RCRA-CESQG, FINDS — 1004688805, HID981657208
1558 S KING ST
HONOLULU, HI 96826

Click here for full text details

RCRA-CESQG
EPA Id: HID981657208

C15 NE 1/8-1/4 0.137 mi. 722 ft.
Relative: Higher

PUNAHOU REPAIR SHOP — LUST, UST — 1000146579, N/A
1558 S KING ST
HONOLULU, HI 96826

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-101387

UST
Tank Status: Permanently Out of Use
Facility Id: 9-101387

D16 SW 1/8-1/4 0.172 mi. 908 ft.
Relative: Lower

801 KAHEKA ST
HONOLULU, HI 96814

EDR US Hist Cleaners — 1015096937, N/A

Click here for full text details

D17 SW 1/8-1/4 0.172 mi. 908 ft.
Relative: Lower

801 KAHEKA ST
HONOLULU, HI 96814

EDR US Hist Auto Stat — 1015638698, N/A

Click here for full text details

D18 SW 1/8-1/4 0.172 mi. 908 ft.
Relative: Lower

FIRESTONE STORE — LUST, UST, Financial Assurance — U001235963, N/A
801 KAHEKA ST
HONOLULU, HI 96814

Click here for full text details

LUST
Facility Status: Site Cleanup Completed with EHE/EHMP
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-102591
Facility Id: 9-102403

UST
Tank Status: Permanently Out of Use
Facility Id: 9-102591
Facility Id: 9-102403

D19
SW
1/8-1/4
0.172 mi.
908 ft.

Relative: Lower

HOLIDAY ACTION GAS — **RCRA-SQG** — **1000223098**, **HID981577265**
801 KAHEKA ST
HONOLULU, HI 96814

Click here for full text details

RCRA-SQG
EPA Id: HID981577265

E20
NNE
1/8-1/4
0.180 mi.
948 ft.

Relative: Higher

ALOHA/KING SELF STORAGE — **SHWS**, **ENG CONTROLS**, **INST CONTROL**, **VCP** — **S106816203**, **N/A**
1414 KALAKAUA AVE
HONOLULU, HI

Click here for full text details

21
NW
1/8-1/4
0.184 mi.
973 ft.

Relative: Higher

MAUI DIVERS OF HAWAII LTD# — **RCRA-CESQG**, **FINDS** — **1000244830**, **HID009116757**
1520 LIONA STREET
HONOLULU, HI 96814

Click here for full text details

RCRA-CESQG
EPA Id: HID009116757

F22
South
1/8-1/4
0.197 mi.
1041 ft.

Relative: Lower

GAS 'N GLO INC — **LUST**, **UST** — **U001235256**, **N/A**
1670 MAKALOA ST
HONOLULU, HI 96814

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100834

UST
Tank Status: Permanently Out of Use
Facility Id: 9-100834

E23
NNE
1/8-1/4
0.199 mi.
1049 ft.

Relative: Higher

7-11 KALAKAUA — **SHWS**, **UST**, **Financial Assurance** — **U001235396**, **N/A**
1323 KALAKAUA AVE
HONOLULU, HI 96826

Click here for full text details

UST
Tank Status: Currently In Use
Tank Status: Currently in Use
Tank Status: Permanently out of Use

7-11 KALAKAUA (Continued) — **U001235396**
Facility Id: 9-101172

F24
SSE
1/8-1/4
0.202 mi.
1069 ft.

Relative: Lower

EDR US Hist Auto Stat — **1015261837**, **N/A**
1665 KALAKAUA AVE
HONOLULU, HI 96826

Click here for full text details

F25
SSE
1/8-1/4
0.202 mi.
1069 ft.

Relative: Lower

FORMER KALAKAUA TRANSMISSION INC — **SHWS**, **ENG CONTROLS**, **INST CONTROL** — **S106817112**, **N/A**
1665 KALAKAUA AVE
HONOLULU, HI 96826

Click here for full text details

F26
SSE
1/8-1/4
0.202 mi.
1069 ft.

Relative: Lower

KALAKAUA TRANSMISSION INC. — **UST** — **1000147228**, **N/A**
1665 KALAKAUA AVE
HONOLULU, HI 96826

Click here for full text details

UST
Tank Status: Permanently Out of Use
Facility Id: 9-100763

F27
SSE
1/8-1/4
0.203 mi.
1073 ft.

Relative: Lower

KALAKUA TRANSMISSION INC — **RCRA-CESQG**, **FINDS** — **1004688784**, **HID981637564**
1665 KALAKUA AVE
HONOLULU, HI 96826

Click here for full text details

RCRA-CESQG
EPA Id: HID981637564

28
NNW
1/8-1/4
0.220 mi.
1160 ft.

Relative: Higher

DEPT OF AGRICULTURE — **UST** — **U003154533**, **N/A**
1428 S KING ST
HONOLULU, HI 96814

Click here for full text details

UST
Tank Status: Permanently Out of Use
Facility Id: 9-101926

29 SSW 1/8-1/4 0.231 mi. 1218 ft. Relative: Lower

C&CH PAWAA FIRE STATION
1610 MAKALOA ST
HONOLULU, HI 96814

LUST — **1006843337** / **N/A**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100087

G30 West 1/8-1/4 0.234 mi. 1236 ft. Relative: Higher

LIKE LIKE PLAZA PETROLEUM CONTAMINATION
745 KEEAUMOKU ST
HONOLULU, HI 96814

SHWS — **1006819347** / **N/A**

Click here for full text details

G31 West 1/8-1/4 0.234 mi. 1236 ft. Relative: Higher

LIKELIKE DRIVE IN
745 KEEAUMOKU ST
HONOLULU, HI 96800

UST — **U003154728** / **N/A**

Click here for full text details

UST
Tank Status: Permanently Out of Use
Facility Id: 9-102931

H32 NNE 1/8-1/4 0.245 mi. 1296 ft. Relative: Higher

OUTRIGGER HOTELS
1315 KALAKAUA AVE
HONOLULU, HI 96815

UST — **U001235483** / **N/A**

Click here for full text details

UST
Tank Status: Permanently Out of Use
Facility Id: 9-101431

G33 West 1/8-1/4 0.246 mi. 1301 ft. Relative: Higher

RED BAG 3, LLC
750 KEEAUMOKU ST
HONOLULU, HI 96814

RCRA-CESQG, FINDS — **1007447433** / **HIR000136036**

Click here for full text details

RCRA-CESQG
EPA Id: HIR000136036

H34 NNE 1/8-1/4 0.247 mi. 1304 ft. Relative: Higher

ONE KALAKAUA PARTNERS
1314 KALAKAUA AVE
HONOLULU, HI 96823

UST — **U003154847** / **N/A**

Click here for full text details

UST
Tank Status: Permanently Out of Use
Facility Id: 9-103140

I35 SSE 1/8-1/4 0.247 mi. 1305 ft. Relative: Lower

ROGERS REPAIR INC
1687 KALAKAUA AVE
HONOLULU, HI 96826

RCRA-CESQG, FINDS — **1000742297** / **HID981615222**

Click here for full text details

RCRA-CESQG
EPA Id: HID981615222

I36 SSE 1/8-1/4 0.247 mi. 1305 ft. Relative: Lower

ROGER'S REPAIR INC
1687 KALAKAUA AVE
HONOLULU, HI 96826

SHWS — **S106820247** / **N/A**

Click here for full text details

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37 SW 1/4-1/2 0.259 mi. 1368 ft. Relative: Lower

HECO SUBSTATION: MAKALOA SUBSTATION
1544 MAKALOA ST
HONOLULU, HI 96814

SHWS, SPILLS, INST CONTROL — **S106817457** / **N/A**

Click here for full text details

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38 NNW 1/4-1/2 0.272 mi. 1434 ft. Relative: Higher

MEADOW GOLD DAIRIES (ICE CREAM PLANT)
1418 YOUNG ST
HONOLULU, HI 96814

SHWS, SPILLS — **S104657475** / **N/A**

Click here for full text details

39 NW 1/4-1/2 0.274 mi. 1449 ft.
Relative: Higher

YAJIMA OIL OF USA INC — LUST, UST, Financial Assurance — U001235254 / N/A
1375 S KING ST
HONOLULU, HI 96814

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100832

UST
Tank Status: Permanently Out of Use
Tank Status: Currently in Use
Facility Id: 9-100832

---

40 North 1/4-1/2 0.283 mi. 1493 ft.
Relative: Higher

HONOLULU STATION - PAWAA ANNEX — LUST, UST, Financial Assurance — U001235050 / N/A
1455 S BERETANIA ST
HONOLULU, HI 96814

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100114

UST
Tank Status: Permanently Out of Use
Facility Id: 9-100114

---

41 WNW 1/4-1/2 0.294 mi. 1553 ft.
Relative: Higher

WENS LIFE CO., INC — LUST, UST — U001235446 / N/A
808 SHERIDAN ST
HONOLULU, HI 96814

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-101330

UST
Tank Status: Permanently Out of Use
Facility Id: 9-101330

42 SW 1/4-1/2 0.295 mi. 1558 ft.
Relative: Lower

NEW OFFICE LOUNGE — SHWS, LUST, UST — 1006843573 / N/A
1551 KAPIOLANI BLVD
HONOLULU, HI 96814

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-103517

UST
Tank Status: Permanently out of Use
Facility Id: 9-103517

J43 North 1/4-1/2 0.302 mi. 1594 ft.
Relative: Higher

MAKIKI SHELL — LUST, UST, Financial Assurance — U003188504 / N/A
1436 S BERETANIA ST
HONOLULU, HI 96814

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100833

UST
Tank Status: Permanently Out of Use
Facility Id: 9-100833

J44 NNW 1/4-1/2 0.324 mi. 1712 ft.
Relative: Higher

MID PAC PETROLEUM 250344 (PREV: DON'S MAKIKI) — LUST, UST, Financial Assurance — U001235010 / N/A
1406 S BERETANIA ST
HONOLULU, HI 96814

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Status: Site Cleanup Completed with EHMP
Facility Id: 9-100035

UST
Tank Status: Permanently Out of Use
Tank Status: Currently In Use
Facility Id: 9-100035

K45 West 1/4-1/2 0.337 mi. 1777 ft. Relative: Lower

SUPERBLOCK PROPERTIES
NORTH BLOCK (BLDG N8) / KEEAUMOKU ST
HONOLULU, HI 96814

LUST **UST** | **U003221767** **N/A**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-102594

UST
Tank Status: Permanently Out of Use
Facility Id: 9-102594

L46 West 1/4-1/2 0.342 mi. 1806 ft. Relative: Lower

HAKUYOSHA HAWAII, INC
730 SHERIDAN ST
HONOLULU, HI 96814

SHWS **SPILLS** **INST CONTROL** **AIRS** | **S106817254** **N/A**

Click here for full text details

AIRS
Facility Id: 0462-01-N
Facility Id: 0564-01-C

L47 West 1/4-1/2 0.342 mi. 1806 ft. Relative: Lower

MOTOR SUPPLY
726 SHERIDAN ST
HONOLULU, HI 96814

SHWS **INST CONTROL** | **S108008592** **N/A**

Click here for full text details

---

48 WSW 1/4-1/2 0.345 mi. 1824 ft. Relative: Lower

WALGREENS KEEAMOKU
1460 KAPIOLANI BLVD
HONOLULU, HI 96814

SHWS | **S115488729** **N/A**

Click here for full text details

L49 West 1/4-1/2 0.349 mi. 1841 ft. Relative: Lower

SUPERBLOCK PROPERTIES
SOUTH BLOCK (BLDG S13) / MAKALOA ST
HONOLULU, HI 96814

LUST **UST** | **U001235971** **N/A**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-102600

UST

SUPERBLOCK PROPERTIES (Continued) | **U001235971**

Tank Status: Permanently Out of Use
Facility Id: 9-102600

K50 WSW 1/4-1/2 0.351 mi. 1851 ft. Relative: Lower

SUPERBLOCK PROPERTIES
SOUTH BLOCK (BLDG S20) / MAKALOA ST
HONOLULU, HI 96814

LUST **UST** | **U001235973** **N/A**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-102602

UST
Tank Status: Permanently Out of Use
Facility Id: 9-102602

---

51 NNW 1/4-1/2 0.359 mi. 1898 ft. Relative: Higher

BERETANIA CHEVRON 0423
1378 S BERETANIA ST
HONOLULU, HI 96814

LUST **UST** **Financial Assurance** | **U003221686** **N/A**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-101720

UST
Tank Status: Currently in Use
Tank Status: Currently In Use
Facility Id: 9-101720

M52 NE 1/4-1/2 0.360 mi. 1901 ft. Relative: Higher

SHRINERS HOSPITALS FOR CRIPPLED CHILDREN
1310 PUNAHOU ST
HONOLULU, HI 96826

LUST **UST** **Financial Assurance** | **U001235903** **N/A**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-102410

UST
Tank Status: Permanently Out of Use
Tank Status: Permanently out of Use
Facility Id: 9-102410

N53
SSE
1/4-1/2
0.361 mi.
1906 ft.

Relative: Lower

FIRST DEVELOPMENT INC
1777 KAPIOLANI BLVD
HONOLULU, HI 96814

CERC-NFRAP
RCRA-CESQG
FINDS

1003879446
HID984466060

Click here for full text details

CERC-NFRAP
EPA Id: HID984466060

RCRA-CESQG
EPA Id: HID984466060

N54
SSE
1/4-1/2
0.361 mi.
1906 ft.

Relative: Lower

ALOHA MOTORS 1777 KAPIOLANI BLVD
1777 KAPIOLANI BLVD
HONOLULU, HI 96813

SHWS
SPILLS

1006820308
N/A

Click here for full text details

O55
SSE
1/4-1/2
0.376 mi.
1984 ft.

Relative: Lower

HAWAII CONVENTION CENTER
1801 KALAKAUA AVE
HONOLULU, HI 96814

SHWS
SPILLS

1006820847
N/A

Click here for full text details

56
West
1/4-1/2
0.378 mi.
1995 ft.

Relative: Lower

SUPERBLOCK PROPERTIES
SOUTH BLOCK (BLDG S1) / SHERIDAN ST
HONOLULU, HI 96814

LUST
UST

U003221769
N/A

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-102596

UST
Tank Status: Permanently Out of Use
Facility Id: 9-102596

57
West
1/4-1/2
0.378 mi.
1997 ft.

Relative: Lower

SUPERBLOCK PROPERTIES
SOUTH BLOCK (BLDG S25) / MAKALOA ST
HONOLULU, HI 96814

LUST
UST

U001235974
N/A

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-102603

UST
Tank Status: Permanently Out of Use
Facility Id: 9-102603

O58
SSE
1/4-1/2
0.378 mi.
1998 ft.

Relative: Lower

FUNAI'S UNION SERVICE L-5583
1810 KAPIOLANI BLVD
HONOLULU, HI 96813

LUST
UST
Financial Assurance

U001235021
N/A

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100047

UST
Tank Status: Permanently Out of Use
Facility Id: 9-100047

M59
NE
1/4-1/2
0.381 mi.
2013 ft.

Relative: Higher

KAPIOLANI WOMEN'S & CHILDREN'S MEDICAL CENTER
1319 PUNAHOU ST
HONOLULU, HI 96826

SHWS
UST
AIRS
Financial Assurance

U001235208
N/A

Click here for full text details

UST
Tank Status: Permanently out of Use
Tank Status: Permanently Out of Use
Facility Id: 9-100740

AIRS
Facility Id: 0588-01-N

N60
SSE
1/4-1/2
0.386 mi.
2039 ft.

Relative: Lower

ALOHA MOTORS
KAPIOLANI BLVD X KALAKAUA AVE
HONOLULU, HI 96815

LUST
UST

U001235755
N/A

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)

ALOHA MOTORS (Continued) — **U001235755**

Facility Id: 9-102160

UST
Tank Status: Permanently Out of Use
Facility Id: 9-102160

---

61 ENE 1/4-1/2 0.397 mi. 2096 ft. Relative: Higher

ALEXANDER TOWER
1226 ALEXANDER ST
HONOLULU, HI 96826

LUST, UST — **U003711696**, **N/A**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-103531

UST
Tank Status: Permanently Out of Use
Facility Id: 9-103531

---

62 West 1/4-1/2 0.399 mi. 2108 ft. Relative: Lower

SUPERBLOCK PROPERTIES
NORTH BLOCK (BLDG N15) / SHERIDAN ST
HONOLULU, HI 96814

LUST, UST — **U003221768**, **N/A**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-102595

UST
Tank Status: Permanently Out of Use
Facility Id: 9-102595

---

63 East 1/4-1/2 0.418 mi. 2206 ft. Relative: Higher

CONTINENTAL AUTO SERVICES
1918 ALGAROBA ST
HONOLULU, HI 96826

SHWS, SPILLS — **S104534121**, **N/A**

Click here for full text details

64 North 1/4-1/2 0.431 mi. 2275 ft. Relative: Higher

CARTWRIGHT NEIGHBORHOOD PARK
KEEAUMOKU ST & MATLOCK AVE
HONOLULU, HI 96814

SHWS — **1006820122**, **N/A**

Click here for full text details

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65 WSW 1/4-1/2 0.442 mi. 2333 ft. Relative: Lower

CUTTER CHEVROLET
1391 KAPIOLANI BLVD
HONOLULU, HI 96814

SHWS, LUST, UST, Financial Assurance — **U001235085**, **N/A**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100185

UST
Tank Status: Permanently Out of Use
Facility Id: 9-100185

---

66 NW 1/4-1/2 0.452 mi. 2386 ft. Relative: Higher

TEXACO STATION 611000090
1239 S KING ST
HONOLULU, HI 96814

RCRA NonGen / NLR, LUST, UST, SPILLS, Financial Assurance — **1000601548**, **HID984467852**

Click here for full text details

RCRA NonGen / NLR
EPA Id: HID984467852

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100340

UST
Tank Status: Permanently Out of Use
Facility Id: 9-100340

---

67 NW 1/4-1/2 0.461 mi. 2435 ft. Relative: Higher

GRACE OTSUKA APARTMENT COMPLEX
1233 YOUNG ST
HONOLULU, HI 96814

SHWS, ENG CONTROLS, INST CONTROL — **S110061466**, **N/A**

Click here for full text details

68 ENE 1/4-1/2 0.467 mi. 2464 ft. Relative: Higher

WALLYS GARDEN CENTER — SHWS, SPILLS — S111678012, N/A
1935 S BERETANIA ST
HONOLULU, HI

Click here for full text details

---

69 NE 1/4-1/2 0.478 mi. 2525 ft. Relative: Higher

ARCADIA RETIREMENT — LUST, UST — U003402852, N/A
1434 PUNAHOU ST
HONOLULU, HI 96822

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-103458

UST
Tank Status: Permanently Out of Use
Facility Id: 9-103458

---

70 West 1/4-1/2 0.488 mi. 2578 ft. Relative: Lower

ALA MOANA UNOCAL — LUST, UST — U001235012, N/A
1322 KAPIOLANI BLVD
HONOLULU, HI 96814

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100037

UST
Tank Status: Permanently Out of Use
Facility Id: 9-100037

---

71 NW 1/2-1 0.507 mi. 2677 ft. Relative: Higher

1012 PIIKOI STREET, ANIN-PIIKOI BUILDING — SHWS, SPILLS — S106815117, N/A
1012 PIIKOI ST
HONOLULU, HI 96814

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72 SSW 1/2-1 0.512 mi. 2701 ft. Relative: Lower

YACHT HARBOR TOWERS — SHWS, SPILLS, ENG CONTROLS, INST CONTROL — S106821166, N/A
1600 ALA MOANA BLVD
HONOLULU, HI 96815

Click here for full text details

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73 NW 1/2-1 0.520 mi. 2745 ft. Relative: Higher

SCHUMAN CARRIAGE MOTORS, LTD. — SHWS, LUST, UST, SPILLS, INST CONTROL, Financial Assurance — U003221663, N/A
1234 S BERETANIA ST
HONOLULU, HI 96814

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-101276

UST
Tank Status: Permanently Out of Use
Facility Id: 9-101276

---

74 South 1/2-1 0.528 mi. 2789 ft. Relative: Lower

1609 ALA WAI DIESEL RELEASE — SHWS, SPILLS — S108008656, N/A
1609 ALA WAI BLVD
HONOLULU, HI

Click here for full text details

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75 West 1/2-1 0.545 mi. 2875 ft. Relative: Lower

CENPAC PROPERTIES - OFFICE BUILDING — SHWS, LUST, UST, SPILLS, Financial Assurance — U003402842, N/A
615 PIIKOI ST
HONOLULU, HI 96814

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-103438

UST
Tank Status: Permanently Out of Use
Facility Id: 9-103438

76 East 1/2-1 0.574 mi. 3032 ft. Relative: Higher

MCCULLY UNION SERVICE
2105 S KING ST
HONOLULU, HI 96826

SHWS, LUST, UST, ENG CONTROLS, INST CONTROL, Financial Assurance

U001235168
N/A

Click here for full text details

LUST
Facility Status: Monitored Natural Attenuation
Facility Status: Active Remediation
Facility Id: 9-100341

UST
Tank Status: Permanently Out of Use
Tank Status: Currently In Use
Facility Id: 9-100341

---

77 West 1/2-1 0.621 mi. 3280 ft. Relative: Lower

EVERSHINE X
1230 KAPIOLANI BLVD
HONOLULU, HI 96814

SHWS, VCP

S105262688
N/A

Click here for full text details

---

78 SW 1/2-1 0.640 mi. 3380 ft. Relative: Lower

SEARS ALA MOANA
1450 ALA MOANA BLVD
HONOLULU, HI 96814

SHWS

S115488724
N/A

Click here for full text details

---

79 West 1/2-1 0.651 mi. 3436 ft. Relative: Lower

DURANT PROPERTIES
1235 KONA ST
HONOLULU, HI

SHWS, INST CONTROL

S109096045
N/A

Click here for full text details

---

80 South 1/2-1 0.688 mi. 3633 ft. Relative: Lower

HOBRON HOTEL
1744 KAIOO DR
HONOLULU, HI 96815

SHWS

S106817744
N/A

Click here for full text details

81 NW 1/2-1 0.692 mi. 3654 ft. Relative: Higher

1310 PENSACOLA STREET
1310 PENSACOLA ST
HONOLULU, HI

SHWS

S111704658
N/A

Click here for full text details

---

82 SSE 1/2-1 0.703 mi. 3710 ft. Relative: Lower

THE PAVILLION
1925 KALAKAUA AVE
HONOLULU, HI 96815

SHWS, SPILLS

S106820617
N/A

Click here for full text details

---

83 NE 1/2-1 0.718 mi. 3791 ft. Relative: Higher

PUNAHOU SCHOOL - MAINTENANCE SHOP
1601 PUNAHOU ST
HONOLULU, HI 96822

SHWS, LUST, UST, Financial Assurance

U003541737
N/A

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100297

UST
Tank Status: Permanently Out of Use
Tank Status: Currently in Use
Facility Id: 9-101654
Facility Id: 9-100297
Facility Id: 9-101653

---

84 WNW 1/2-1 0.743 mi. 3922 ft. Relative: Higher

AUXILIARY SERVICES - DOE
1039 S KING ST
HONOLULU, HI 96814

SHWS, UST, Financial Assurance

U003154583
N/A

Click here for full text details

UST
Tank Status: Permanently Out of Use
Facility Id: 9-102337

85 West 1/2-1 0.770 mi. 4063 ft. Relative: Lower

KOOLANI TOWER PROJECT — SHWS, SPILLS, ENG CONTROLS, INST CONTROL — S106818609 / N/A
1189 WAIMANU ST
HONOLULU, HI 96814

Click here for full text details

---

86 West 1/2-1 0.805 mi. 4251 ft. Relative: Lower

RESERVE HOUSING TOWER SOIL CONTAMINATION — SHWS, SPILLS — 1006819959 / N/A
1141 WAIMANU ST
HONOLULU, HI 96813

Click here for full text details

---

87 SSE 1/2-1 0.813 mi. 4291 ft. Relative: Lower

CHEVRON U.S.A., INC. — SHWS, LUST — U001235436 / N/A
2002 KALAKAUA AVE
HONOLULU, HI 96815

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-101266

---

88 ENE 1/2-1 0.834 mi. 4406 ft. Relative: Higher

1800 VANCOUVER DRIVE — SHWS, INST CONTROL, CDL — S110526102 / N/A
1800 VANCOUVER DR
HONOLULU, HI 96822

Click here for full text details

---

89 West 1/2-1 0.858 mi. 4529 ft. Relative: Lower

SELF STORAGE 1 — SHWS, SPILLS — 1006819998 / N/A
438 KAMAKEE ST
HONOLULU, HI 96814

Click here for full text details

90 West 1/2-1 0.883 mi. 4664 ft. Relative: Lower

JAS W GLOVER LTD — RCRA NonGen / NLR, FINDS, SHWS, LUST, UST — 1000135795 / HID981637861
1046 WAIMAMU ST
HONOLULU, HI 96814

Click here for full text details

RCRA NonGen / NLR
EPA Id: HID981637861

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100835

UST
Tank Status: Permanently Out of Use
Facility Id: 9-100835

---

91 West 1/2-1 0.890 mi. 4700 ft. Relative: Lower

PACIFICA CONDOMINIUM — SHWS, LUST — S110765470 / N/A
1009 KAPIOLANI BLVD
HONOLULU, HI 96814

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-103909

---

92 SSE 1/2-1 0.930 mi. 4909 ft. Relative: Lower

ROYAL GARDENS HOTEL DIESEL — SHWS, SPILLS — S110061800 / N/A
440 OLOHANA ST
HONOLULU, HI

Click here for full text details

---

93 SE 1/2-1 0.946 mi. 4995 ft. Relative: Lower

ALA WAI COVE CONDOMINIUM APARTMENTS — SHWS, SPILLS — 1006820430 / N/A
509 UNIVERSITY AVE
HONOLULU, HI 96815

Click here for full text details

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
94 SSE 1/2-1 0.964 mi. 5089 ft.	**KING KALAKAUA PLAZA** **2080 KALAKAUA AVE** **HONOLULU, HI 96815**	**SHWS** **LUST** **UST** **SPILLS** **INST CONTROL**	**U003154872** **N/A**

Relative: Lower

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-103235

UST
Tank Status: Permanently Out of Use
Facility Id: 9-103235

---

95 WNW 1/2-1 0.988 mi. 5219 ft.	**SYMPHONY PARK** **850 KAPIOLANI BLVD** **HONOLULU, HI 96807**	**SHWS** **SPILLS**	**S107022567** **N/A**

Relative: Lower

Click here for full text details

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
HI	AIRS	List of Permitted Facilities	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	BROWNFIELDS	Brownfields Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	CDL	Clandestine Drug Lab Listing	Department of Health	08/04/2010	09/10/2010	10/22/2010
HI	DRYCLEANERS	Permitted Drycleaner Facility Listing	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	ENG CONTROLS	Engineering Control Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	Financial Assurance	Financial Assurance Information Listing	Department of Health	12/01/2014	12/19/2014	01/28/2015
HI	INST CONTROL	Sites with Institutional Controls	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	LUST	Leaking Underground Storage Tank Database	Department of Health	03/02/2015	03/04/2015	03/17/2015
HI	RGA HWS	Recovered Government Archive State Hazardous Waste Facilitie	Department of Health		07/01/2013	01/08/2014
HI	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Health		07/01/2013	01/17/2014
HI	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	Department of Health		07/01/2013	01/03/2014
HI	SHWS	Sites List	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	SPILLS	Release Notifications	Department of Health	12/02/2014	12/22/2014	01/28/2015
HI	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	03/10/2012	01/03/2013	02/11/2013
HI	SWF/LF	Permitted Landfills in the State of Hawaii	Department of Health	09/17/2012	04/03/2013	05/10/2013
HI	UIC	Underground Injection Wells Listing	Department of Health	02/07/2013	02/12/2013	04/09/2013
HI	UST	Underground Storage Tank Database	Department of Health	03/02/2015	03/04/2015	03/17/2015
HI	VCP	Voluntary Response Program Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	04/22/2013	03/03/2015	03/09/2015
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2011	02/26/2013	04/19/2013
US	CERCLIS	Comprehensive Environmental Response, Compensation, and Liab	EPA	10/25/2013	11/11/2013	02/13/2014
US	CERCLIS-NFRAP	CERCLIS No Further Remedial Action Planned	EPA	10/25/2013	11/11/2013	02/13/2014
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	07/01/2014	09/10/2014	10/20/2014
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	01/23/2015	02/13/2015	03/09/2015
US	CORRACTS	Corrective Action Report	EPA	12/09/2014	12/29/2014	01/29/2015
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DELISTED NPL	National Priority List Deletions	EPA	12/16/2014	01/08/2015	02/09/2015
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	07/31/2012	08/07/2012	09/18/2012
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EDR US Hist Auto Stat	EDR Exclusive Historic Gas Stations	EDR, Inc.			
US	EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	09/29/2014	09/30/2014	11/06/2014
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	07/21/2014	10/07/2014	10/20/2014
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
US	FEMA UST	Underground Storage Tank Listing	FEMA	01/01/2010	02/16/2010	04/12/2010
US	FINDS	Facility Index System/Facility Registry System	EPA	08/16/2014	09/10/2014	10/20/2014
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	06/06/2014	09/10/2014	09/18/2014
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	12/29/2014	12/30/2014	03/09/2015
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	01/23/2015	02/06/2015	03/09/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	02/01/2013	05/01/2013	11/01/2013

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	01/30/2015	02/05/2015	03/09/2015
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/10/2015	03/13/2015
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	01/28/2015	01/30/2015	03/13/2015
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	01/08/2015	01/08/2015	02/09/2015
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2005	12/08/2006	01/11/2007
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	02/01/2013	05/01/2013	01/27/2014
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	01/30/2015	02/05/2015	03/13/2015
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/13/2015	03/13/2015
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	01/29/2015	01/30/2015	03/13/2015
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	12/14/2014	02/13/2015	03/13/2015
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	09/29/2014	10/01/2014	11/06/2014
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	11/25/2014	11/26/2014	01/29/2015
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	02/18/2014	03/18/2014	04/24/2014
US	LUCIS	Land Use Control Information System	Department of the Navy	12/03/2014	12/12/2014	01/29/2015
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	12/29/2014	01/08/2015	01/29/2015
US	NPL	National Priority List	EPA	12/16/2014	01/08/2015	02/09/2015
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	07/01/2014	10/15/2014	11/17/2014
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	02/01/2011	10/19/2011	01/10/2012
US	PRP	Potentially Responsible Parties	EPA	10/25/2013	10/17/2014	10/20/2014
US	Proposed NPL	Proposed National Priority List Sites	EPA	12/16/2014	01/08/2015	02/09/2015
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	10/07/2014	10/08/2014	10/20/2014
US	RCRA NonGen / NLR	RCRA - Non Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RMP	Risk Management Plans	Environmental Protection Agency	08/01/2014	08/12/2014	11/06/2014
US	ROD	Records Of Decision	EPA	11/25/2013	12/12/2013	02/24/2014
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	03/07/2011	03/09/2011	05/02/2011
US	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2011	07/31/2013	09/13/2013
US	TSCA	Toxic Substances Control Act	EPA	12/31/2012	01/15/2015	01/29/2015
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	09/14/2010	10/07/2011	03/01/2012
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/16/2014	10/31/2014	11/17/2014
US	US AIRS MINOR	Air Facility System Data	EPA	10/16/2014	10/31/2014	11/17/2014

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	12/22/2014	12/22/2014	01/29/2015
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	11/19/2014	11/21/2014	01/29/2015
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	12/30/2014	12/31/2014	01/29/2015
US	Oil/Gas Pipelines	GeoData Digital Line Graphs from 1:100,000-Scale Maps	USGS			
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
US	USGS 7.5' Topographic Map	Scanned Digital USGS 7.5' Topographic Map (DRG)	USGS			

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

KALAKAUA HOMES
1545 KALAKAUA AVE.
HONOLULU, HI 96814

TARGET PROPERTY COORDINATES

Latitude (North):	21.2956 - 21˚ 17' 44.16''
Longitude (West):	157.8377 - 157˚ 50' 15.72''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	620565.1
UTM Y (Meters):	2355168.5
Elevation:	7 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	21157-C7 HONOLULU, HI
Most Recent Revision:	Not reported

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

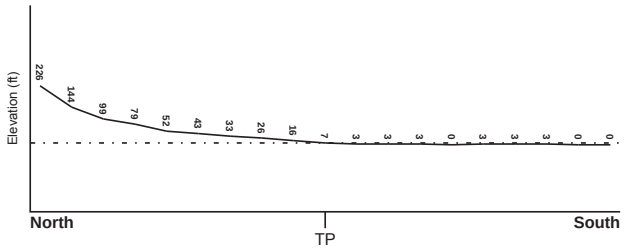
TOPOGRAPHIC INFORMATION

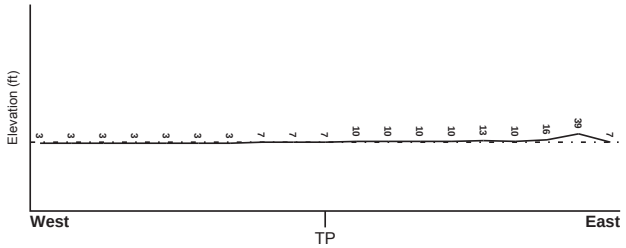
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General South

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 7 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
HONOLULU, HI	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 15003C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
HONOLULU	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

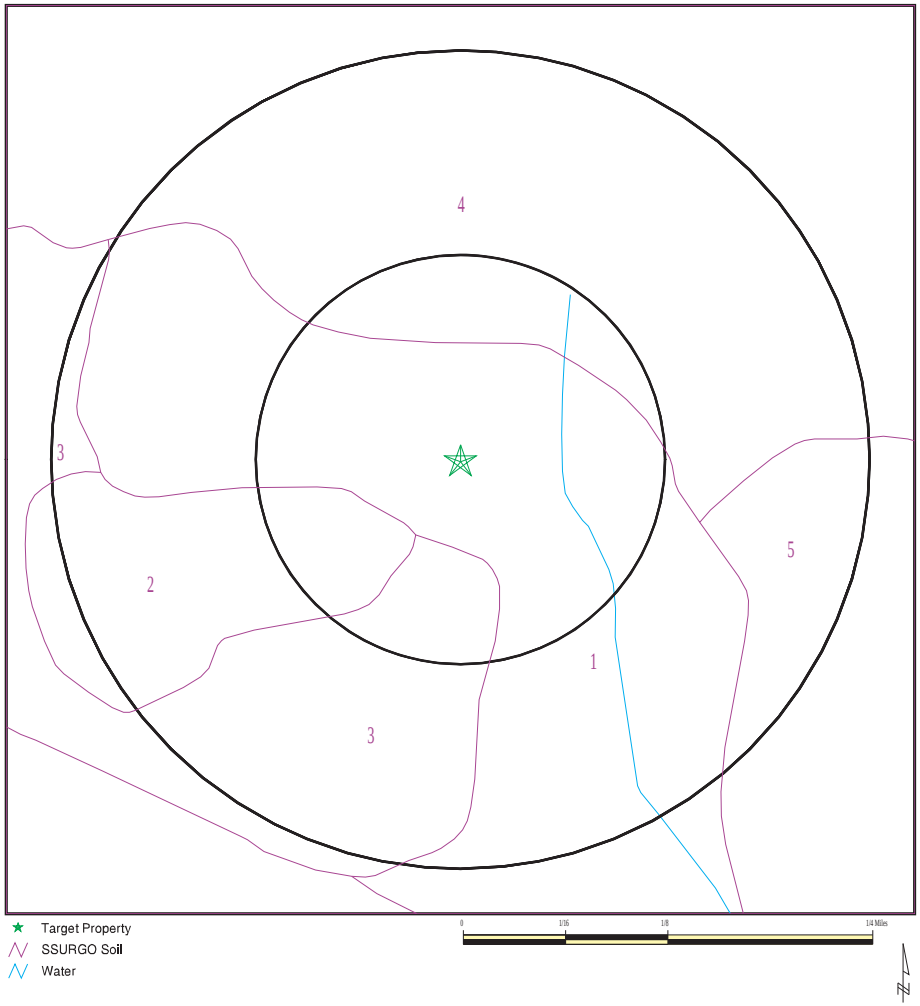
Era: -
System: -
Series: -
Code: N/A *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: -

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4237094.38s



★ Target Property
SSURGO Soil
Water

SITE NAME: Kalakaua Homes ADDRESS: 1545 Kalakaua Ave. Honolulu HI 96814 LAT/LONG: 21.2956 / 157.8377	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.38s DATE: March 18, 2015 7:44 am

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Kawaihapai

Soil Surface Texture: clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		Soil Reaction (pH)
1	0 inches	22 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 42.34 Min: 4.23	Max: 7.3 Min: 6.6
2	22 inches	31 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.14 Min: 14.11	Max: 7.3 Min: 6.6
3	31 inches	53 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.14 Min: 14.11	Max: 7.3 Min: 6.6

Soil Map ID: 2

Soil Component Name: Pearl Harbor

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 30 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4.23 Min: 0.42	Max: 7.3 Min: 6.6
2	11 inches	31 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 8.4 Min: 6.6
3	31 inches	48 inches	muck	A-8	Highly organic soils, Peat.	Max: 0.42 Min: 0.01	Max: 7.8 Min: 7.4

Soil Map ID: 3

Soil Component Name: Ewa

Soil Surface Texture: silty clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Highly organic soils, Peat.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6
2	7 inches	29 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Highly organic soils, Peat.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6
3	29 inches	38 inches	bedrock	Not reported	Not reported	Max: 42 Min: 1	Max: Min:

Soil Map ID: 4

Soil Component Name: Makiki

Soil Surface Texture: clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	20 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Highly organic soils, Peat.	Max: 42 Min: 4.23	Max: 5.5 Min: 5.1
2	20 inches	29 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Highly organic soils, Peat.	Max: 14.11 Min: 4.23	Max: 6 Min: 5.6
3	29 inches	59 inches	paragravelly clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.14 Min: 14.11	Max: 6 Min: 5.6

Soil Map ID: 5

Soil Component Name: Fill land, mixed

Soil Surface Texture: gravelly sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 152 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	gravelly sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 1.41	Max: 7.3 Min: 6.1
2	5 inches	59 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 1.41	Max: 7.3 Min: 6.1
3	59 inches	70 inches	bedrock	Not reported	Not reported	Max: 0.42 Min: 0.02	Max: Min:

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A2	USGS40000269556	0 - 1/8 Mile ESE
B3	USGS40000269567	0 - 1/8 Mile NNE
B5	USGS40000269568	1/8 - 1/4 Mile NNW
B6	USGS40000269571	1/8 - 1/4 Mile NNW
D10	USGS40000269572	1/8 - 1/4 Mile NW
C12	USGS40000269561	1/8 - 1/4 Mile West
E13	USGS40000269580	1/8 - 1/4 Mile NNE
F15	USGS40000269578	1/4 - 1/2 Mile NE
G17	USGS40000269559	1/4 - 1/2 Mile East

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
G19	USGS40000269562	1/4 - 1/2 Mile East
H21	USGS40000269592	1/4 - 1/2 Mile NNW
I22	USGS40000269569	1/4 - 1/2 Mile WNW
J24	USGS40000269570	1/4 - 1/2 Mile ENE
H25	USGS40000269603	1/4 - 1/2 Mile NNW
K28	USGS40000269584	1/4 - 1/2 Mile NW
L29	USGS40000269591	1/4 - 1/2 Mile NE
M32	USGS40000269555	1/4 - 1/2 Mile East
N33	USGS40000269607	1/4 - 1/2 Mile NNE
O34	USGS40000269614	1/4 - 1/2 Mile NNE
P38	USGS40000269575	1/4 - 1/2 Mile ENE
P39	USGS40000269583	1/4 - 1/2 Mile ENE
Q42	USGS40000269590	1/4 - 1/2 Mile NE
P44	USGS40000269574	1/4 - 1/2 Mile ENE
P49	USGS40000269573	1/2 - 1 Mile ENE
S52	USGS40000269632	1/2 - 1 Mile NNW
T54	USGS40000269566	1/2 - 1 Mile ENE
U56	USGS40000269589	1/2 - 1 Mile ENE
T58	USGS40000269565	1/2 - 1 Mile East
U59	USGS40000269587	1/2 - 1 Mile ENE
T62	USGS40000269564	1/2 - 1 Mile East
V64	USGS40000269642	1/2 - 1 Mile NNW
W67	USGS40000269585	1/2 - 1 Mile WNW
X69	USGS40000269611	1/2 - 1 Mile NE
Y71	USGS40000269615	1/2 - 1 Mile NW
Z74	USGS40000269602	1/2 - 1 Mile ENE
Z77	USGS40000269593	1/2 - 1 Mile ENE
AB81	USGS40000269619	1/2 - 1 Mile NW
AA83	USGS40000269599	1/2 - 1 Mile ENE
AA84	USGS40000269600	1/2 - 1 Mile ENE
AA85	USGS40000269596	1/2 - 1 Mile ENE
AA86	USGS40000269595	1/2 - 1 Mile ENE
AA87	USGS40000269598	1/2 - 1 Mile ENE
AA88	USGS40000269597	1/2 - 1 Mile ENE
AA90	USGS40000269601	1/2 - 1 Mile ENE
AB95	USGS40000269620	1/2 - 1 Mile WNW
AC99	USGS40000269497	1/2 - 1 Mile South
AC100	USGS40000269498	1/2 - 1 Mile South
AD101	USGS40000269677	1/2 - 1 Mile NNE
AE103	USGS40000269616	1/2 - 1 Mile WNW
AF106	USGS40000269604	1/2 - 1 Mile WNW
AF107	USGS40000269605	1/2 - 1 Mile WNW
AG110	USGS40000269702	1/2 - 1 Mile North
AI113	USGS40000269494	1/2 - 1 Mile South
AJ115	USGS40000269543	1/2 - 1 Mile ESE
AJ116	USGS40000269544	1/2 - 1 Mile ESE
AK119	USGS40000269644	1/2 - 1 Mile NW
AK123	USGS40000269637	1/2 - 1 Mile NW
AL125	USGS40000269698	1/2 - 1 Mile NNE
AM129	USGS40000269680	1/2 - 1 Mile NE
AE130	USGS40000269622	1/2 - 1 Mile WNW
132	USGS40000269490	1/2 - 1 Mile South

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
AN138	USGS40000269530	1/2 - 1 Mile ESE
AO139	USGS40000269676	1/2 - 1 Mile NE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
Z75	HI0000324	1/2 - 1 Mile ENE

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

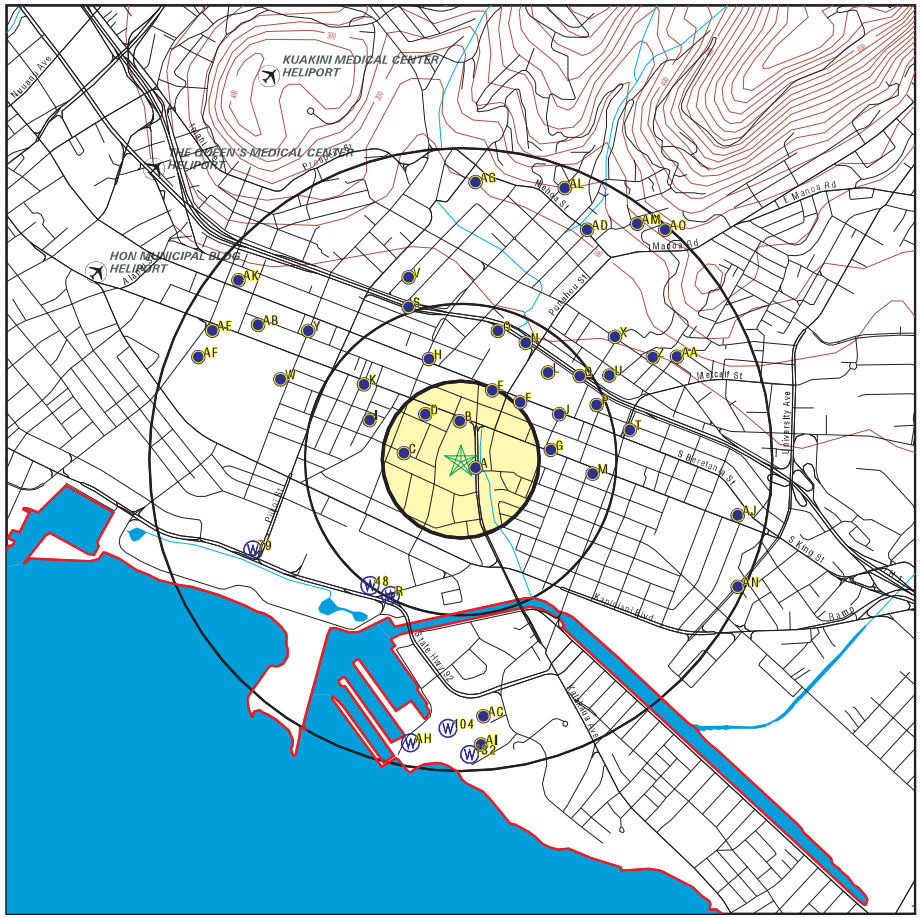
MAP ID	WELL ID	LOCATION FROM TP
A1	HI8000000002117	0 - 1/8 Mile ESE
B4	HI8000000002130	0 - 1/8 Mile NNE
B7	HI8000000002134	1/8 - 1/4 Mile NNW
B8	HI8000000002137	1/8 - 1/4 Mile NNE
C9	HI8000000002120	1/8 - 1/4 Mile West
D11	HI8000000002136	1/8 - 1/4 Mile NW
E14	HI8000000002146	1/8 - 1/4 Mile NNE
F16	HI8000000002145	1/4 - 1/2 Mile NE
G18	HI8000000002123	1/4 - 1/2 Mile East
G20	HI8000000002125	1/4 - 1/2 Mile East
I23	HI8000000002133	1/4 - 1/2 Mile WNW
J26	HI8000000002138	1/4 - 1/2 Mile ENE
H27	HI8000000002170	1/4 - 1/2 Mile NNW
K30	HI8000000002148	1/4 - 1/2 Mile NW
L31	HI8000000002156	1/4 - 1/2 Mile NE
M35	HI8000000002115	1/4 - 1/2 Mile East
N36	HI8000000002181	1/4 - 1/2 Mile NNE
O37	HI8000000002187	1/4 - 1/2 Mile NNE
P40	HI8000000002139	1/4 - 1/2 Mile ENE
Q41	HI8000000002149	1/4 - 1/2 Mile ENE
Q43	HI8000000002157	1/4 - 1/2 Mile NE
R45	HI8000000002088	1/4 - 1/2 Mile SSW
R46	HI8000000002089	1/4 - 1/2 Mile SSW
P47	HI8000000002140	1/4 - 1/2 Mile ENE
48	HI8000000002091	1/4 - 1/2 Mile SW
R50	HI8000000002090	1/2 - 1 Mile SSW
P51	HI8000000002141	1/2 - 1 Mile ENE
S53	HI8000000002209	1/2 - 1 Mile NNW
T55	HI8000000002131	1/2 - 1 Mile ENE
U57	HI8000000002158	1/2 - 1 Mile ENE
T60	HI8000000002128	1/2 - 1 Mile East
U61	HI8000000002154	1/2 - 1 Mile ENE
T63	HI8000000002129	1/2 - 1 Mile East
V65	HI8000000002222	1/2 - 1 Mile NNW
W66	HI8000000002153	1/2 - 1 Mile WNW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
W68	HI8000000002147	1/2 - 1 Mile WNW
X70	HI8000000002183	1/2 - 1 Mile NE
Y72	HI8000000002188	1/2 - 1 Mile NW
W73	HI8000000002155	1/2 - 1 Mile WNW
Z76	HI8000000002174	1/2 - 1 Mile ENE
Z78	HI8000000002165	1/2 - 1 Mile ENE
79	HI8000000002099	1/2 - 1 Mile WSW
AA80	HI8000000002162	1/2 - 1 Mile ENE
AA82	HI8000000002167	1/2 - 1 Mile ENE
AB89	HI8000000002192	1/2 - 1 Mile NW
AA91	HI8000000002163	1/2 - 1 Mile ENE
AA92	HI8000000002176	1/2 - 1 Mile ENE
AA93	HI8000000002175	1/2 - 1 Mile ENE
AA94	HI8000000002168	1/2 - 1 Mile ENE
AB96	HI8000000002191	1/2 - 1 Mile WNW
AC97	HI8000000002053	1/2 - 1 Mile South
AC98	HI8000000002054	1/2 - 1 Mile South
AD102	HI8000000002251	1/2 - 1 Mile NNE
104	HI8000000002049	1/2 - 1 Mile South
AE105	HI8000000002186	1/2 - 1 Mile WNW
AE108	HI8000000002169	1/2 - 1 Mile WNW
AC109	HI8000000002047	1/2 - 1 Mile South
AH111	HI8000000002046	1/2 - 1 Mile South
AH112	HI8000000002045	1/2 - 1 Mile South
AG114	HI8000000002285	1/2 - 1 Mile North
AJ117	HI8000000002105	1/2 - 1 Mile East
AJ118	HI8000000002106	1/2 - 1 Mile East
AH120	HI8000000002042	1/2 - 1 Mile South
AH121	HI8000000002043	1/2 - 1 Mile South
AK122	HI8000000002224	1/2 - 1 Mile NW
AK124	HI8000000002219	1/2 - 1 Mile NW
AH126	HI8000000002040	1/2 - 1 Mile South
AL127	HI8000000002283	1/2 - 1 Mile NNE
AI128	HI8000000002037	1/2 - 1 Mile South
AE131	HI8000000002196	1/2 - 1 Mile WNW
AM133	HI8000000002255	1/2 - 1 Mile NE
AH134	HI8000000002036	1/2 - 1 Mile South
AH135	HI8000000002035	1/2 - 1 Mile South
AF136	HI8000000002166	1/2 - 1 Mile WNW
AN137	HI8000000002092	1/2 - 1 Mile ESE
AO140	HI8000000002252	1/2 - 1 Mile NE

PHYSICAL SETTING SOURCE MAP - 4237094.38s



- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location

SITE NAME: Kalakaua Homes ADDRESS: 1545 Kalakaua Ave. Honolulu HI 96814 LAT/LONG: 21.2956 / 157.8377	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.38s DATE: March 18, 2015 7:44 am

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
A1 **ESE** **0 - 1/8 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002117**
A2 **ESE** **0 - 1/8 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269556**
B3 **NNE** **0 - 1/8 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269567**
B4 **NNE** **0 - 1/8 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002130**
B5 **NNW** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269568**
B6 **NNW** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269571**
B7 **NNW** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002134**
B8 **NNE** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002137**
C9 **West** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002120**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
D10 **NW** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269572**
D11 **NW** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002136**
C12 **West** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269561**
E13 **NNE** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269580**
E14 **NNE** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002146**
F15 **NE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269578**
F16 **NE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002145**
G17 **East** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269559**
G18 **East** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002123**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
G19 **East** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269562**
G20 **East** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002125**
H21 **NNW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269592**
I22 **WNW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269569**
I23 **WNW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002133**
J24 **ENE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269570**
H25 **NNW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269603**
J26 **ENE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002138**
H27 **NNW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002170**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
K28 **NW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269584**
L29 **NE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269591**
K30 **NW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002148**
L31 **NE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002156**
M32 **East** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269555**
N33 **NNE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269607**
O34 **NNE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269614**
M35 **East** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002115**
N36 **NNE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002181**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
O37 **NNE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002187**
P38 **ENE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269575**
P39 **ENE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269583**
P40 **ENE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002139**
Q41 **ENE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002149**
Q42 **NE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269590**
Q43 **NE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002157**
P44 **ENE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269574**
R45 **SSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002088**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
R46 **SSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002089**
P47 **ENE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002140**
48 **SW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002091**
P49 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269573**
R50 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002090**
P51 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002141**
S52 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269632**
S53 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002209**
T54 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269566**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
T55 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002131**
U56 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269589**
U57 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002158**
T58 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269565**
U59 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269587**
T60 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002128**
U61 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002154**
T62 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269564**
T63 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002129**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
V64 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269642**
V65 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002222**
W66 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002153**
W67 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269585**
W68 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002147**
X69 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269611**
X70 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002183**
Y71 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269615**
Y72 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002188**

Map ID Direction Distance Elevation		Database	EDR ID Number
W73 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002155**
Z74 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269602**
Z75 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FRDS PWS**	**HI0000324**
Z76 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002174**
Z77 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269593**
Z78 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002165**
79 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002099**
AA80 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002162**
AB81 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269619**

Map ID Direction Distance Elevation		Database	EDR ID Number
AA82 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002167**
AA83 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269599**
AA84 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269600**
AA85 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269596**
AA86 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269595**
AA87 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269598**
AA88 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269597**
AB89 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002192**
AA90 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269601**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
AA91 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002163**
AA92 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002176**
AA93 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002175**
AA94 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002168**
AB95 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269620**
AB96 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002191**
AC97 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002053**
AC98 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002054**
AC99 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269497**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
AC100 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269498**
AD101 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269677**
AD102 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002251**
AE103 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269616**
104 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002049**
AE105 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002186**
AF106 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269604**
AF107 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269605**
AE108 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002169**

Map ID Direction Distance Elevation		Database	EDR ID Number
AC109 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002047**
AG110 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269702**
AH111 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002046**
AH112 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002045**
AI113 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269494**
AG114 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002285**
AJ115 **ESE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269543**
AJ116 **ESE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269544**
AJ117 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002105**

Map ID Direction Distance Elevation		Database	EDR ID Number
AJ118 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002106**
AK119 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269644**
AH120 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002042**
AH121 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002043**
AK122 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002224**
AK123 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269637**
AK124 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002219**
AL125 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269698**
AH126 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002040**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
AL127 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002283**
AI128 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002037**
AM129 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269680**
AE130 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269622**
AE131 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002196**
132 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269490**
AM133 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002255**
AH134 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002036**
AH135 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002035**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
AF136 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002166**
AN137 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002092**
AN138 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269530**
AO139 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269676**
AO140 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002252**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for HONOLULU County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for HONOLULU COUNTY, HI

Number of sites tested: 209

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.015 pCi/L	100%	0%	0%
Living Area - 2nd Floor	0.125 pCi/L	100%	0%	0%
Basement	0.415 pCi/L	96%	4%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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EXHIBIT C

Section 106 Consultation &

Architectural Inventory Survey Information

DAVID Y. IGE
GOVERNOR OF HAWAII

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

KEKOA KALUHIWA
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CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555

December 2, 2015

IN REPLY REFER TO:
LOG: 2015.02939, 2015.03565
DOC NO: 1511JLP41
Architecture, Archaeology
History and Culture

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
P.O. Box 17907
Honolulu, HI 96817

SUBJECT: **Chapter 6E-8 and National Historic Preservation Act Section (NHPA) Section 106 Consultation – Department of Housing and Urban Development (HUD) Repair and Rehabilitation Project Department of Human Services, Hawai‘i Public Housing Authority (HPHA) Makua Alii Rehabilitation Project – 1541 Kalakaua Avenue Honolulu Ahupua‘a, Kona District, Island of O‘ahu TMK: (1) 2-3-019:004**

Thank you for your initial submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services (DHS), Hawaii Public Housing Authority (HPHA) consultation with SHPD in accordance with 36 CFR 800.3 and Hawaii Revised Statutes (HRS), Chapter 6E. We received your supplemental submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience.

The submittals indicate that the HPHA is requesting the State Historic Preservation Officer's (SHPO) concurrence with a determination of "no effect" for the proposed HUD repair and rehabilitation improvement projects involving 43 existing public housing developments located throughout the State over the next five (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 consultation on their behalf.

This letter addresses Makua Alii Rehabilitation Project, 1541 Kalakaua Avenue. The HPHA has identified the area of potential effects (APE) as the 2.60 acre area parcel owned by the State (HPHA) which is identified as TMK: (1) 2-3-019:004. DHS/HPHA have indicated at this stage of the planning process, they are unclear whether the subject 2.60-acre project area will require any ground disturbances.

Our records indicate that no archaeological inventory survey has been conducted within the subject parcel and that no historic properties have been identified. However, based on nearby studies potential exists to encounter subsurface traditional Hawaiian and/or historic properties within the subject parcel.

The SHPD has reviewed the undertaking at 1541 Kalakaua Avenue, and the SHPO's determination is **no adverse effect** pursuant to NHPA Section 106 and **no historic properties affected** pursuant to HRS §6E-8 within the APE **provided the following conditions are met:**

- If ground disturbing activity is anticipated, DHS must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation;
- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;
- Submit information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;

- Submit a TMK map showing the full extent of the project area within the affected parcel(s);
- Submit description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Submit summary of land use history, such as previous intensive cultivation, grubbing or grading; and
- Submit copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions regarding archaeological resources or concerns please contact Susan Lebo at (808) 692-8019 or at Susan.A.Lebo@hawaii.gov. For any history and cultural concerns please contact Kaʻāhiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov. Please contact Jessica Puff at Jessica.L.Puff@hawaii.gov or (808) 692-8023 for any questions regarding architectural concerns or this letter.

Sincerely,

Alan S. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

MAKUA ALII

Project	Makua Alii
Architect	Frank Slavsky
Built	1967, Renovated in 1972, 1984
National Register Eligibility	Eligible
Criteria	A and C
Significance	Association with history of the Hawaii Housing Authority. Architecturally significant in its high quality of design and being a work of master.
Character Defining Features	High-rise with two connected towers, lanai corridor with spandrel and some original planter boxes, original kitchen cabinets, original hopper windows with vent screen box, original bi-fold closet doors, original wood door with upper panel jalousie window, and screen cell cmu bloks at the utility room. Flat roof community center, arts and craft room wing, concrete paved courtyard, and front and side yard with original landscape.

Landscape Architect : Richard Tongg

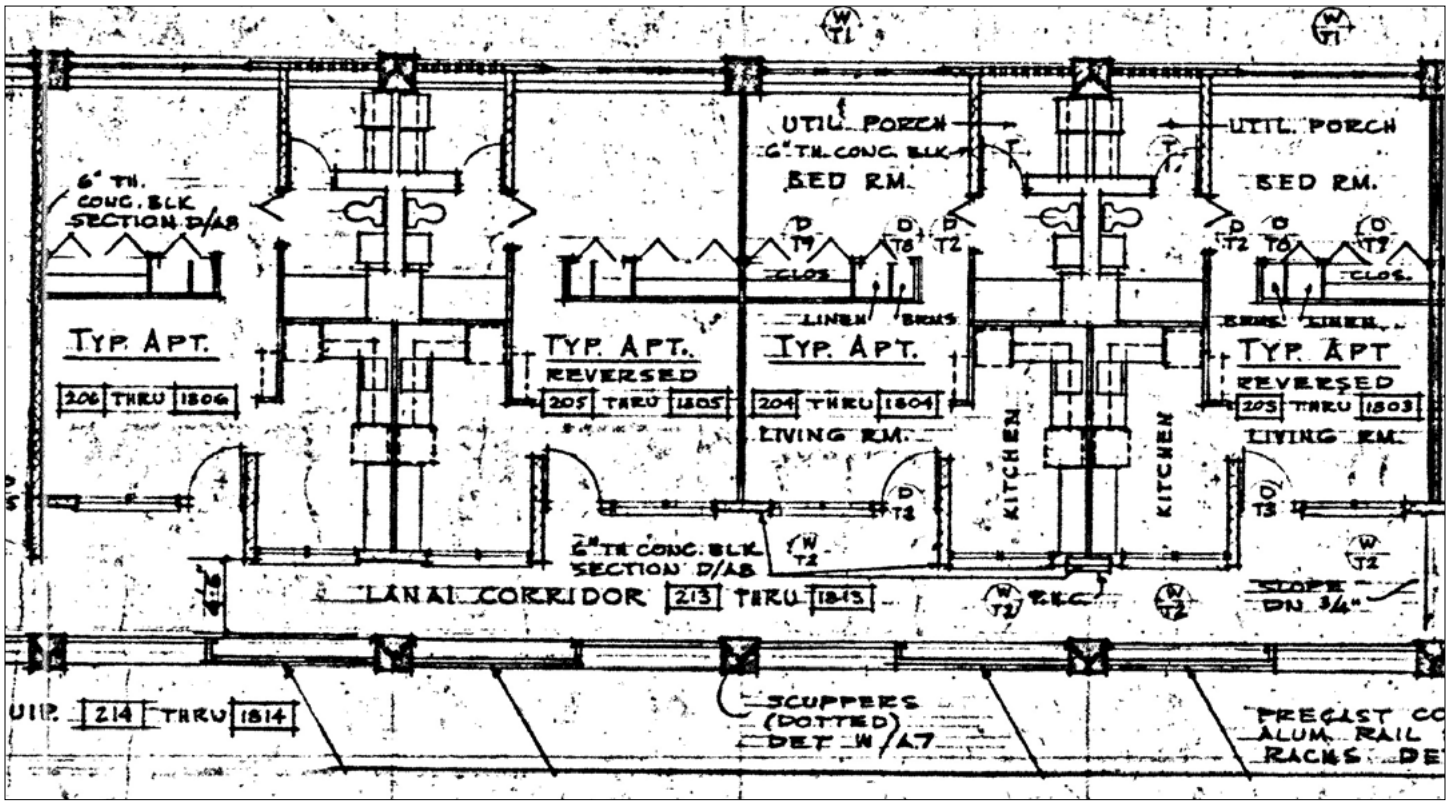
Description

Makua Alii is a 19-story building that sits on a flat lot which includes Kalakaua Homes, immediately off Kalakaua Avenue in a mixed use neighborhood. The building, its grounds and parking occupies 97,519 square feet of the HPHA owned property's total lot size of 9.15 acres. The 33 feet 6 inches x 280 feet building fronts on an asphalt paved entry drive, which runs off Kalakaua Avenue and curves past the building and to a parking lot on the Ewa-rear side of the high- rise apartment building. The building houses 210 one-bedroom units, and sits on a concrete pile foundation. There are typically 12 apartments per floor above the first floor, while the first floor is dedicated to maintenance, security and recreational functions.

The high-rise is comprised of two connected towers, one set back from the other, with the vertical circulation at the intersection. Its façade is characterized by the interplay of horizontal bands formed by the precast spandrels of the lanai-corridors which run across the face of the building and the vertical, reinforced concrete structural columns set 20 feet on center. Open, concrete stairways are at either end of the building. It has a built up, flat roof with a 3-foot high parapet.

Typical upper floors each have 12 one-bedroom units accessed from a lanai corridor which traverses the length of the façade. A precast, 25-inch high spandrel runs along the outer edge of the lanai corridor floor. It is surmounted by a new 20-inch metal railing, which supplanted an earlier metal railing which did not meet current code requirements. Planter boxes adorned the outer side of the spandrels being placed adjoining every other column. Because of poor drainage, spalling became problematic and most of the planter boxes were removed, although boxes still remain on each floor at the left end of the building in its two end bays.

Overview of the Makua Alii



Typical Floor Plan
Frank Slavsky & Associates Architects, *Typical Floor Plan 19th Floor Plan Schedule (Makua Alii)*, Sheet A-2, 1965, Hawaii Housing Authority.

Lanai Corridor with Spandrel

Planter Boxes

The apartments are all one-bedroom with the entry door opening on the living room. The rooms have vinyl tile floors with a 4-inch high vinyl baseboard, and popcorn ceilings. The kitchen is off the side of the living room, and the bedroom is behind the living room's rear wall. Jalousie windows, which retain their original crank handles, are in the living room and kitchen's front wall, and the kitchen retains its original cabinets. There is no door between the bedroom and living room. The bedroom has a set of three, in-swinging, hopper windows in its rear, mauka, wall. Immediately in front and below these windows is a canted vent screen box which allows fresh air to flow into the unit. Three trap doors in the top of the vent screen box allow tenants to regulate the amount of air flowing into their unit. The bedroom closet has original, bi-fold doors and built-in shelving, and a bi-fold door separates the bedroom from its adjoining bathroom. A tile wainscot protects the walls enclosing the tub-shower. Off the bathroom is a rear utility room with a laundry sink. A hinged door with an upper panel jalousie window accesses this space. The outer wall of the utility room is screen cell cmu blocks laid on their sides, allowing fresh air to flow through their holes into the room.

Vinyl Floor with Vinyl Baseboard

Kitchen

Hopper Windows with Vent Screen Box

Vent Box Screens

Bi-fold Closet Doors at Bedroom

Utility Room with Upper Panel Jalousie Window

Screen Cell CMU Blocks at Utility Room

Canted Vent Screens from Exterior

Flat Roof with Pre-stressed Concrete Beams

Aluminum Grilles

At ground level, a left of center, single-story wing projects from the front of the building. This wing houses offices, a former three-bedroom apartment for the building superintendent, and originally a health clinic, which is no longer in operation. The police use one of the offices, as does the building's security. The centered entry to the building is recessed at the right side of the front wing. It is defined by a cantilevered, flat roofed concrete porte cochere, which projects from the building to cover the sidewalk running between the building and entry drive. The flat roof is supported by a series of criss-crossed pre-stressed concrete beams. The entry has aluminum doors, added in 1972, which open on a lobby. The lobby has a tile floor of recent vintage, and a pair of elevators to the left side. Tenant mail boxes are along the rear wall, and along the right wall is an approximately 3-foot 6-inch high cmu wall with an aluminum grille above it, separating the lobby from a recreation room. The latter, as well as the mailboxes, was added in 1984.

Mail Boxes at Lobby

To the right of the elevators is a hallway which accesses the office wing and also a rear wing. The rear wing is a multi-purpose community center room with a stage at its mauka end, and a kitchen beyond the stage's rear wall. A folding partition wall can divide the multi-purpose room into two spaces. Four sets of aluminum sliding doors, added in 1972, are located on the Diamond Head side of the multi-purpose room and provide access and views of the paved courtyard adjoining it.

Original Folding Partitions

The concrete paved courtyard runs along the Diamond Head side of the rear, centered wing. It is separated from the remainder of the property by a 6-foot high cmu wall. A gate in the Ewa side wall, as well as a rear door from the lobby, provide further access into the space, which on the Diamond Head side flows out into the side yard with its lawn, meandering walks and perimeter plantings. The rear courtyard features a demi-eliptical

Circular Lathe House

Concrete Paved Courtyard

Flat Roof with Pre-stressed Concrete Beams

and two circular planter boxes, as well as a circular lathe house, 20 feet in diameter with a shake shingle roof. An original, large monkey pod shades much of the courtyard.

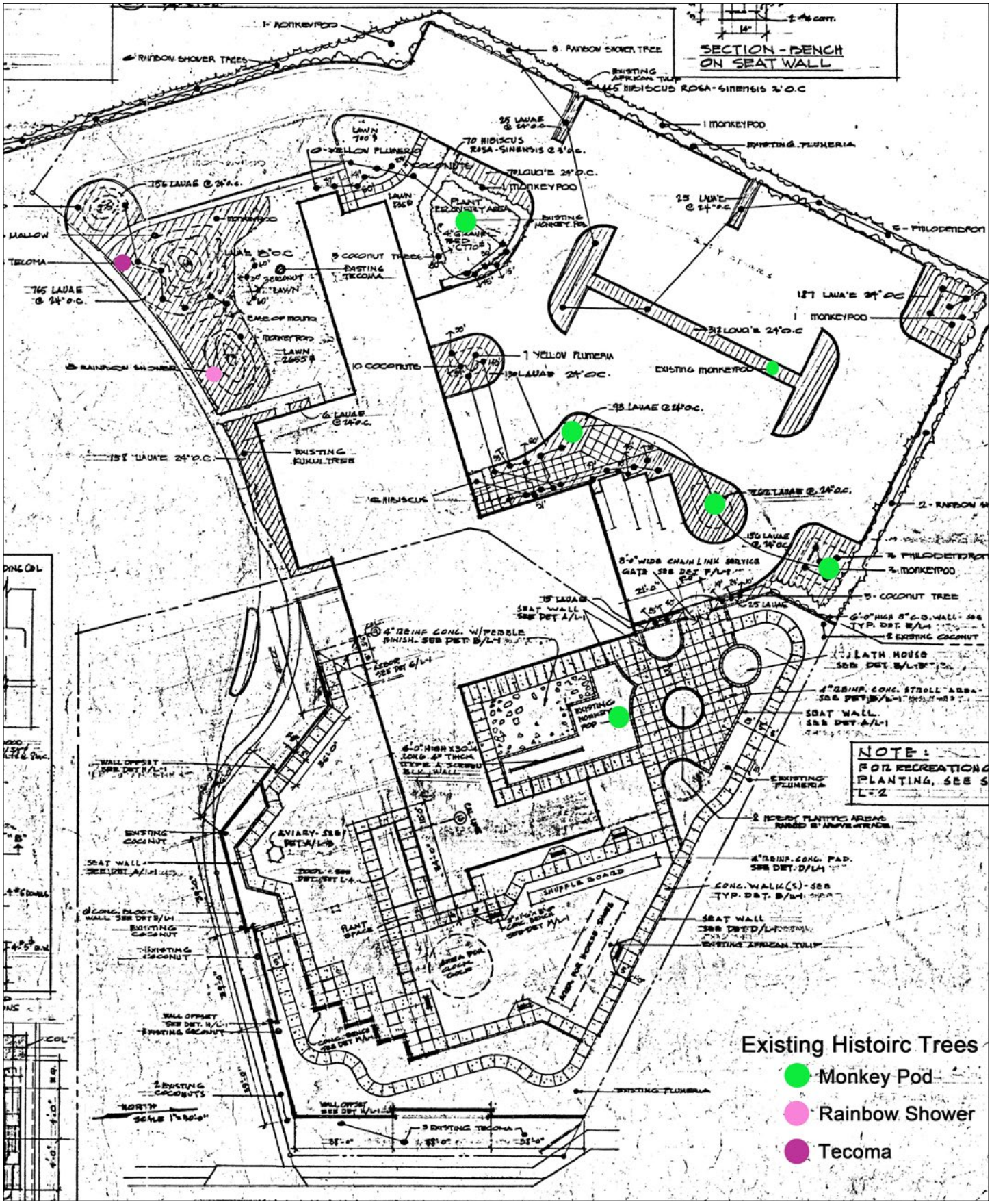
The Diamond Head side of the courtyard is defined by another single-story wing which projects from the right corner of the building. This wing houses an arts and crafts room, which maintains its historic use. At the intersection of the arts and crafts room wing and the main building, a breezeway penetrates the building, providing direct circulation between the front and rear of the high rise. At the front, right corner of the building is a ground floor room which originally housed a library, but now is used as an art room. Both the arts and crafts room and the former library are accessed by aluminum sliding doors which were added in 1972. A non-historic, paved patio, covered by a pergola, is in front of the art room. Originally, a koi pool was located here. The building's front and side yard flow out and around the patio. These landscaped grounds are enclosed by a cmu wall, approximately 6 feet high. The original circulation configuration and seating remain intact, as do many of the original plantings (see next pages landscape plans). In addition to these plantings, several mature trees from the original landscape design are also present in the parking area.

As noted in the above description, Makua Alii has had several alterations made to it over the years. However, none of these are so major as to detract from the historic integrity of the property.

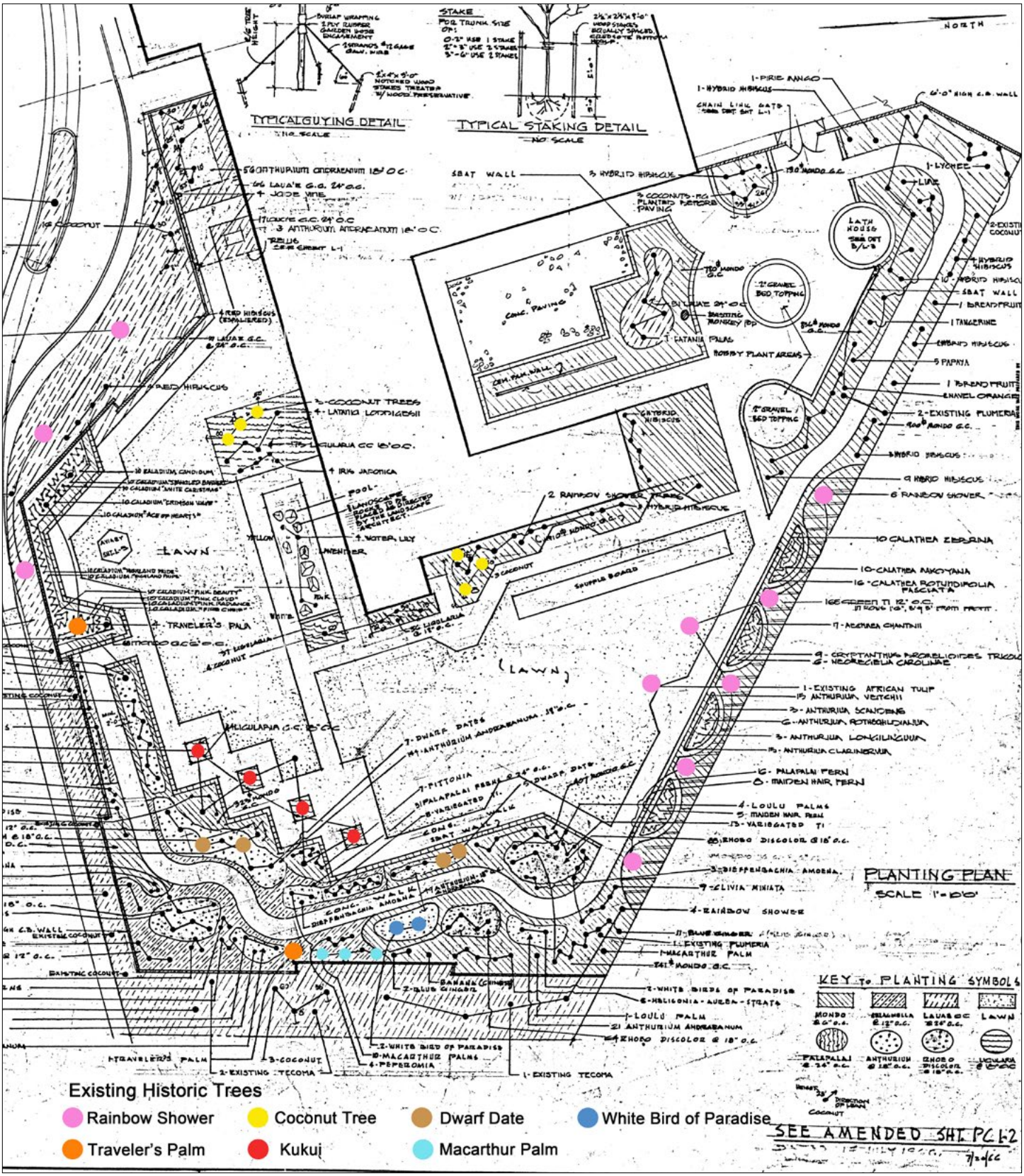
Non-Historic Paved Patio

Side Yard of the Building

Left: Backyard of the Building



Landscape Plan Shows Historic Trees
Frank Slavsky & Associates Architects, *Landscape Planting Plan & Construction Details (Makua Alii)*, Sheet L-1, 1965, Hawaii Housing Authority.



Landscape Plan Shows Historic Trees
Frank Slavsky & Associates Architects, *Landscape Panting Plan Recreation Garden (Makua Alii)*, Sheet L-2, 1965, Hawaii Housing Authority.

MAKUA ALII

History and Significance

Makua Alii was the second Senior Citizen Housing project to be undertaken by the HHA. It was built on a portion of land occupied by Kalakaua Homes. The HHA had built this 122 unit low income housing project in 1941, and later expanded it to 146 units. In order to have sufficient open space to build the proposed elderly housing high rise project, 46 of Kalakaua Homes' units were demolished. In late 1965, the tenants of these demolished apartments were relocated to the recently completed Kuhio Park Terrace housing project. In March 1966 HHA was granted a variance from County parking requirements, and was authorized to provide only one space for every four units. This cleared the way for the awarding of a construction contract in May 1966 to Hawaiian Dredging, who also built the high-rise Kuhio Park Terrace project for the HHA.

Makua Alii was completed and tenants started to move in during December 1967, and the Governor and Mayor dedicated the complex in January 1968. At the time of its opening, the HHA received 427 applications for the 210 units, with 75% of

Building Rendering

the applicants being women. In order to qualify for residency in Makua Alii, applicants had to be over the age of 62, and could have a maximum income of $4,200. The initial tenants averaged 69 years old with an average income of $3,000/year. Rents averaged $32/month.

The HHA worked with the City and County of Honolulu (City) in the planning and design of the project, and the City provided $100,000 toward the construction of the 7,800 square foot ground level senior citizen center with a multi-purpose room, as well as a library, music room, and an arts and crafts room. The County Department of Parks and Recreation continues to administer and operate this senior community center. Initially the State Department of Health maintained a clinic in the building, but this is no longer in operation and their space is now utilized for storage and offices.

At the time it was constructed, the Makua Alii project was, in terms of dollars, the most valuable development administered by the HHA, in large part due to the value of the land on which the high rise sat.

Makua Alii is significant at the State level for its associations with the history of the HHA, and is also significant at the State level for its high quality of design, being the work of a master, Honolulu architect Frank Slavsky.

Makua Alii is associated with both the federal government and HHA's turning their attention to the senior citizen segment of the low income population. Engendered in part by a recognition that the elderly population with low fixed incomes was increasing as a result of improved health care, and a desire of many of the elderly to retain their independence and not be a burden on their children, the U.S. Housing Act of 1956 added special provisions allowing public housing programs, for the first time, to rent dwelling units to one person households, so long as the applicant was 65 years or older in age. In 1961, recognizing that rental prices for units occupied by the elderly might be so low as to make such rentals economically infeasible, the federal Housing Act of that year authorized higher federal subsidies for units occupied by the elderly, allowing local housing authorities to spend relatively more on such units. In the following year, the Senior Citizens Housing Act (Public Law 87-723) lowered the age qualification to 62.

Although Hawaii experienced a 20 percent increase in its population over the age of 65 between 1950 and 1956, the need for low-cost elderly housing did not at first appear to be high. With the Islands' strong tradition of multi-generational households, a survey undertaken in 1956, indicated 95% of the elderly reported satisfaction with their housing situation. As a result, the initial project built to specifically address senior citizen housing in Honolulu, Punchbowl Homes, when it opened in 1960, could not be filled by senior citizens as there were insufficient applicants. Over the next few years, the attitude towards independent living, as well as residing in a high rise apartment, began to change, and the response to Makua Alii encouraged the HHA to proceed with other high-rise buildings for senior citizens, including Kalanihuia.

In 2010, Mason Architects evaluated Punchbowl Homes as being eligible for listing in the National Register of Historic Places for its associations with the history of public housing in Hawaii. Makua Alii, as the first immediately successful, large scale, low-cost senior citizen housing in Hawaii, also appears to met the criteria for listing in the National Register of Historic Places due to its associations with Hawaii's public housing history.

MAKUA ALII

In addition, Makua Alii also appears to meet the criteria for listing in the National Register of Historic Places at the State level as it embodies the distinctive characteristics of its type, period, and method of construction, and possesses high artistic values, that represent the work of a master, Frank Slavsky.

The 19-story building is typical of its period with its pile driven foundation and use of reinforced concrete in its construction. In gains distinction in its application of screen vents to a high-rise building. The use of such a ventilation device had previously only been undertaken in single-story residences in Hawaii, with the Agee residence in Manoa (no longer extant), built in 1919 being an early example of this element. During the 1950s, Slavsky and others, most notably Vladmimir Ossipoff, continued the use of this means of ventilation in their residential design. In addition to this climatically appropriate means of ventilation, the building also incorporates ventilated utility rooms into its design and employs a single stacked lanai corridor to access the individual units. Similarly, the recreation oriented rooms on the ground floor all open to the outside via sliding aluminum doors, reinforcing the indoor-outdoor relationship of the building. The high quality of Richard Tongg's landscaped grounds further contributes to the character of Makua Alii, and although Tongg provided landscape designs for many HHA projects, this is a rare one to have survived so intact. The building won a national award from HUD for excellence in architecture, and also won an award for outstanding design from the Hawaii chapter of the American Institute of Architects (AIA).

Frank Slavsky was born in Denver in 1919 and attended the University of California at Berkeley. He arrived in Hawaii in mid-1941, and then served in the Army Corps of Engineers. In 1952, he opened his own office, and in 1957 went into partnership with Richard Dennis. They designed a number of high quality residences, and such apartments as the Waikiki Palms, 3003 Kalakaua and Makiki Hale. Slavsky also designed the Liliuokalani Trust Building on Vineyard Avenue, and won a Hawaii chapter of the AIA design award for the Ethel Hill residence.

One of the two high-rises surveyed, Makua Alii retains a high degree of historic integrity and appears to meet the criteria for listing in the National Register as excellent examples of high rise public housing and also as excellent examples of public housing provided for the elderly.

HAWAII PUBLIC HOUSING AUTHORITY

ENVIRONMENTAL REVIEW

PAOAKALANI

Honolulu, O`ahu

AMP 34
HPHA No. 1036

Prepared for:

State of Hawaii
Hawaii Public Housing Authority

Prepared by:

HHF PLANNERS
places for people

U.S. Department of Housing and Urban Development
451 Seventh Street, SW
Washington, DC 20410
www.hud.gov

espanol.hud.gov

Environmental Review for Activity/Project that is Categorically Excluded Subject to Section 58.5

Pursuant to 24 CFR 58.35(a)

Project Information

Project Name: Paoakalani (AMP 34)

Responsible Entity: Hawaii Public Housing Authority
1002 North School Street
Honolulu, HI 96817

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

State/Local Identifier: State of Hawaiʻi

Preparer: Mr. Scott Ezer, Vice President
HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaiʻi 96813

Certifying Officer Name and Title: Mr. David Y. Ige
Governor, State of Hawaiʻi

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

Consultant (if applicable): HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaiʻi 96813

Direct Comments to: Mr. Hakim Ouansafi, Executive Director
Hawaii Public Housing Authority
1002 North School Street
Honolulu, Hawaiʻi 96817

Project Location: 1581 Kalākaua Avenue
Honolulu, Hawaiʻi 96826

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]**:**

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a "major construction activity" and would involve one or a combination of several HUD designated categories of actions.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent;
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons;
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland;
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation;
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls);
7. Interior and exterior renovations and rehabilitation;
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site;
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Level of Environmental Review Determination:

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.5. Compliance with and completion of conformance determinations for other statute, executive order, or regulation has been completed and support the Categorical Exclusion.

Funding Information

Grant Number	HUD Program	Funding Amount
To be determined	Capital Fund Grants	To be determined
To be determined	Economic Development Initiative Special Project Grant	To be determined
To be determined	Other Grants	To be determined

Estimated Total HUD Funded Amount:

To be determined by HUD using a formula and based upon Federal budget.

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]:

Depends on funds available.

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	*The project is not within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.*
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☒	*Hawai'i has no coastal barriers (http://www.fws.gov/CBRA/Maps/Mapper.html)*
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes ☐ No ☒	*As indicated in the Flood Insurance Rate Map Panels 15003C0362G and 15003C0366G, the project site is located in Zone X and is determined to have minimal flood hazard and is outside the 500-year flood zone. Based on the project description the project includes no activities that would require further evaluation under this section. The project does not require flood insurance or is exempt from flood insurance. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with Flood Insurance requirements*

STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5		
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes ☐ No ☒	*The State of Hawai'i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. EPA's Green Book for currently designated "nonattainment areas" as of June 2015. Planned repair and rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.*
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes ☐ No ☒	*Documentation from the Office of Planning determined that projects receiving federal funds from HUD's Public Housing Capital Fund do not require review for consistency with Hawai'i's CZM program.*
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☐ No ☒	*Based on the results of the EDR report and site visit, there are no known hazardous materials, contamination, or toxic chemicals, gasses or radioactive substances in the immediate vicinity which could affect the health or safety of occupants or conflict with intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gasses, etc.*
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes ☒ No ☐	*The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (USFWS) in their letter dated September 28, 2015 which is included in the Appendices, while project-specific mitigation measures are identified in the following section.*
Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes ☐ No ☒	*There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site.*
Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes ☐ No ☒	*The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. The project is located within the*

		State Land Use Urban District. The existing development is located on urbanized property. No farmlands will be impacted by repair or rehabilitation improvements implemented.
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes ☐ No ☒	*As indicated in the Flood Insurance Rate Map Panel 15003C0362G and 15003C0366G, the project site is located in Zone X and is determined to have minimal flood hazard and is outside the 500-year flood zone. The project is in compliance with Executive Order 11988.*
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes ☐ No ☒	*Paoakalani is 45 years old and was first occupied in 1970. To be eligible for listing in the National Register of Historic Places (NRHP), a property must meet the National Register criteria for evaluation which involves examining its integrity, significance, and age (generally at least 50 years old). Due to its age, this housing project does not meet the eligibility criteria to be evaluated for the NRHP. In a letter to the State Historic Preservation Officer dated July 23, 2015, the HPHA determined that no historic properties would be affected by repair and rehabilitation improvements for this housing project. No comments or objections about this no effect determination were received.*
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes ☐ No ☒	*The project site is not situated along a highway or major arterial roadway that has a high volume of vehicular traffic that may generate significant noise. The HUD noise level calculator estimated noise levels at the project site to be 54.4 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.*
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes ☐ No ☒	*The housing project is located within the O‘ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation.*

Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☐ No ☒	*There are no known wetlands within the housing project's property, and therefore, no wetlands will be adversely impacted by the project improvements (http://www.fws.gov/wetlands/data/mapper.HTML)*
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes ☐ No ☒	*There are no Wild and Scenic Rivers in Hawai'i, which excludes this project from mitigation or formal consultation requirements (http://www.rivers.gov/map.php) .*
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes ☐ No ☒	*Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, these improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects on minority populations and low-income populations. Improvements should benefit low-income and minority populations living within this housing project.*

Field Inspection (Date and completed by)**:** June 2, 2015
Glenn Tadaki, Planner
HHF Planners

Summary of Findings and Conclusions:

Repair and rehabilitation improvements implemented for this existing housing project by HPHA should not result in significant environmental impacts based upon research data collected, a field inspection, consultation with the site manager and maintenance staff, consultation with pertinent resource agencies, and prior HPHA experience implementing repair and rehabilitation improvements. Therefore, repair and rehabilitation improvements would comply and be consistent with the statutes, executive orders, and regulations addressed. Furthermore, HPHA would evaluate improvements planned to ensure the work is consistent with the designated categories of actions described under the project description section. Compliance with these factors evaluated are further addressed in the attached Source Documentation Statutory Worksheet along with relevant technical reports/assessments.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Law, Authority, or Factor	Mitigation Measure
Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	*Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.* *Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.* *Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.* *Newell's shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.* *Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.* *Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo'i, impoundments or other vegetated water bodies.*

	1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols. *2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.* *3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.* *In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.* *<u>Additional Measures</u>: The following additional measures would be implemented:* *1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.*

Determination:

☒ This categorically excluded activity/project converts to **EXEMPT** per Section 58.34(a)(12), because it does not require any mitigation for compliance with any listed statutes or authorities, nor requires any formal permit or license; **Funds may be committed and drawn down after certification of this part** for this (now) EXEMPT project; OR

☐ This categorically excluded activity/project cannot convert to Exempt status because one or more statutes or authorities listed at Section 58.5 requires formal consultation or mitigation. Complete consultation/mitigation protocol requirements, **publish NOI/RROF and obtain "Authority to Use Grant Funds"** (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR

☐ This project is not categorically excluded OR, if originally categorically excluded, is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

Preparer Signature: Scott Ezer Date: 11-10-15

Name/Title/Organization: Mr. Scott Ezer, Vice President
HHF Planners

Responsible Entity Agency Official Signature:

David Y Ige Date: APR 28 2016

Name/Title: Mr. David Y. Ige, Governor

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

PAOAKALANI (HA # 1036)

TMK: (1) 2-3-019: 004

Hawai‘i Public Housing Authority (HPHA) Environmental Review

SOURCE DOCUMENTATION (SD) STATUTORY WORKSHEET

Site Visit Date: June 2, 2015
Prepared By: Glenn Tadaki

The Paoakalani elderly housing project is located within the McCully-Mo‘ili‘ili community in the Honolulu district on the island of O‘ahu. McCully-Mo‘ili‘ili is located in urban Honolulu, northeast of Ala Moana Shopping Center.

The project site is situated between Kalākaua Avenue and Kaheka Street and is located on the same tax parcel as the Kalākaua Homes and Makua Ali`i housing projects. Paoakalani is approximately 730 feet west of Washington Middle School and lies within HPHA’s Asset Management Project (AMP) 34 which includes the other two housing projects.

Paoakalani was first occupied in 1970 and has a street address of 1583 Kalākaua Avenue. This housing project covers 1.8 acres, and is identified by Tax Map Key (1) 2-3-019: 004. The housing project is comprised of a single 16-story apartment building with 90 studio units, 60 one-bedroom units, and a single three-bedroom unit for live-in maintenance staff. The property is designated for “Urban” use by the State Land Use Commission and is zoned for “A-3 High Density Apartment” use by the City and County of Honolulu.

The project site is not located within a tsunami evacuation zone, and the entire site is located in Flood Zone X based upon the Flood Insurance Rate Map (Community Panel Numbers 15003C0362G and 15003C0366G, Revised January 19, 2011. Zone X is an area determined to be outside the 0.2% annual chance floodplain.

The following figures in Exhibit A provide supporting information on this housing project:

Figure 1: Location Map
Figure 2: TMK Map
Figure 3: Site Map
Figure 4: Flood Map

COMPLIANCE FACTORS

I. AIRPORT CLEAR ZONES AND ACCIDENT POTENTIAL ZONES (24 CFR PART 51D)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The housing project does not lie within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). In addition, the project is an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: 24 CFR 51 (D).

Honolulu International Airport Master Plan - 2010 (August 1994), State Department of Transportation, Airports Division; and

*Hawai`i Airports and Flying Safety Guide (2012-13, Fifth Edition, Revision 1)* Hawai`i Department of Transportation, Airports Division.

HDOT website at: http://hidot.hawaii.gov/airports/files/2013/01/Airport-Safety-Guide-2012-2013-5rev1.pdf

II. COASTAL BARRIER RESOURCES (COASTAL BARRIER IMPROVEMENT ACT OF 1990 [16 USC 3501])

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i does not have any designated coastal barrier resource units.

SUPPORTING DOCUMENTATION:

Printed: U.S. Fish and Wildlife Service website at:
http://www.fws.gov/cbra/maps/mapper.html
(Date accessed: 6/30/15).

III. FLOOD INSURANCE (FLOOD DISASTER PROTECTION ACT OF 1973 AND NATIONAL FLOOD INSURANCE REFORM ACT OF 1994 [42 USC 4001-4128 AND 42 USC 5154a])

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program

The project site is located in Zone X (area of minimal flood hazard) and is located outside the 500-year flood zone. A field inspection and information obtained from the site manager confirmed no major flooding issues within the site. Based on its description, the Paoakalani housing project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal any signs of previous flooding problems. An interview with the Maintenance Supervisor also determined that no major ponding or flooding issues have occurred on the project site although evidence of moisture penetration and concrete spalling was observed on the north and south sides of the building.

Printed: City and County of Honolulu, Flood Insurance Rate Map, Hawai‘i Community Panel Numbers 15003C0362G and 15003C0366G, Revised January 19, 2011.

Hawai`i Department of Land and Natural Resources website at:
http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 6/30/15)

IV. CLEAN AIR ACT (40 CFR PARTS 6, 51, 93)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. Environmental Protection Agency's Green Book for currently designated "nonattainment areas" as of June 2015. Planned rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.

SUPPORTING DOCUMENTATION:

Printed: *State of Hawai‘i Annual Summary 2013 Air Quality Data*. State of Hawai'i, Department of Health, July 2014.

U.S. Environmental Protection Agency website at: http://epa.gov/airquality/greenbk/

V. COASTAL ZONE MANAGEMENT ACT (16 USC 1451, SECTIONS 307 (C), (D)

CONTACT:
Mr. John Nakagawa
Office of Planning
Department of Business, Economic Development & Tourism
State of Hawai‘i
P.O. Box 2359
Honolulu, Hawai'i, 96804-2359

SUPPORTING DOCUMENTS

	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai‘i's Coastal Zone Management (CZM) program.

SUPPORTING DOCUMENTATION:

Contact: In an e-mail to the Office of Planning (OP) dated July 27, 2015, the HPHA determined that the use of HUD funds for the implementation of repair and rehabilitation improvements does not require review for consistency with Hawai‘i's CZM program. The OP confirmed this determination in an e-mail dated July 28, 2015 and included in the Appendices.

Experience: As part of past environmental reviews in December 2010, a letter from the OP dated July 20, 2005 determined that their review for consistency with Hawai'i's CZM program was not required. A copy of this letter is included in the Appendices.

VI. CONTAMINATION AND TOXIC SUBSTANCES (24 CFR PART 50.3 & 58.5(I)(2))

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Project Not Affected

There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.

SUPPORTING DOCUMENTATION:

Field: A site inspection and interview with the site manager and Maintenance Supervisor revealed no presence of any toxic or radioactive materials on the project site that warrant any concern. A secure storage building behind Paoakalani stores 55 gallon drums of diesel and gallon-size containers of gasoline. The diesel is used for the emergency generators in each of three housing projects on this tax parcel, while the gasoline is used to power their lawn trimmers. The storage building is in acceptable condition and labeled with signage.

Study: Environmental Data Resources, Inc. (EDR), conducted a search of available environmental records and prepared a Radius Map Report (Inquiry Number 4237094.38s, March 18, 2015). EDR reviewed more than 25 federal and statewide regulatory databases for information regarding the treatment, storage, disposal and release of toxic chemicals at the project site and within specific radii (generally 1 mile) of the site. A Detail Map within the EDR report documents those sites identified within a 0.25 mile radius of the project site. Some of the sites contain underground storage tanks (UST) that are currently in use or are permanently out of use. The EDR report in Exhibit B includes the results of their research findings.

The EDR report notes that the nearby Kalākaua Homes housing project was inspected for asbestos in 2005 and that the inspection resulted in no violation or enforcement action. It also notes that this housing project is classified as a small, small quantity generator because it produces between 100 to 1,000 kilograms (kg) of hazardous waste per month and accumulates less than 6,000 kg of hazardous waste at any time. No violations were reported for Kalākaua Homes as a small, small quantity generator.

In the vicinity of the project site, the report notes that a former gas station at 1505 S. King Street closed around 2007 and its four gasoline UST (total 36,500 gallons) and one oil

UST (550 gallons) are permanently out of use. It also notes that cleanup for a leaking UST at a gas station on 1549 S. King Street was conducted in 2010 and that a drug store at 966 Kāheka Street is a conditionally exempt small quantity generator because it produces 100 kilograms (kg) or less of hazardous waste per month and accumulates 1,000 kg or less of hazardous waste at any time. No violations have been reported for the drug store as a conditionally exempt small quantity generator.

The project site was not identified as a Formerly Used Defense Site (FUDS) by the U.S. Army Corps of Engineers and is not subject to any cleanup actions for Department of Defense-generated contamination.

VII. ENDANGERED SPECIES (50 CFR PART 402)

CONTACT:
Mr. Loyal Mehrhoff, Field Supervisor
Pacific Islands Administrator
Fish and Wildlife Services
U.S. Department of the Interior
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawai'i 96813
Tel. #: 792-9400

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Adverse Effect Subject to Mitigation

The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices.

SUPPORTING DOCUMENTATION:

Contact: A letter from the HPHA dated July 24, 2015 was submitted to the Pacific Island Administrator for the FWS determining that repair and rehabilitation improvements that may be implemented using HUD funds for this housing project would have no likelihood of effect on any listed species or proposed species, or existing or proposed designated critical habitat subject to certain measures. Concurrence with this determination along with proposed minimization and avoidance measures was received from the FWS in a letter dated September 28, 2015 which is included in the Appendices. This housing project is subject to the following minimization and avoidance measures.

Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.

Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.

Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.

Newell's shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.

Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.

Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo'i, impoundments or other vegetated water bodies.

1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols.
2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.
3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.

In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.

Additional Measures: The following additional measures would be implemented:

1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.

Experience: The FWS was previously consulted as part of environmental reviews that were completed in 2005 (39 housing projects) and 2010 (70 housing projects) which supported the determination that repair and rehabilitation improvements would either: 1) have no likelihood of effect for certain housing projects; or 2) not likely adversely affect federally listed species or critical habitat for certain housing projects subject to mitigative measures. A summary of these consultation efforts follows.

2005 Consultation: In a letter dated July 15, 2005, the Housing and Community Development Corporation of Hawai'i (predecessor to the HPHA), determined that the implementation of minor repair and rehabilitation improvements for 39 housing projects would not have an adverse effect on federally-listed species or critical habitat. In a letter dated August 11, 2005, the FWS concurred with the HCDCH determination.

2010 Consultation: In a letter dated May 17, 2010, the HPHA informed the FWS that HUD funds would be used to immediately implement repair and rehabilitation improvements for six housing projects on O'ahu and the island of Hawai`i. In a subsequent letter dated May 21, 2010, the FWS was informed that HPHA would be using HUD funds to implement minor repair and rehabilitation improvements for 64 projects throughout the State. In both letters, the HPHA determined that the repair and rehabilitation improvements were not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat. Based on further consultation and a meeting with FWS staff on June 24, 2010, the HPHA determined that repair and rehabilitation improvements for most of their housing projects would not likely adversely affect any listed or proposed species, or existing or proposed designated habitat, subject to various mitigative measures for certain housing projects.

VIII. EXPLOSIVE AND FLAMMABLE OPERATIONS (24 CFR PART 51C)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

Status Category: Not Applicable

Status Category: Not Applicable.

There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

SUPPORTING DOCUMENTATION:

Field: Field inspection was limited to the exterior of residential buildings and associated structures for this housing project. No above-ground explosive or flammable material storage containers in excess of 100 gallons were observed at the site.

Printed: 24 CFR Part 51, Subpart C addresses acceptable separation distance from above-ground explosive or flammable fuels or chemical containers. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

IX. FARMLANDS PROTECTION (7 CFR PART 658)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. Since the property consists of an existing housing development within an urbanized area, no farmlands would be impacted by the implementation of repair and rehabilitation improvements.

Printed: The project site is designated for "Urban" use by the State Land Use Commission and is zoned for "A-3 High Density Apartment" use by the City and County of Honolulu.

State Office of Planning website at: http://planning.hawaii.gov/gis/
(Date accessed: 6/30/2015)

X. FLOODPLAIN MANAGEMENT (EXECUTIVE ORDER 11988, 24 CFR PART 55)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program

The project site is located in Zone X, an area of minimal flooding (i.e., 0.2% annual chance flood), and is located outside the 500-year flood zone. A field inspection and information obtained from the site manager confirmed no major flooding issues within the project site.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal any signs of previous flooding problems. An interview with the Maintenance Supervisor also determined that no major ponding or flooding issues have occurred on the project site although evidence of moisture penetration and concrete spalling was observed on the north and south sides of the building.

Printed: City and County of Honolulu, Flood Insurance Rate Map, Hawai'i Community Panel Numbers 15003C0362G and 15003C0366G, Revised January 19, 2011.

Hawai`i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 6/30/15)

XI. HISTORIC PRESERVATION (NATIONAL HISTORIC PRESERVATION ACT OF 1966; SECTIONS 106 AND 110; 36 CFR, PART 800)

CONTACT:

Ms. Suzanne Case, Chairperson
Department of Land and Natural Resources (DLNR)
State of Hawai'i
1151 Punchbowl Street
Honolulu, Hawai'i 96813
Tel. #: 587-0400

SUPPORTING DOCUMENTS

X	Field
X	Contact
X	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Effect on Historic Properties

Paoakalani is 45 years old and was constructed in 1970. To be eligible for listing in the National Register of Historic Places (NRHP), a property must meet the National Register criteria for evaluation which involves examining its integrity, significance, and age (generally at least 50 years old). Due to its age, this housing project does not meet the eligibility criteria to be evaluated for the NRHP. In a letter to the State Historic Preservation Officer (SHPO) dated July 23, 2015, the HPHA determined that no historic properties would be affected (no effect) by repair and rehabilitation improvements for this housing project. No comments or objections about this no effect determination were received.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the Paoakalani housing project did not locate any existing or potential archaeological sites (e.g., heiau) or cultural features on the property. The project site has undergone extensive ground-altering activities since it was initially developed and improved with buildings, driveways, parking lots, sidewalks, and other related

improvements. An interview with the AMP Manager and Maintenance Supervisor indicates that no known sites or features are present on the property.

Contact: A letter from the HPHA dated July 23, 2015, which is included in the Appendix, was submitted to the State Historic Preservation Officer [SHPO] (Chair of State Board of Land and Natural Resources) as part of Section 106 consultation determining that no historic properties would be affected (no effect) by repair and rehabilitation improvements that may be implemented using HUD funds for this housing project. The SHPO did not submit any comments or objections on the "no effect" determination for this housing project, which included follow-up e-mails with the State Historic Preservation Division regarding a response. On September 28, 2015, notice of HPHA's determination was also distributed to several native Hawaiian organizations and the various County Planning Departments. No concerns or opposition to this determination was received.

Printed: A review of the U.S. National Parks Service website for the National Register of Historic Places did not identify any historic properties within the limits of this housing project. A similar review of the State DLNR website for the State Register of Historic Places revealed that there are no historic properties within the project site.

National Register: U.S. National Park Service website at: http://www.nps.gov/nr/research/ (Date accessed: 7/2/15).

State Register: Hawai`i Department of Land and Natural Resources website at: http://dlnr.hawaii.gov/shpd/state-register/ (Date accessed: 7/2/15).

Experience: In letter to the SHPO dated April 19, 2011, the HPHA determined that minor repair and rehabilitation improvement at 57 public housing projects throughout Hawai'i (including Paoakalani) would have "no effect" on historic properties. The SHPO had no comments or objections on the "no effect" determination.

XII. NOISE ABATEMENT CONTROL (24 CFR PART 51B)

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Within HUD Noise Standards

The project site is not situated along a highway or major arterial roadway that has a high volume of vehicular traffic that may generate significant noise. Kalākaua Avenue is a major City roadway along the project site serving vehicular traffic entering and exiting Waikiki along with providing access to other surrounding urban areas. The HUD noise level calculator estimated noise levels at the project site to be 54.4 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

SUPPORTING DOCUMENTATION:

Field: The project site is situated within a block generally surrounded by other existing condominiums, commercial buildings, and the HPHA Makua Aliʻi and Kalākaua projects. Noise from surrounding areas and roadways are also mitigated at the project site to some extent from these other concrete buildings and structures serving as barriers from roadways. No significant noise generating sources were identified within the project site during the site inspection. Noise sources are predominantly associated with vehicular traffic along adjacent roadways and voices from surrounding activities.

Study: The HUD day/night noise level calculator was used to estimate approximate traffic noise levels at the project site. Kalākaua Avenue is a major City roadway generally running in a north-south direction along the project site serving vehicular traffic entering and exiting Waikiki along with providing access to other surrounding urban areas. Kāheka Street is located to the west of the project site running in a north-south direction, and provides access to existing uses along that street. Kalākaua Avenue has about 43,900 vehicles a day based upon State Department of Transportation 2013 traffic data. Given the distance of the center lines of this roadway from the project site (about 60 feet), the estimated noise levels at the project site using this HUD calculator was 54.4 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

XIII. SOLE SOURCE AQUIFER (40 CFR PART 149)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact on Sole Source Aquifer

The housing project is located within the Oʻahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation. However, if exceptional circumstances require compliance steps with any of these authorities, such compliance must be established and documented prior to approving the site-specific loan or grant.

SUPPORTING DOCUMENTATION:

Printed: This determination was based upon review of the Sole Source Aquifer Memorandum of 4/30/90 (Sections II.B.1 and II.B.2) and consideration of the type of rehabilitation related improvements that would be conducted for this project.

XIV. WETLANDS PROTECTION (EXECUTIVE ORDER 11990)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the property did not identify the presence of any wetlands.

Printed: U.S Fish and Wildlife Service website at: http://www.fws.gov/wetlands/data/mapper.html (Date accessed 6/30/2015).

XV. WILD AND SCENIC RIVERS ACT (16 USC 1271, SECTION 7 (B), (C))

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no Wild and Scenic Rivers in Hawai‘i, which excludes this project from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: National Wild and Scenic Rivers System website at: http://www.rivers.gov/index.php (Date accessed: 6/30/2015).

XVI. ENVIRONMENTAL JUSTICE (EXECUTIVE ORDER NO. 12898)

SUPPORTING DOCUMENTS	
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, repair and rehabilitation improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations. Repair and rehabilitation improvements should benefit low-income and minority populations living within this housing project.

SUPPORTING DOCUMENTATION:

Printed: Executive Order 12898.

U.S. Department of Housing and Urban Development website at:
https://www.hudexchange.info/environmental-review/environmental-justice/

EXHIBIT A

Location Map, TMK Map, Site Map, Flood Map, and Site Photos

Source: State of Hawaiʻi GIS Data and Google Earth Pro - 1/12/13

HONOLULU RAIL TRANSIT

Transit Corridor

Transit Station

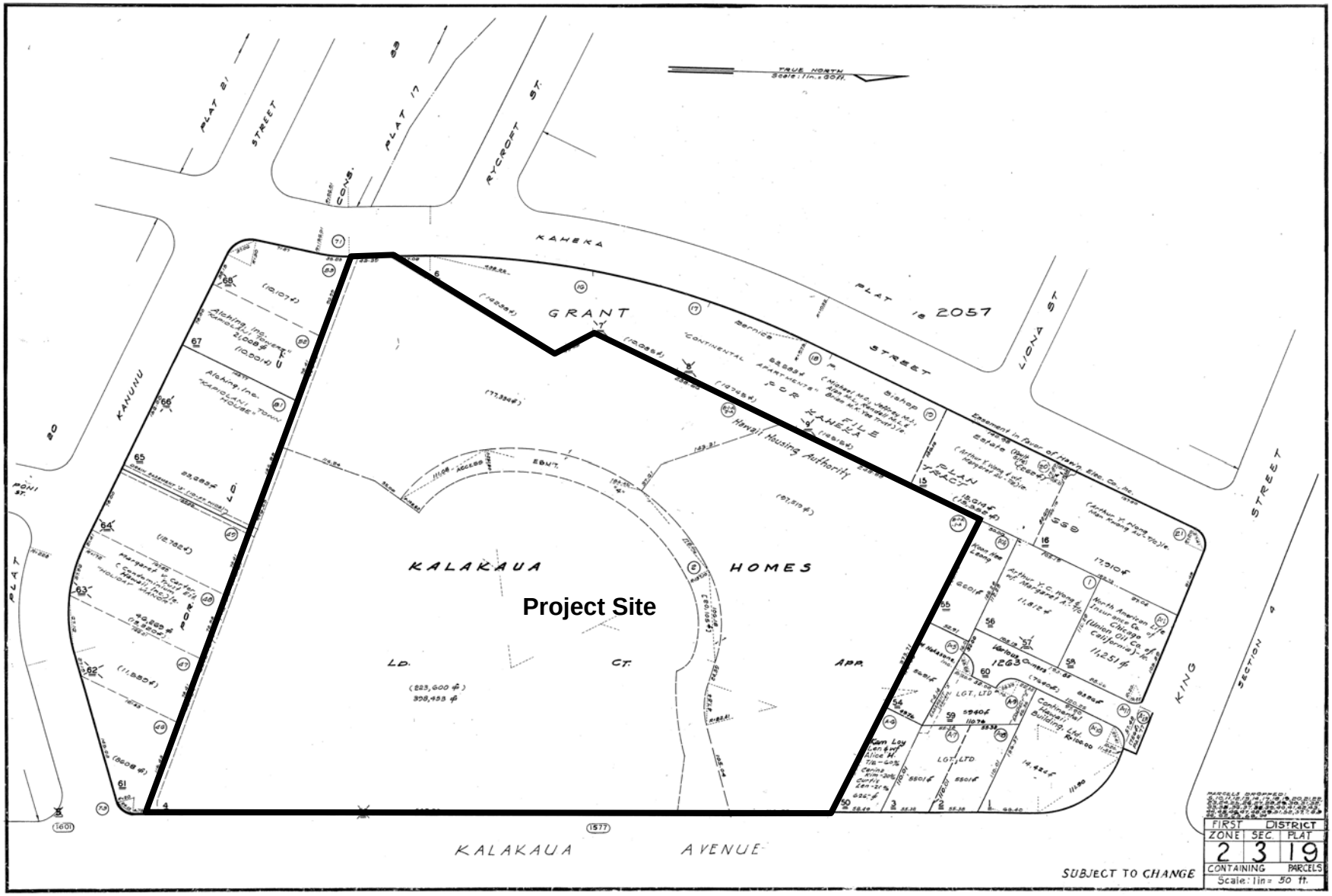
HPHA No. 1036 - Paoakalani Homes (AMP 34)

Figure 1 - Project Location Map

Honolulu, Oʻahu

2,000 FT

HHF PLANNERS
places for people



HPHA No. 1036 - Paokalani Homes (AMP 34)

Figure 2 - TMK Map

Honolulu, O'ahu

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1036 - Paokalani Homes (AMP 34)

Figure 3 - Site Map

Honolulu, O'ahu

40 FEET

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

LEGEND

Zone X - Outside the 0.2% Annual Chance of Flood

HPHA No. 1036 - Paoakalani Homes (AMP 34)

Figure 4 - Flood Map

Honolulu, O'ahu

40 FEET

HHF PLANNERS
places for people

PAOAKALANI
SITE PHOTOS

Kalakaua Avenue, fronting housing site, looking north

Entrance; subject housing site behind the high-rise (not shown)

Main entry to housing units

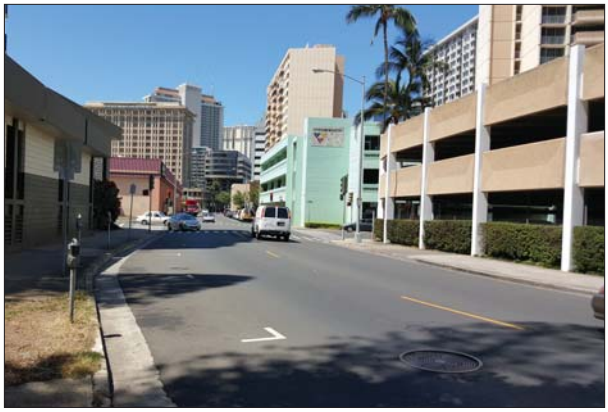
Landscaping at project entry

Transformer building at rear, near Kaheka Street

Rear yard

PAOAKALANI
SITE PHOTOS

Landscaping fronting housing site; housing site in background



Kaheka Street along rear of housing site, looking south

Kaheka Street frontage at rear of housing site. looking north

Bumps on building exterior are concrete spalls -- risk of falling onto residents and visitors

Storage Area

Backup generator

EXHIBIT B

EDR Radius Map Report

Kalakaua Homes
1545 Kalakaua Ave.
Honolulu, HI 96814

Inquiry Number: 4237094.38s
March 18, 2015

EDR Summary Radius Map Report

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

FORM-NULL-PVC

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

1545 KALAKAUA AVE.
HONOLULU County, HI 96814

COORDINATES

Latitude (North):	21.2956000 - 21˚ 17' 44.16''
Longitude (West):	157.8377000 - 157˚ 50' 15.72''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	620565.1
UTM Y (Meters):	2355168.5
Elevation:	7 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	USGS 7.5 min quad index

MAPPED SITES SUMMARY

Target Property Address:
1545 KALAKAUA AVE.
, HI 96814

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
A1	KALAKAUA HOMES - 17T	1545 KALAKUA AVE,	FTTS, HIST FTTS		TP
A2	KALAKAUA HOMES	1545 KALAKAUA AVE.	RCRA-SQG, FINDS		TP
A3	KALAKAUA HOMES #1910	1545 KALAKAUA AVE.	FTTS, HIST FTTS		TP
4		920 PUNAHOU ST	EDR US Hist Auto Stat	Higher	504, East
B5	LIONELS SERVICE INC	1505 S KING ST	RCRA-SQG	Higher	618, North
B6		1505 S KING ST	EDR US Hist Auto Stat	Higher	618, North
B7	MID PAC PETROLEUM 25	1505 S. KING ST.	LUST, UST, Financial Assurance	Higher	618, North
8	LONGS DRUG STORE NO	966 KAHEKA ST	RCRA-CESQG	Higher	622, NNW
C9	TESORO 2GO 61018	1549 S KING ST	LUST, UST, Financial Assurance	Higher	671, NE
10	GAS PLUS	1524 S KING ST	LUST, UST	Higher	685, NNE
C11		1549 S KING ST	EDR US Hist Auto Stat	Higher	715, NE
C12	O'REILLY AUTO PARTS	1550 SOUTH KING STRE	RCRA-CESQG	Higher	716, NE
C13		1558 S KING ST	EDR US Hist Auto Stat	Higher	722, NE
C14	PUNAHOU REPAIR SHOP	1558 S KING ST	RCRA-CESQG, FINDS	Higher	722, NE
C15	PUNAHOU REPAIR SHOP	1558 S KING ST	LUST, UST	Higher	722, NE
D16		801 KAHEKA ST	EDR US Hist Cleaners	Lower	908, SW
D17		801 KAHEKA ST	EDR US Hist Auto Stat	Lower	908, SW
D18	FIRESTONE STORE	801 KAHEKA ST	LUST, UST, Financial Assurance	Lower	908, SW
D19	HOLIDAY ACTION GAS	801 KAHEKA ST	RCRA-SQG	Lower	908, SW
E20	ALOHA/KING SELF STOR	1414 KALAKAUA AVE	SHWS, ENG CONTROLS, INST CONTROL, VCP	Higher	948, NNE
21	MAUI DIVERS OF HAWAI	1520 LIONA STREET	RCRA-CESQG, FINDS	Higher	973, NW
F22	GAS 'N GLO INC	1670 MAKALOA ST	LUST, UST	Lower	1041, South
E23	7-11 KALAKAUA	1323 KALAKAUA AVE	SHWS, UST, Financial Assurance	Higher	1049, NNE
F24		1665 KALAKAUA AVE	EDR US Hist Auto Stat	Lower	1069, SSE
F25	FORMER KALAKAUA TRAN	1665 KALAKAUA AVE	SHWS, ENG CONTROLS, INST CONTROL	Lower	1069, SSE
F26	KALAKAUA TRANSMISSIO	1665 KALAKAUA AVE	UST	Lower	1069, SSE
F27	KALAKUA TRANSMISSION	1665 KALAKUA AVE	RCRA-CESQG, FINDS	Lower	1073, SSE
28	DEPT OF AGRICULTURE	1428 S KING ST	UST	Higher	1160, NNW
29	C&CH PAWAA FIRE STAT	1610 MAKALOA ST	LUST	Lower	1218, SSW
G30	LIKE LIKE PLAZA PETR	745 KEEAUMOKU ST	SHWS	Higher	1236, West
G31	LIKELIKE DRIVE IN	745 KEEAUMOKU ST	UST	Higher	1236, West
H32	OUTRIGGER HOTELS	1315 KALAKAUA AVE	UST	Higher	1296, NNE
G33	RED BAG 3, LLC	750 KEEAUMOKU ST	RCRA-CESQG, FINDS	Higher	1301, West
H34	ONE KALAKAUA PARTNER	1314 KALAKAUA AVE	UST	Higher	1304, NNE
I35	ROGERS REPAIR INC	1687 KALAKAUA AVE	RCRA-CESQG, FINDS	Lower	1305, SSE
I36	ROGER'S REPAIR INC	1687 KALAKAUA AVE	SHWS	Lower	1305, SSE
37	HECO SUBSTATION: MAK	1544 MAKALOA ST	SHWS, SPILLS, INST CONTROL	Lower	1368, SW
38	MEADOW GOLD DAIRIES	1418 YOUNG ST	SHWS, SPILLS	Higher	1434, NNW
39	YAJIMA OIL OF USA IN	1375 S KING ST	LUST, UST, Financial Assurance	Higher	1449, NW

MAPPED SITES SUMMARY

Target Property Address:
1545 KALAKAUA AVE.
, HI 96814

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
40	HONOLULU STATION - P	1455 S BERETANIA ST	LUST, UST, Financial Assurance	Higher	1493, North
41	WENS LIFE CO., INC	808 SHERIDAN ST	LUST, UST	Higher	1553, WNW
42	NEW OFFICE LOUNGE	1551 KAPIOLANI BLVD	SHWS, LUST, UST	Lower	1558, SW
J43	MAKIKI SHELL	1436 S BERETANIA ST	LUST, UST, Financial Assurance	Higher	1594, North
J44	MID PAC PETROLEUM 25	1406 S BERETANIA ST	LUST, UST, Financial Assurance	Higher	1712, NNW
K45	SUPERBLOCK PROPERTIE	NORTH BLOCK (BLDG N8	LUST, UST	Lower	1777, West
L46	HAKUYOSHA HAWAII, IN	730 SHERIDAN ST	SHWS, SPILLS, INST CONTROL, AIRS	Lower	1806, West
L47	MOTOR SUPPLY	726 SHERIDAN ST	SHWS, INST CONTROL	Lower	1806, West
48	WALGREENS KEEAMOKU	1460 KAPIOLANI BLVD	SHWS	Lower	1824, WSW
L49	SUPERBLOCK PROPERTIE	SOUTH BLOCK (BLDG S1	LUST, UST	Lower	1841, West
K50	SUPERBLOCK PROPERTIE	SOUTH BLOCK (BLDG S2	LUST, UST	Lower	1851, WSW
51	BERETANIA CHEVRON 04	1378 S BERETANIA ST	LUST, UST, Financial Assurance	Higher	1898, NNW
M52	SHRINERS HOSPITALS F	1310 PUNAHOU ST	LUST, UST, Financial Assurance	Higher	1901, NE
N53	FIRST DEVELOPMENT IN	1777 KAPIOLANI BLVD	CERC-NFRAP, RCRA-CESQG, FINDS	Lower	1906, SSE
N54	ALOHA MOTORS 1777 KA	1777 KAPIOLANI BLVD	SHWS, SPILLS	Lower	1906, SSE
O55	HAWAII CONVENTION CE	1801 KALAKAUA AVE	SHWS, SPILLS	Lower	1984, SSE
56	SUPERBLOCK PROPERTIE	SOUTH BLOCK (BLDG S1	LUST, UST	Lower	1995, West
57	SUPERBLOCK PROPERTIE	SOUTH BLOCK (BLDG S2	LUST, UST	Lower	1997, West
O58	FUNAI'S UNION SERVIC	1810 KAPIOLANI BLVD	LUST, UST, Financial Assurance	Lower	1998, SSE
M59	KAPIOLANI WOMEN'S &	1319 PUNAHOU ST	SHWS, UST, AIRS, Financial Assurance	Higher	2013, NE
N60	ALOHA MOTORS	KAPIOLANI BLVD X KAL	LUST, UST	Lower	2039, SSE
61	ALEXANDER TOWER	1226 ALEXANDER ST	LUST, UST	Higher	2096, ENE
62	SUPERBLOCK PROPERTIE	NORTH BLOCK (BLDG N1	LUST, UST	Lower	2108, West
63	CONTINENTAL AUTO SER	1918 ALGAROBA ST	SHWS, SPILLS	Higher	2206, East
64	CARTWRIGHT NEIGHBORH	KEEAUMOKU ST & MATLO	SHWS	Higher	2275, North
65	CUTTER CHEVROLET	1391 KAPIOLANI BLVD	SHWS, LUST, UST, Financial Assurance	Lower	2333, WSW
66	TEXACO STATION 61100	1239 S KING ST	RCRA NonGen / NLR, LUST, UST, SPILLS, Financial...	Higher	2386, NW
67	GRACE OTSUKA APARTME	1233 YOUNG ST	SHWS, ENG CONTROLS, INST CONTROL	Higher	2435, NW
68	WALLYS GARDEN CENTER	1935 S BERETANIA ST	SHWS, SPILLS	Higher	2464, ENE
69	ARCADIA RETIREMENT	1434 PUNAHOU ST	LUST, UST	Higher	2525, NE
70	ALA MOANA UNOCAL	1322 KAPIOLANI BLVD	LUST, UST	Lower	2578, West
71	1012 PIIKOI STREET,	1012 PIIKOI ST	SHWS, SPILLS	Higher	2677, NW
72	YACHT HARBOR TOWERS	1600 ALA MOANA BLVD	SHWS, SPILLS, ENG CONTROLS, INST CONTROL	Lower	2701, SSW
73	SCHUMAN CARRIAGE MOT	1234 S BERETANIA ST	SHWS, LUST, UST, SPILLS, INST CONTROL, Financial...	Higher	2745, NW
74	1609 ALA WAI DIESEL	1609 ALA WAI BLVD	SHWS, SPILLS	Lower	2789, South
75	CENPAC PROPERTIES -	615 PIIKOI ST	SHWS, LUST, UST, SPILLS, Financial Assurance	Lower	2875, West
76	MCCULLY UNION SERVIC	2105 S KING ST	SHWS, LUST, UST, ENG CONTROLS, INST CONTROL,...	Higher	3032, East
77	EVERSHINE X	1230 KAPIOLANI BLVD	SHWS, VCP	Lower	3280, West
78	SEARS ALA MOANA	1450 ALA MOANA BLVD	SHWS	Lower	3380, SW

MAPPED SITES SUMMARY

Target Property Address:
1545 KALAKAUA AVE.
, HI 96814

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
79	DURANT PROPERTIES	1235 KONA ST	SHWS, INST CONTROL	Lower	3436, West
80	HOBRON HOTEL	1744 KAIOO DR	SHWS	Lower	3633, South
81	1310 PENSACOLA STREE	1310 PENSACOLA ST	SHWS	Higher	3654, NW
82	THE PAVILLION	1925 KALAKAUA AVE	SHWS, SPILLS	Lower	3710, SSE
83	PUNAHOU SCHOOL - MAI	1601 PUNAHOU ST	SHWS, LUST, UST, Financial Assurance	Higher	3791, NE
84	AUXILIARY SERVICES -	1039 S KING ST	SHWS, UST, Financial Assurance	Higher	3922, WNW
85	KOOLANI TOWER PROJEC	1189 WAIMANU ST	SHWS, SPILLS, ENG CONTROLS, INST CONTROL	Lower	4063, West
86	RESERVE HOUSING TOWE	1141 WAIMANU ST	SHWS, SPILLS	Lower	4251, West
87	CHEVRON U.S.A., INC.	2002 KALAKAUA AVE	SHWS, LUST	Lower	4291, SSE
88	1800 VANCOUVER DRIVE	1800 VANCOUVER DR	SHWS, INST CONTROL, CDL	Higher	4406, ENE
89	SELF STORAGE 1	438 KAMAKEE ST	SHWS, SPILLS	Lower	4529, West
90	JAS W GLOVER LTD	1046 WAIMAMU ST	RCRA NonGen / NLR, FINDS, SHWS, LUST, UST	Lower	4664, West
91	PACIFICA CONDOMINIUM	1009 KAPIOLANI BLVD	SHWS, LUST	Lower	4700, West
92	ROYAL GARDENS HOTEL	440 OLOHANA ST	SHWS, SPILLS	Lower	4909, SSE
93	ALA WAI COVE CONDOMI	509 UNIVERSITY AVE	SHWS, SPILLS	Lower	4995, SE
94	KING KALAKAUA PLAZA	2080 KALAKAUA AVE	SHWS, LUST, UST, SPILLS, INST CONTROL	Lower	5089, SSE
95	SYMPHONY PARK	850 KAPIOLANI BLVD	SHWS, SPILLS	Lower	5219, WNW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 7 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
KALAKAUA HOMES - 17T 1545 KALAKUA AVE, HONOLULU, HI 96815	FTTS HIST FTTS	N/A
KALAKAUA HOMES 1545 KALAKAUA AVE. HONOLULU, HI 96826	RCRA-SQG FINDS	HIP000142166
KALAKAUA HOMES #1910 1545 KALAKAUA AVE. HONOLULU, HI 96826	FTTS HIST FTTS	N/A

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal CERCLIS NFRAP site List

CERC-NFRAP: A review of the CERC-NFRAP list, as provided by EDR, and dated 10/25/2013 has revealed that there is 1 CERC-NFRAP site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
FIRST DEVELOPMENT IN	***1777 KAPIOLANI BLVD***	***SSE 1/4 - 1/2 (0.361 mi.)***	***N53***	***19***

EXECUTIVE SUMMARY

Federal RCRA generators list

RCRA-SQG: A review of the RCRA-SQG list, as provided by EDR, and dated 12/09/2014 has revealed that there are 2 RCRA-SQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LIONELS SERVICE INC	1505 S KING ST	N 0 - 1/8 (0.117 mi.)	B5	7

Lower Elevation	Address	Direction / Distance	Map ID	Page
HOLIDAY ACTION GAS	801 KAHEKA ST	SW 1/8 - 1/4 (0.172 mi.)	D19	11

RCRA-CESQG: A review of the RCRA-CESQG list, as provided by EDR, and dated 12/09/2014 has revealed that there are 7 RCRA-CESQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LONGS DRUG STORE NO	966 KAHEKA ST	NNW 0 - 1/8 (0.118 mi.)	8	8
O'REILLY AUTO PARTS	1550 SOUTH KING STRE	NE 1/8 - 1/4 (0.136 mi.)	C12	9
PUNAHOU REPAIR SHOP	***1558 S KING ST***	***NE 1/8 - 1/4 (0.137 mi.)***	***C14***	***9***
MAUI DIVERS OF HAWAI	***1520 LIONA STREET***	***NW 1/8 - 1/4 (0.184 mi.)***	***21***	***11***
RED BAG 3, LLC	***750 KEEAUMOKU ST***	***W 1/8 - 1/4 (0.246 mi.)***	***G33***	***13***

Lower Elevation	Address	Direction / Distance	Map ID	Page
KALAKUA TRANSMISSION	***1665 KALAKUA AVE***	***SSE 1/8 - 1/4 (0.203 mi.)***	***F27***	***12***
ROGERS REPAIR INC	***1687 KALAKAUA AVE***	***SSE 1/8 - 1/4 (0.247 mi.)***	***I35***	***14***

State- and tribal - equivalent CERCLIS

SHWS: A review of the SHWS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 44 SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ALOHA/KING SELF STOR	***1414 KALAKAUA AVE***	***NNE 1/8 - 1/4 (0.180 mi.)***	***E20***	***11***
7-11 KALAKAUA	***1323 KALAKAUA AVE***	***NNE 1/8 - 1/4 (0.199 mi.)***	***E23***	***11***
LIKE LIKE PLAZA PETR	745 KEEAUMOKU ST	W 1/8 - 1/4 (0.234 mi.)	G30	13
MEADOW GOLD DAIRIES	***1418 YOUNG ST***	***NNW 1/4 - 1/2 (0.272 mi.)***	***38***	***14***
KAPIOLANI WOMEN'S &	***1319 PUNAHOU ST***	***NE 1/4 - 1/2 (0.381 mi.)***	***M59***	***20***
CONTINENTAL AUTO SER	***1918 ALGAROBA ST***	***E 1/4 - 1/2 (0.418 mi.)***	***63***	***21***
CARTWRIGHT NEIGHBORH	KEEAUMOKU ST & MATLO	N 1/4 - 1/2 (0.431 mi.)	64	22
GRACE OTSUKA APARTME	***1233 YOUNG ST***	***NW 1/4 - 1/2 (0.461 mi.)***	***67***	***22***
WALLYS GARDEN CENTER	***1935 S BERETANIA ST***	***ENE 1/4 - 1/2 (0.467 mi.)***	***68***	***23***
1012 PIIKOI STREET,	***1012 PIIKOI ST***	***NW 1/2 - 1 (0.507 mi.)***	***71***	***23***
SCHUMAN CARRIAGE MOT	***1234 S BERETANIA ST***	***NW 1/2 - 1 (0.520 mi.)***	***73***	***24***
MCCULLY UNION SERVIC	***2105 S KING ST***	***E 1/2 - 1 (0.574 mi.)***	***76***	***25***
1310 PENSACOLA STREE	1310 PENSACOLA ST	NW 1/2 - 1 (0.692 mi.)	81	26
PUNAHOU SCHOOL - MAI	***1601 PUNAHOU ST***	***NE 1/2 - 1 (0.718 mi.)***	***83***	***26***
AUXILIARY SERVICES -	***1039 S KING ST***	***WNW 1/2 - 1 (0.743 mi.)***	***84***	***26***
1800 VANCOUVER DRIVE	***1800 VANCOUVER DR***	***ENE 1/2 - 1 (0.834 mi.)***	***88***	***27***

Lower Elevation	Address	Direction / Distance	Map ID	Page
FORMER KALAKAUA TRAN	***1665 KALAKAUA AVE***	***SSE 1/8 - 1/4 (0.202 mi.)***	***F25***	***12***
ROGER'S REPAIR INC	1687 KALAKAUA AVE	SSE 1/8 - 1/4 (0.247 mi.)	I36	14
HECO SUBSTATION: MAK	***1544 MAKALOA ST***	***SW 1/4 - 1/2 (0.259 mi.)***	***37***	***14***
NEW OFFICE LOUNGE	***1551 KAPIOLANI BLVD***	***SW 1/4 - 1/2 (0.295 mi.)***	***42***	***16***
HAKUYOSHA HAWAII, IN	***730 SHERIDAN ST***	***W 1/4 - 1/2 (0.342 mi.)***	***L46***	***17***
MOTOR SUPPLY	***726 SHERIDAN ST***	***W 1/4 - 1/2 (0.342 mi.)***	***L47***	***17***
WALGREENS KEEAMOKU	1460 KAPIOLANI BLVD	WSW 1/4 - 1/2 (0.345 mi.)	48	17
ALOHA MOTORS 1777 KA	***1777 KAPIOLANI BLVD***	***SSE 1/4 - 1/2 (0.361 mi.)***	***N54***	***19***
HAWAII CONVENTION CE	***1801 KALAKAUA AVE***	***SSE 1/4 - 1/2 (0.376 mi.)***	***O55***	***19***
CUTTER CHEVROLET	***1391 KAPIOLANI BLVD***	***WSW 1/4 - 1/2 (0.442 mi.)***	***65***	***22***
YACHT HARBOR TOWERS	***1600 ALA MOANA BLVD***	***SSW 1/2 - 1 (0.512 mi.)***	***72***	***24***
1609 ALA WAI DIESEL	***1609 ALA WAI BLVD***	***S 1/2 - 1 (0.528 mi.)***	***74***	***24***
CENPAC PROPERTIES -	***615 PIIKOI ST***	***W 1/2 - 1 (0.545 mi.)***	***75***	***24***
EVERSHINE X	***1230 KAPIOLANI BLVD***	***W 1/2 - 1 (0.621 mi.)***	***77***	***25***
SEARS ALA MOANA	1450 ALA MOANA BLVD	SW 1/2 - 1 (0.640 mi.)	78	25
DURANT PROPERTIES	***1235 KONA ST***	***W 1/2 - 1 (0.651 mi.)***	***79***	***25***
HOBRON HOTEL	1744 KAIOO DR	S 1/2 - 1 (0.688 mi.)	80	25
THE PAVILLION	***1925 KALAKAUA AVE***	***SSE 1/2 - 1 (0.703 mi.)***	***82***	***26***
KOOLANI TOWER PROJEC	***1189 WAIMANU ST***	***W 1/2 - 1 (0.770 mi.)***	***85***	***27***
RESERVE HOUSING TOWE	***1141 WAIMANU ST***	***W 1/2 - 1 (0.805 mi.)***	***86***	***27***
CHEVRON U.S.A., INC.	***2002 KALAKAUA AVE***	***SSE 1/2 - 1 (0.813 mi.)***	***87***	***27***
SELF STORAGE 1	***438 KAMAKEE ST***	***W 1/2 - 1 (0.858 mi.)***	***89***	***27***
JAS W GLOVER LTD	***1046 WAIMAMU ST***	***W 1/2 - 1 (0.883 mi.)***	***90***	***28***
PACIFICA CONDOMINIUM	***1009 KAPIOLANI BLVD***	***W 1/2 - 1 (0.890 mi.)***	***91***	***28***
ROYAL GARDENS HOTEL	***440 OLOHANA ST***	***SSE 1/2 - 1 (0.930 mi.)***	***92***	***28***
ALA WAI COVE CONDOMI	***509 UNIVERSITY AVE***	***SE 1/2 - 1 (0.946 mi.)***	***93***	***28***
KING KALAKAUA PLAZA	***2080 KALAKAUA AVE***	***SSE 1/2 - 1 (0.964 mi.)***	***94***	***29***
SYMPHONY PARK	***850 KAPIOLANI BLVD***	***WNW 1/2 - 1 (0.988 mi.)***	***95***	***29***

State and tribal leaking storage tank lists

LUST: A review of the LUST list, as provided by EDR, and dated 03/02/2015 has revealed that there are 28 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MID PAC PETROLEUM 25	***1505 S. KING ST.***	***N 0 - 1/8 (0.117 mi.)***	***B7***	***8***
Facility Status: Site Cleanup Completed (NFA)				
TESORO 2GO 61018	***1549 S KING ST***	***NE 1/8 - 1/4 (0.127 mi.)***	***C9***	***8***
Facility Status: LUST Cleanup Initiated				
GAS PLUS	***1524 S KING ST***	***NNE 1/8 - 1/4 (0.130 mi.)***	***10***	***9***
Facility Status: Site Cleanup Completed (NFA)				
PUNAHOU REPAIR SHOP	***1558 S KING ST***	***NE 1/8 - 1/4 (0.137 mi.)***	***C15***	***10***
Facility Status: Site Cleanup Completed (NFA)				
YAJIMA OIL OF USA IN	***1375 S KING ST***	***NW 1/4 - 1/2 (0.274 mi.)***	***39***	***15***
Facility Status: Site Cleanup Completed (NFA)				
HONOLULU STATION - P	***1455 S BERETANIA ST***	***N 1/4 - 1/2 (0.283 mi.)***	***40***	***15***
Facility Status: Site Cleanup Completed (NFA)				
WENS LIFE CO., INC	***808 SHERIDAN ST***	***WNW 1/4 - 1/2 (0.294 mi.)***	***41***	***15***
Facility Status: Site Cleanup Completed (NFA)				

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MAKIKI SHELL	***1436 S BERETANIA ST***	***N 1/4 - 1/2 (0.302 mi.)***	***J43***	***16***
Facility Status: Site Cleanup Completed (NFA)				
MID PAC PETROLEUM 25	***1406 S BERETANIA ST***	***NNW 1/4 - 1/2 (0.324 mi.)***	***J44***	***16***
Facility Status: Site Cleanup Completed (NFA)				
Facility Status: Site Cleanup Completed with EHMP				
BERETANIA CHEVRON 04	***1378 S BERETANIA ST***	***NNW 1/4 - 1/2 (0.359 mi.)***	***51***	***18***
Facility Status: Site Cleanup Completed (NFA)				
SHRINERS HOSPITALS F	***1310 PUNAHOU ST***	***NE 1/4 - 1/2 (0.360 mi.)***	***M52***	***18***
Facility Status: Site Cleanup Completed (NFA)				
ALEXANDER TOWER	***1226 ALEXANDER ST***	***ENE 1/4 - 1/2 (0.397 mi.)***	***61***	***21***
Facility Status: Site Cleanup Completed (NFA)				
TEXACO STATION 61100	***1239 S KING ST***	***NW 1/4 - 1/2 (0.452 mi.)***	***66***	***22***
Facility Status: Site Cleanup Completed (NFA)				
ARCADIA RETIREMENT	***1434 PUNAHOU ST***	***NE 1/4 - 1/2 (0.478 mi.)***	***69***	***23***
Facility Status: Site Cleanup Completed (NFA)				

Lower Elevation	Address	Direction / Distance	Map ID	Page
FIRESTONE STORE	***801 KAHEKA ST***	***SW 1/8 - 1/4 (0.172 mi.)***	***D18***	***10***
Facility Status: Site Cleanup Completed with EHE/EHMP				
Facility Status: Site Cleanup Completed (NFA)				
GAS 'N GLO INC	***1670 MAKALOA ST***	***S 1/8 - 1/4 (0.197 mi.)***	***F22***	***11***
Facility Status: Site Cleanup Completed (NFA)				
C&CH PAWAA FIRE STAT	1610 MAKALOA ST	SSW 1/8 - 1/4 (0.231 mi.)	29	13
Facility Status: Site Cleanup Completed (NFA)				
NEW OFFICE LOUNGE	***1551 KAPIOLANI BLVD***	***SW 1/4 - 1/2 (0.295 mi.)***	***42***	***16***
Facility Status: Site Cleanup Completed (NFA)				
SUPERBLOCK PROPERTIE	***NORTH BLOCK (BLDG N8***	***W 1/4 - 1/2 (0.337 mi.)***	***K45***	***17***
Facility Status: Site Cleanup Completed (NFA)				
SUPERBLOCK PROPERTIE	***SOUTH BLOCK (BLDG S1***	***W 1/4 - 1/2 (0.349 mi.)***	***L49***	***17***
Facility Status: Site Cleanup Completed (NFA)				
SUPERBLOCK PROPERTIE	***SOUTH BLOCK (BLDG S2***	***WSW 1/4 - 1/2 (0.351 mi.)***	***K50***	***18***
Facility Status: Site Cleanup Completed (NFA)				
SUPERBLOCK PROPERTIE	***SOUTH BLOCK (BLDG S1***	***W 1/4 - 1/2 (0.378 mi.)***	***56***	***19***
Facility Status: Site Cleanup Completed (NFA)				
SUPERBLOCK PROPERTIE	***SOUTH BLOCK (BLDG S2***	***W 1/4 - 1/2 (0.378 mi.)***	***57***	***20***
Facility Status: Site Cleanup Completed (NFA)				
FUNAI'S UNION SERVIC	***1810 KAPIOLANI BLVD***	***SSE 1/4 - 1/2 (0.378 mi.)***	***O58***	***20***
Facility Status: Site Cleanup Completed (NFA)				
ALOHA MOTORS	***KAPIOLANI BLVD X KAL***	***SSE 1/4 - 1/2 (0.386 mi.)***	***N60***	***20***
Facility Status: Site Cleanup Completed (NFA)				
SUPERBLOCK PROPERTIE	***NORTH BLOCK (BLDG N1***	***W 1/4 - 1/2 (0.399 mi.)***	***62***	***21***
Facility Status: Site Cleanup Completed (NFA)				
CUTTER CHEVROLET	***1391 KAPIOLANI BLVD***	***WSW 1/4 - 1/2 (0.442 mi.)***	***65***	***22***
Facility Status: Site Cleanup Completed (NFA)				
ALA MOANA UNOCAL	***1322 KAPIOLANI BLVD***	***W 1/4 - 1/2 (0.488 mi.)***	***70***	***23***
Facility Status: Site Cleanup Completed (NFA)				

State and tribal registered storage tank lists

UST: A review of the UST list, as provided by EDR, and dated 03/02/2015 has revealed that there are 12 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MID PAC PETROLEUM 25	***1505 S. KING ST.***	***N 0 - 1/8 (0.117 mi.)***	***B7***	***8***
TESORO 2GO 61018	***1549 S KING ST***	***NE 1/8 - 1/4 (0.127 mi.)***	***C9***	***8***
GAS PLUS	***1524 S KING ST***	***NNE 1/8 - 1/4 (0.130 mi.)***	***10***	***9***
PUNAHOU REPAIR SHOP	***1558 S KING ST***	***NE 1/8 - 1/4 (0.137 mi.)***	***C15***	***10***
7-11 KALAKAUA	***1323 KALAKAUA AVE***	***NNE 1/8 - 1/4 (0.199 mi.)***	***E23***	***11***
DEPT OF AGRICULTURE	1428 S KING ST	NNW 1/8 - 1/4 (0.220 mi.)	28	12
LIKELIKE DRIVE IN	745 KEEAUMOKU ST	W 1/8 - 1/4 (0.234 mi.)	G31	13
OUTRIGGER HOTELS	1315 KALAKAUA AVE	NNE 1/8 - 1/4 (0.245 mi.)	H32	13
ONE KALAKAUA PARTNER	1314 KALAKAUA AVE	NNE 1/8 - 1/4 (0.247 mi.)	H34	14

Lower Elevation	Address	Direction / Distance	Map ID	Page
FIRESTONE STORE	***801 KAHEKA ST***	***SW 1/8 - 1/4 (0.172 mi.)***	***D18***	***10***
GAS 'N GLO INC	***1670 MAKALOA ST***	***S 1/8 - 1/4 (0.197 mi.)***	***F22***	***11***
KALAKAUA TRANSMISSIO	1665 KALAKAUA AVE	SSE 1/8 - 1/4 (0.202 mi.)	F26	12

State and tribal institutional control / engineering control registries

ENG CONTROLS: A review of the ENG CONTROLS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 3 ENG CONTROLS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ALOHA/KING SELF STOR	***1414 KALAKAUA AVE***	***NNE 1/8 - 1/4 (0.180 mi.)***	***E20***	***11***
GRACE OTSUKA APARTME	***1233 YOUNG ST***	***NW 1/4 - 1/2 (0.461 mi.)***	***67***	***22***

Lower Elevation	Address	Direction / Distance	Map ID	Page
FORMER KALAKAUA TRAN	***1665 KALAKAUA AVE***	***SSE 1/8 - 1/4 (0.202 mi.)***	***F25***	***12***

INST CONTROL: A review of the INST CONTROL list, as provided by EDR, and dated 12/02/2014 has revealed that there are 6 INST CONTROL sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ALOHA/KING SELF STOR	***1414 KALAKAUA AVE***	***NNE 1/8 - 1/4 (0.180 mi.)***	***E20***	***11***
GRACE OTSUKA APARTME	***1233 YOUNG ST***	***NW 1/4 - 1/2 (0.461 mi.)***	***67***	***22***

Lower Elevation	Address	Direction / Distance	Map ID	Page
FORMER KALAKAUA TRAN	***1665 KALAKAUA AVE***	***SSE 1/8 - 1/4 (0.202 mi.)***	***F25***	***12***
HECO SUBSTATION: MAK	***1544 MAKALOA ST***	***SW 1/4 - 1/2 (0.259 mi.)***	***37***	***14***
HAKUYOSHA HAWAII, IN	***730 SHERIDAN ST***	***W 1/4 - 1/2 (0.342 mi.)***	***L46***	***17***
MOTOR SUPPLY	***726 SHERIDAN ST***	***W 1/4 - 1/2 (0.342 mi.)***	***L47***	***17***

State and tribal voluntary cleanup sites

VCP: A review of the VCP list, as provided by EDR, and dated 12/02/2014 has revealed that there is 1 VCP site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ALOHA/KING SELF STOR	***1414 KALAKAUA AVE***	***NNE 1/8 - 1/4 (0.180 mi.)***	***E20***	***11***

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Auto Stat: A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there are 6 EDR US Hist Auto Stat sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	920 PUNAHOU ST	E 0 - 1/8 (0.095 mi.)	4	7
Not reported	1505 S KING ST	N 0 - 1/8 (0.117 mi.)	B6	8
Not reported	1549 S KING ST	NE 1/8 - 1/4 (0.135 mi.)	C11	9
Not reported	1558 S KING ST	NE 1/8 - 1/4 (0.137 mi.)	C13	9

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	801 KAHEKA ST	SW 1/8 - 1/4 (0.172 mi.)	D17	10
Not reported	1665 KALAKAUA AVE	SSE 1/8 - 1/4 (0.202 mi.)	F24	12

EDR US Hist Cleaners: A review of the EDR US Hist Cleaners list, as provided by EDR, has revealed that there is 1 EDR US Hist Cleaners site within approximately 0.25 miles of the target property.

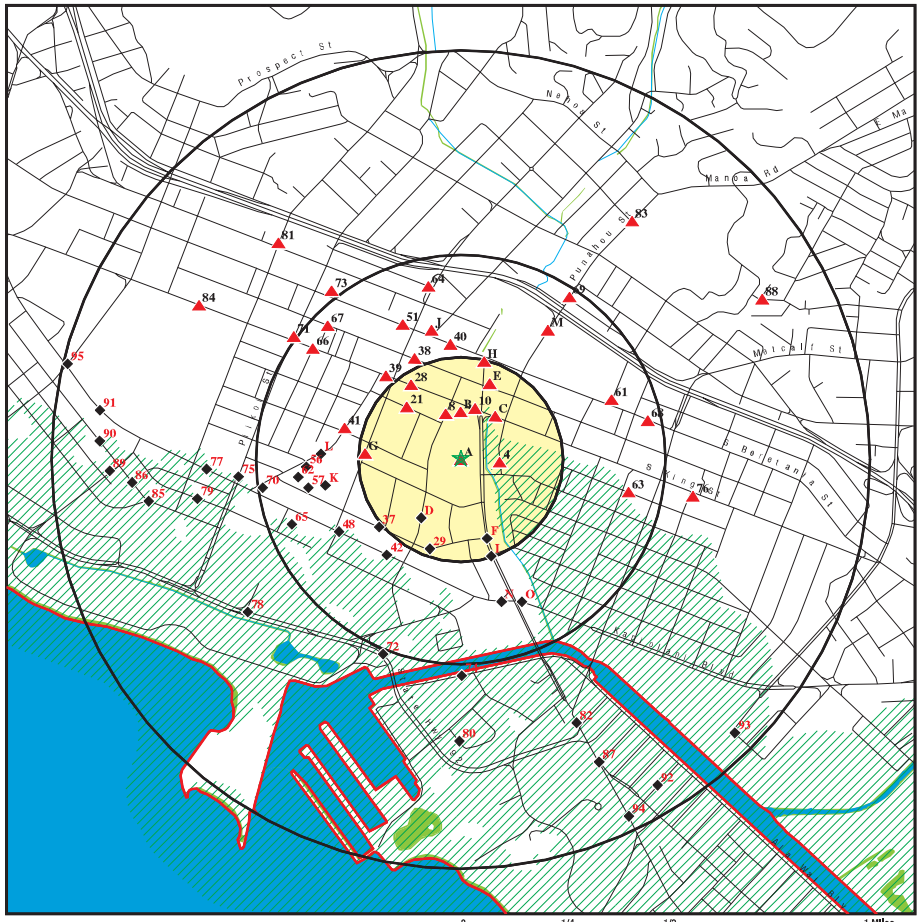
Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	801 KAHEKA ST	SW 1/8 - 1/4 (0.172 mi.)	D16	10

Count: 17 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
HONOLULU	S111704669	ALA WAI HARBOR BOAT REPAIR YARD	ALA MOANA BLVD		SHWS
HONOLULU	S112375188	MAKIKI STREAM KING STREET AND KALA	KALAKAUA ST AND KING ST	96826	SPILLS 90
HONOLULU	S107023655	MAKIKI STREAM AT KALAKAUA AVENUE	KALAKAUA AVE	96815	SPILLS
HONOLULU	1008919686	KALAKAUA AVENUE WATER SYSTEM IMPRO	KALAKAUA AVENUE	96815	FINDS
HONOLULU	S112375236	MAKIKI STREAM KING STREET AND KALA	KALAKAUA ST AND KING ST		SPILLS 90
HONOLULU	S106818084	KALAKAUA AVENUE, SEWAGE SPILL	KALAKAUA AVE	96815	SPILLS
HONOLULU	S107023352	MAKIKI STREAM, ALONG KALAKAUA AVEN	KALAKAUA AVE		SPILLS
HONOLULU	S107023711	KALAKAUA AVENUE, UNKNOWN CHEMICALS	KALAKAUA AVE	96815	SPILLS
HONOLULU	S107024027	KALAKAUA AVENUE & RYCROFT ST, WAIK	KALAKAUA AVE & RYCROFT ST	96815	SPILLS
HONOLULU	S115555360	MAKIKI STREAM, KING STREET AND KAL	KALAKAUA ST & KING ST		SPILLS
HONOLULU	S106818081	KALAKAUA AVENUE	KALAKAUA AVE		SPILLS
HONOLULU	S107023195	ALA WAI CANAL BY KALAKAUA AVENUE	KALAKAUA AVE	96815	SPILLS
HONOLULU	1008171358	KALAKAUA AVENUE BRIDGE	KALAKAUA AVENUE	96826	FINDS
HONOLULU	S109096053	JCRA INVESTMENTS	1685 KAPIOLANI PROPERTY	96814	LUST
HONOLULU	S106818337	KEEAUMOKU SUPERBLOCK PROJECT	KEEAUMOKU ST		SHWS, SPILLS
HONOLULU	1014696845	FY10/FY11 WAIKIKI IMPROVEMENTS - K	VARIOUS SECTIONS ALONG KALAKAU	96815	FINDS
MOKULEIA	S106817395	HAWAIIAN BITUMULS PAVING & PRECAST	FARRINGTON HWY	96826	SHWS

OVERVIEW MAP - 4237094.38S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Kalakaua Homes ADDRESS: 1545 Kalakaua Ave. Honolulu HI 96814 LAT/LONG: 21.2956 / 157.8377	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.38s DATE: March 18, 2015 7:44 am

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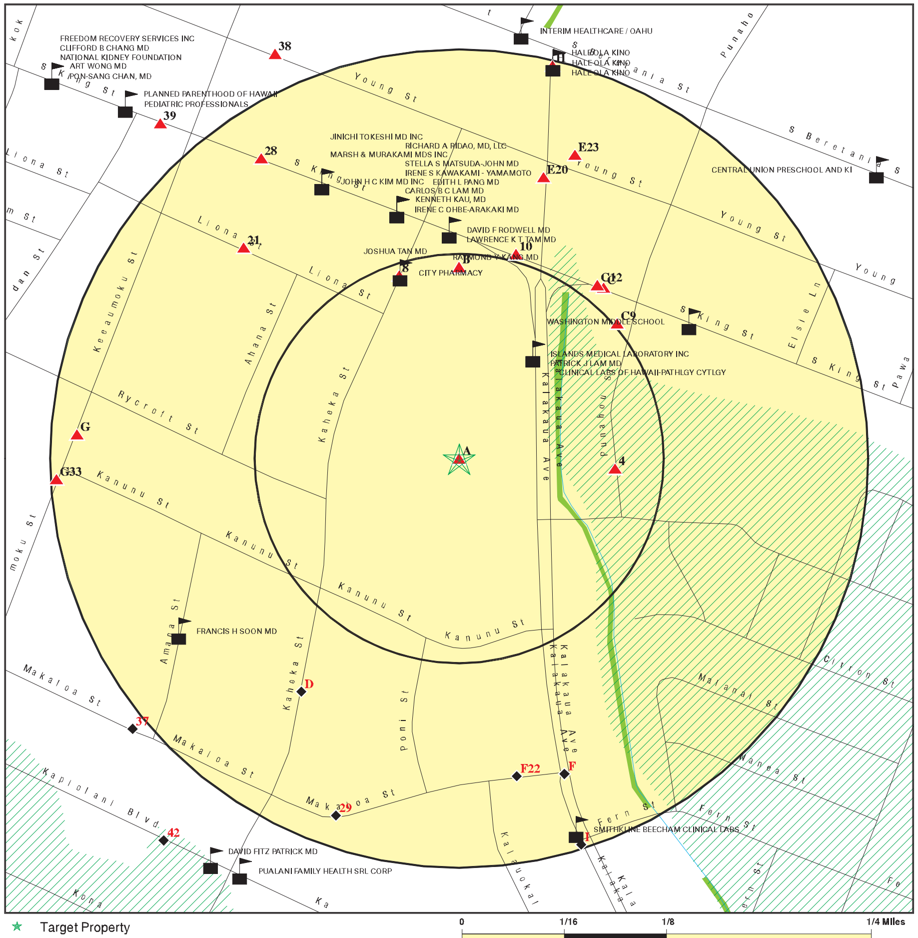
DETAIL MAP - 4237094.38S



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Kalakaua Homes	CLIENT:	Helber , Hastert, and Fee Planners
ADDRESS:	1545 Kalakaua Ave.	CONTACT:	Aaron Mann
	Honolulu HI 96814	INQUIRY #:	4237094.38s
LAT/LONG:	21.2956 / 157.8377	DATE:	March 18, 2015 7:44 am

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	1	NR	NR	1
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250	1	1	1	NR	NR	NR	3
RCRA-CESQG	0.250		1	6	NR	NR	NR	7
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
SHWS	1.000		0	5	14	25	NR	44
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		1	6	21	NR	NR	28
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250		1	11	NR	NR	NR	12

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		0	2	1	NR	NR	3
INST CONTROL	0.500		0	2	4	NR	NR	6
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	1	0	NR	NR	1
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP	2	NR	NR	NR	NR	NR	2
HIST FTTS	TP	2	NR	NR	NR	NR	NR	2
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP	1	NR	NR	NR	NR	NR	1
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		2	4	NR	NR	NR	6
EDR US Hist Cleaners	0.250		0	1	NR	NR	NR	1
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
RGA HWS	TP		NR	NR	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1
Target Property
Actual: 7 ft.

KALAKAUA HOMES - 17TH FLOOR
1545 KALAKUA AVE,
HONOLULU, HI 96815

FTTS **1008893467**
HIST FTTS **N/A**

Click here for full text details

A2
Target Property
Actual: 7 ft.

KALAKAUA HOMES
1545 KALAKAUA AVE.
HONOLULU, HI 96826

RCRA-SQG **1016675603**
FINDS **HIP000142166**

Click here for full text details

RCRA-SQG
EPA Id: HIP000142166

A3
Target Property
Actual: 7 ft.

KALAKAUA HOMES #1910 & #1911
1545 KALAKAUA AVE.
HONOLULU, HI 96826

FTTS **1008893509**
HIST FTTS **N/A**

Click here for full text details

4
East
< 1/8
0.095 mi.
504 ft.
Relative: Higher

920 PUNAHOU ST
HONOLULU, HI 96826

EDR US Hist Auto Stat **1015675164**
N/A

Click here for full text details

B5
North
< 1/8
0.117 mi.
618 ft.
Relative: Higher

LIONELS SERVICE INC
1505 S KING ST
HONOLULU, HI 96826

RCRA-SQG **1000823234**
HID984468736

Click here for full text details

RCRA-SQG
EPA Id: HID984468736

B6
North
< 1/8
0.117 mi.
618 ft.
Relative: Higher

1505 S KING ST
HONOLULU, HI 96826

EDR US Hist Auto Stat **1015239122**
N/A

Click here for full text details

B7
North
< 1/8
0.117 mi.
618 ft.
Relative: Higher

MID PAC PETROLEUM 253943 (PREV: LIONEL'S UNOCAL)
1505 S. KING ST.
HONOLULU, HI 96826

LUST **U001235016**
UST **N/A**
Financial Assurance

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100041

UST
Tank Status: Permanently Out of Use
Tank Status: Permanently out of Use
Facility Id: 9-100041

8
NNW
< 1/8
0.118 mi.
622 ft.
Relative: Higher

LONGS DRUG STORE NO 6889
966 KAHEKA ST
HONOLULU, HI 96814

RCRA-CESQG **1014389656**
HIR000140038

Click here for full text details

RCRA-CESQG
EPA Id: HIR000140038

C9
NE
1/8-1/4
0.127 mi.
671 ft.
Relative: Higher

TESORO 2GO 61018
1549 S KING ST
HONOLULU, HI 96826

LUST **U003402801**
UST **N/A**
Financial Assurance

Click here for full text details

LUST
Facility Status: LUST Cleanup Initiated
Facility Id: 9-100059

UST
Tank Status: Currently In Use
Tank Status: Permanently out of Use
Facility Id: 9-100059

10 NNE 1/8-1/4 0.130 mi. 685 ft.
Relative: Higher

GAS PLUS — LUST, UST — U001235103, N/A
1524 S KING ST
HONOLULU, HI 96826

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100224

UST
Tank Status: Permanently Out of Use
Facility Id: 9-100224

C11 NE 1/8-1/4 0.135 mi. 715 ft.
Relative: Higher

1549 S KING ST
HONOLULU, HI 96826

EDR US Hist Auto Stat — 1015246246, N/A

Click here for full text details

C12 NE 1/8-1/4 0.136 mi. 716 ft.
Relative: Higher

O'REILLY AUTO PARTS STORE 3479 — RCRA-CESQG — 1016675612, HIR000142000
1550 SOUTH KING STREET
HONOLULU, HI 96826

Click here for full text details

RCRA-CESQG
EPA Id: HIR000142000

C13 NE 1/8-1/4 0.137 mi. 722 ft.
Relative: Higher

1558 S KING ST
HONOLULU, HI 96826

EDR US Hist Auto Stat — 1015247485, N/A

Click here for full text details

C14 NE 1/8-1/4 0.137 mi. 722 ft.
Relative: Higher

PUNAHOU REPAIR SHOP INC — RCRA-CESQG, FINDS — 1004688805, HID981657208
1558 S KING ST
HONOLULU, HI 96826

Click here for full text details

RCRA-CESQG
EPA Id: HID981657208

C15 NE 1/8-1/4 0.137 mi. 722 ft.
Relative: Higher

PUNAHOU REPAIR SHOP — LUST, UST — 1000146579, N/A
1558 S KING ST
HONOLULU, HI 96826

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-101387

UST
Tank Status: Permanently Out of Use
Facility Id: 9-101387

D16 SW 1/8-1/4 0.172 mi. 908 ft.
Relative: Lower

801 KAHEKA ST
HONOLULU, HI 96814

EDR US Hist Cleaners — 1015096937, N/A

Click here for full text details

D17 SW 1/8-1/4 0.172 mi. 908 ft.
Relative: Lower

801 KAHEKA ST
HONOLULU, HI 96814

EDR US Hist Auto Stat — 1015638698, N/A

Click here for full text details

D18 SW 1/8-1/4 0.172 mi. 908 ft.
Relative: Lower

FIRESTONE STORE — LUST, UST, Financial Assurance — U001235963, N/A
801 KAHEKA ST
HONOLULU, HI 96814

Click here for full text details

LUST
Facility Status: Site Cleanup Completed with EHE/EHMP
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-102591
Facility Id: 9-102403

UST
Tank Status: Permanently Out of Use
Facility Id: 9-102591
Facility Id: 9-102403

D19
SW
1/8-1/4
0.172 mi.
908 ft.

Relative: Lower

HOLIDAY ACTION GAS — **RCRA-SQG** — **1000223098**, **HID981577265**
801 KAHEKA ST
HONOLULU, HI 96814

Click here for full text details

RCRA-SQG
EPA Id: HID981577265

E20
NNE
1/8-1/4
0.180 mi.
948 ft.

Relative: Higher

ALOHA/KING SELF STORAGE — **SHWS**, **ENG CONTROLS**, **INST CONTROL**, **VCP** — **S106816203**, **N/A**
1414 KALAKAUA AVE
HONOLULU, HI

Click here for full text details

21
NW
1/8-1/4
0.184 mi.
973 ft.

Relative: Higher

MAUI DIVERS OF HAWAII LTD# — **RCRA-CESQG**, **FINDS** — **1000244830**, **HID009116757**
1520 LIONA STREET
HONOLULU, HI 96814

Click here for full text details

RCRA-CESQG
EPA Id: HID009116757

F22
South
1/8-1/4
0.197 mi.
1041 ft.

Relative: Lower

GAS 'N GLO INC — **LUST**, **UST** — **U001235256**, **N/A**
1670 MAKALOA ST
HONOLULU, HI 96814

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100834

UST
Tank Status: Permanently Out of Use
Facility Id: 9-100834

E23
NNE
1/8-1/4
0.199 mi.
1049 ft.

Relative: Higher

7-11 KALAKAUA — **SHWS**, **UST**, **Financial Assurance** — **U001235396**, **N/A**
1323 KALAKAUA AVE
HONOLULU, HI 96826

Click here for full text details

UST
Tank Status: Currently In Use
Tank Status: Currently in Use
Tank Status: Permanently out of Use

7-11 KALAKAUA (Continued) — **U001235396**
Facility Id: 9-101172

F24
SSE
1/8-1/4
0.202 mi.
1069 ft.

Relative: Lower

EDR US Hist Auto Stat — **1015261837**, **N/A**
1665 KALAKAUA AVE
HONOLULU, HI 96826

Click here for full text details

F25
SSE
1/8-1/4
0.202 mi.
1069 ft.

Relative: Lower

FORMER KALAKAUA TRANSMISSION INC — **SHWS**, **ENG CONTROLS**, **INST CONTROL** — **S106817112**, **N/A**
1665 KALAKAUA AVE
HONOLULU, HI 96826

Click here for full text details

F26
SSE
1/8-1/4
0.202 mi.
1069 ft.

Relative: Lower

KALAKAUA TRANSMISSION INC. — **UST** — **1000147228**, **N/A**
1665 KALAKAUA AVE
HONOLULU, HI 96826

Click here for full text details

UST
Tank Status: Permanently Out of Use
Facility Id: 9-100763

F27
SSE
1/8-1/4
0.203 mi.
1073 ft.

Relative: Lower

KALAKUA TRANSMISSION INC — **RCRA-CESQG**, **FINDS** — **1004688784**, **HID981637564**
1665 KALAKUA AVE
HONOLULU, HI 96826

Click here for full text details

RCRA-CESQG
EPA Id: HID981637564

28
NNW
1/8-1/4
0.220 mi.
1160 ft.

Relative: Higher

DEPT OF AGRICULTURE — **UST** — **U003154533**, **N/A**
1428 S KING ST
HONOLULU, HI 96814

Click here for full text details

UST
Tank Status: Permanently Out of Use
Facility Id: 9-101926

29 SSW 1/8-1/4 0.231 mi. 1218 ft. Relative: Lower

C&CH PAWAA FIRE STATION
1610 MAKALOA ST
HONOLULU, HI 96814

LUST — **1006843337** / **N/A**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100087

G30 West 1/8-1/4 0.234 mi. 1236 ft. Relative: Higher

LIKE LIKE PLAZA PETROLEUM CONTAMINATION
745 KEEAUMOKU ST
HONOLULU, HI 96814

SHWS — **1006819347** / **N/A**

Click here for full text details

G31 West 1/8-1/4 0.234 mi. 1236 ft. Relative: Higher

LIKELIKE DRIVE IN
745 KEEAUMOKU ST
HONOLULU, HI 96800

UST — **U003154728** / **N/A**

Click here for full text details

UST
Tank Status: Permanently Out of Use
Facility Id: 9-102931

H32 NNE 1/8-1/4 0.245 mi. 1296 ft. Relative: Higher

OUTRIGGER HOTELS
1315 KALAKAUA AVE
HONOLULU, HI 96815

UST — **U001235483** / **N/A**

Click here for full text details

UST
Tank Status: Permanently Out of Use
Facility Id: 9-101431

G33 West 1/8-1/4 0.246 mi. 1301 ft. Relative: Higher

RED BAG 3, LLC
750 KEEAUMOKU ST
HONOLULU, HI 96814

RCRA-CESQG, FINDS — **1007447433** / **HIR000136036**

Click here for full text details

RCRA-CESQG
EPA Id: HIR000136036

H34 NNE 1/8-1/4 0.247 mi. 1304 ft. Relative: Higher

ONE KALAKAUA PARTNERS
1314 KALAKAUA AVE
HONOLULU, HI 96823

UST — **U003154847** / **N/A**

Click here for full text details

UST
Tank Status: Permanently Out of Use
Facility Id: 9-103140

I35 SSE 1/8-1/4 0.247 mi. 1305 ft. Relative: Lower

ROGERS REPAIR INC
1687 KALAKAUA AVE
HONOLULU, HI 96826

RCRA-CESQG, FINDS — **1000742297** / **HID981615222**

Click here for full text details

RCRA-CESQG
EPA Id: HID981615222

I36 SSE 1/8-1/4 0.247 mi. 1305 ft. Relative: Lower

ROGER'S REPAIR INC
1687 KALAKAUA AVE
HONOLULU, HI 96826

SHWS — **S106820247** / **N/A**

Click here for full text details

---

37 SW 1/4-1/2 0.259 mi. 1368 ft. Relative: Lower

HECO SUBSTATION: MAKALOA SUBSTATION
1544 MAKALOA ST
HONOLULU, HI 96814

SHWS, SPILLS, INST CONTROL — **S106817457** / **N/A**

Click here for full text details

---

38 NNW 1/4-1/2 0.272 mi. 1434 ft. Relative: Higher

MEADOW GOLD DAIRIES (ICE CREAM PLANT)
1418 YOUNG ST
HONOLULU, HI 96814

SHWS, SPILLS — **S104657475** / **N/A**

Click here for full text details

39 NW 1/4-1/2 0.274 mi. 1449 ft.
Relative: Higher

YAJIMA OIL OF USA INC — LUST, UST, Financial Assurance — U001235254 / N/A
1375 S KING ST
HONOLULU, HI 96814

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100832

UST
Tank Status: Permanently Out of Use
Tank Status: Currently in Use
Facility Id: 9-100832

---

40 North 1/4-1/2 0.283 mi. 1493 ft.
Relative: Higher

HONOLULU STATION - PAWAA ANNEX — LUST, UST, Financial Assurance — U001235050 / N/A
1455 S BERETANIA ST
HONOLULU, HI 96814

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100114

UST
Tank Status: Permanently Out of Use
Facility Id: 9-100114

---

41 WNW 1/4-1/2 0.294 mi. 1553 ft.
Relative: Higher

WENS LIFE CO., INC — LUST, UST — U001235446 / N/A
808 SHERIDAN ST
HONOLULU, HI 96814

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-101330

UST
Tank Status: Permanently Out of Use
Facility Id: 9-101330

42 SW 1/4-1/2 0.295 mi. 1558 ft.
Relative: Lower

NEW OFFICE LOUNGE — SHWS, LUST, UST — 1006843573 / N/A
1551 KAPIOLANI BLVD
HONOLULU, HI 96814

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-103517

UST
Tank Status: Permanently out of Use
Facility Id: 9-103517

J43 North 1/4-1/2 0.302 mi. 1594 ft.
Relative: Higher

MAKIKI SHELL — LUST, UST, Financial Assurance — U003188504 / N/A
1436 S BERETANIA ST
HONOLULU, HI 96814

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100833

UST
Tank Status: Permanently Out of Use
Facility Id: 9-100833

J44 NNW 1/4-1/2 0.324 mi. 1712 ft.
Relative: Higher

MID PAC PETROLEUM 250344 (PREV: DON'S MAKIKI) — LUST, UST, Financial Assurance — U001235010 / N/A
1406 S BERETANIA ST
HONOLULU, HI 96814

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Status: Site Cleanup Completed with EHMP
Facility Id: 9-100035

UST
Tank Status: Permanently Out of Use
Tank Status: Currently In Use
Facility Id: 9-100035

K45 West 1/4-1/2 0.337 mi. 1777 ft. Relative: Lower

SUPERBLOCK PROPERTIES
NORTH BLOCK (BLDG N8) / KEEAUMOKU ST
HONOLULU, HI 96814

LUST **UST** | **U003221767** **N/A**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-102594

UST
Tank Status: Permanently Out of Use
Facility Id: 9-102594

L46 West 1/4-1/2 0.342 mi. 1806 ft. Relative: Lower

HAKUYOSHA HAWAII, INC
730 SHERIDAN ST
HONOLULU, HI 96814

SHWS **SPILLS** **INST CONTROL** **AIRS** | **S106817254** **N/A**

Click here for full text details

AIRS
Facility Id: 0462-01-N
Facility Id: 0564-01-C

L47 West 1/4-1/2 0.342 mi. 1806 ft. Relative: Lower

MOTOR SUPPLY
726 SHERIDAN ST
HONOLULU, HI 96814

SHWS **INST CONTROL** | **S108008592** **N/A**

Click here for full text details

---

48 WSW 1/4-1/2 0.345 mi. 1824 ft. Relative: Lower

WALGREENS KEEAMOKU
1460 KAPIOLANI BLVD
HONOLULU, HI 96814

SHWS | **S115488729** **N/A**

Click here for full text details

L49 West 1/4-1/2 0.349 mi. 1841 ft. Relative: Lower

SUPERBLOCK PROPERTIES
SOUTH BLOCK (BLDG S13) / MAKALOA ST
HONOLULU, HI 96814

LUST **UST** | **U001235971** **N/A**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-102600

UST

SUPERBLOCK PROPERTIES (Continued) | **U001235971**

Tank Status: Permanently Out of Use
Facility Id: 9-102600

K50 WSW 1/4-1/2 0.351 mi. 1851 ft. Relative: Lower

SUPERBLOCK PROPERTIES
SOUTH BLOCK (BLDG S20) / MAKALOA ST
HONOLULU, HI 96814

LUST **UST** | **U001235973** **N/A**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-102602

UST
Tank Status: Permanently Out of Use
Facility Id: 9-102602

---

51 NNW 1/4-1/2 0.359 mi. 1898 ft. Relative: Higher

BERETANIA CHEVRON 0423
1378 S BERETANIA ST
HONOLULU, HI 96814

LUST **UST** **Financial Assurance** | **U003221686** **N/A**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-101720

UST
Tank Status: Currently in Use
Tank Status: Currently In Use
Facility Id: 9-101720

M52 NE 1/4-1/2 0.360 mi. 1901 ft. Relative: Higher

SHRINERS HOSPITALS FOR CRIPPLED CHILDREN
1310 PUNAHOU ST
HONOLULU, HI 96826

LUST **UST** **Financial Assurance** | **U001235903** **N/A**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-102410

UST
Tank Status: Permanently Out of Use
Tank Status: Permanently out of Use
Facility Id: 9-102410

N53
SSE
1/4-1/2
0.361 mi.
1906 ft.

Relative: Lower

FIRST DEVELOPMENT INC
1777 KAPIOLANI BLVD
HONOLULU, HI 96814

CERC-NFRAP
RCRA-CESQG
FINDS

1003879446
HID984466060

Click here for full text details

CERC-NFRAP
EPA Id: HID984466060

RCRA-CESQG
EPA Id: HID984466060

N54
SSE
1/4-1/2
0.361 mi.
1906 ft.

Relative: Lower

ALOHA MOTORS 1777 KAPIOLANI BLVD
1777 KAPIOLANI BLVD
HONOLULU, HI 96813

SHWS
SPILLS

1006820308
N/A

Click here for full text details

O55
SSE
1/4-1/2
0.376 mi.
1984 ft.

Relative: Lower

HAWAII CONVENTION CENTER
1801 KALAKAUA AVE
HONOLULU, HI 96814

SHWS
SPILLS

1006820847
N/A

Click here for full text details

56
West
1/4-1/2
0.378 mi.
1995 ft.

Relative: Lower

SUPERBLOCK PROPERTIES
SOUTH BLOCK (BLDG S1) / SHERIDAN ST
HONOLULU, HI 96814

LUST
UST

U003221769
N/A

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-102596

UST
Tank Status: Permanently Out of Use
Facility Id: 9-102596

57
West
1/4-1/2
0.378 mi.
1997 ft.

Relative: Lower

SUPERBLOCK PROPERTIES
SOUTH BLOCK (BLDG S25) / MAKALOA ST
HONOLULU, HI 96814

LUST
UST

U001235974
N/A

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-102603

UST
Tank Status: Permanently Out of Use
Facility Id: 9-102603

O58
SSE
1/4-1/2
0.378 mi.
1998 ft.

Relative: Lower

FUNAI'S UNION SERVICE L-5583
1810 KAPIOLANI BLVD
HONOLULU, HI 96813

LUST
UST
Financial Assurance

U001235021
N/A

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100047

UST
Tank Status: Permanently Out of Use
Facility Id: 9-100047

M59
NE
1/4-1/2
0.381 mi.
2013 ft.

Relative: Higher

KAPIOLANI WOMEN'S & CHILDREN'S MEDICAL CENTER
1319 PUNAHOU ST
HONOLULU, HI 96826

SHWS
UST
AIRS
Financial Assurance

U001235208
N/A

Click here for full text details

UST
Tank Status: Permanently out of Use
Tank Status: Permanently Out of Use
Facility Id: 9-100740

AIRS
Facility Id: 0588-01-N

N60
SSE
1/4-1/2
0.386 mi.
2039 ft.

Relative: Lower

ALOHA MOTORS
KAPIOLANI BLVD X KALAKAUA AVE
HONOLULU, HI 96815

LUST
UST

U001235755
N/A

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)

ALOHA MOTORS (Continued) — **U001235755**

Facility Id: 9-102160

UST
Tank Status: Permanently Out of Use
Facility Id: 9-102160

---

61 ENE 1/4-1/2 0.397 mi. 2096 ft. Relative: Higher

ALEXANDER TOWER
1226 ALEXANDER ST
HONOLULU, HI 96826

LUST, UST — **U003711696**, **N/A**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-103531

UST
Tank Status: Permanently Out of Use
Facility Id: 9-103531

---

62 West 1/4-1/2 0.399 mi. 2108 ft. Relative: Lower

SUPERBLOCK PROPERTIES
NORTH BLOCK (BLDG N15) / SHERIDAN ST
HONOLULU, HI 96814

LUST, UST — **U003221768**, **N/A**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-102595

UST
Tank Status: Permanently Out of Use
Facility Id: 9-102595

---

63 East 1/4-1/2 0.418 mi. 2206 ft. Relative: Higher

CONTINENTAL AUTO SERVICES
1918 ALGAROBA ST
HONOLULU, HI 96826

SHWS, SPILLS — **S104534121**, **N/A**

Click here for full text details

64 North 1/4-1/2 0.431 mi. 2275 ft. Relative: Higher

CARTWRIGHT NEIGHBORHOOD PARK
KEEAUMOKU ST & MATLOCK AVE
HONOLULU, HI 96814

SHWS — **1006820122**, **N/A**

Click here for full text details

---

65 WSW 1/4-1/2 0.442 mi. 2333 ft. Relative: Lower

CUTTER CHEVROLET
1391 KAPIOLANI BLVD
HONOLULU, HI 96814

SHWS, LUST, UST, Financial Assurance — **U001235085**, **N/A**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100185

UST
Tank Status: Permanently Out of Use
Facility Id: 9-100185

---

66 NW 1/4-1/2 0.452 mi. 2386 ft. Relative: Higher

TEXACO STATION 611000090
1239 S KING ST
HONOLULU, HI 96814

RCRA NonGen / NLR, LUST, UST, SPILLS, Financial Assurance — **1000601548**, **HID984467852**

Click here for full text details

RCRA NonGen / NLR
EPA Id: HID984467852

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100340

UST
Tank Status: Permanently Out of Use
Facility Id: 9-100340

---

67 NW 1/4-1/2 0.461 mi. 2435 ft. Relative: Higher

GRACE OTSUKA APARTMENT COMPLEX
1233 YOUNG ST
HONOLULU, HI 96814

SHWS, ENG CONTROLS, INST CONTROL — **S110061466**, **N/A**

Click here for full text details

68 ENE 1/4-1/2 0.467 mi. 2464 ft. Relative: Higher

WALLYS GARDEN CENTER — SHWS, SPILLS — S111678012, N/A
1935 S BERETANIA ST
HONOLULU, HI

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69 NE 1/4-1/2 0.478 mi. 2525 ft. Relative: Higher

ARCADIA RETIREMENT — LUST, UST — U003402852, N/A
1434 PUNAHOU ST
HONOLULU, HI 96822

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-103458

UST
Tank Status: Permanently Out of Use
Facility Id: 9-103458

---

70 West 1/4-1/2 0.488 mi. 2578 ft. Relative: Lower

ALA MOANA UNOCAL — LUST, UST — U001235012, N/A
1322 KAPIOLANI BLVD
HONOLULU, HI 96814

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100037

UST
Tank Status: Permanently Out of Use
Facility Id: 9-100037

---

71 NW 1/2-1 0.507 mi. 2677 ft. Relative: Higher

1012 PIIKOI STREET, ANIN-PIIKOI BUILDING — SHWS, SPILLS — S106815117, N/A
1012 PIIKOI ST
HONOLULU, HI 96814

Click here for full text details

72 SSW 1/2-1 0.512 mi. 2701 ft. Relative: Lower

YACHT HARBOR TOWERS — SHWS, SPILLS, ENG CONTROLS, INST CONTROL — S106821166, N/A
1600 ALA MOANA BLVD
HONOLULU, HI 96815

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---

73 NW 1/2-1 0.520 mi. 2745 ft. Relative: Higher

SCHUMAN CARRIAGE MOTORS, LTD. — SHWS, LUST, UST, SPILLS, INST CONTROL, Financial Assurance — U003221663, N/A
1234 S BERETANIA ST
HONOLULU, HI 96814

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-101276

UST
Tank Status: Permanently Out of Use
Facility Id: 9-101276

---

74 South 1/2-1 0.528 mi. 2789 ft. Relative: Lower

1609 ALA WAI DIESEL RELEASE — SHWS, SPILLS — S108008656, N/A
1609 ALA WAI BLVD
HONOLULU, HI

Click here for full text details

---

75 West 1/2-1 0.545 mi. 2875 ft. Relative: Lower

CENPAC PROPERTIES - OFFICE BUILDING — SHWS, LUST, UST, SPILLS, Financial Assurance — U003402842, N/A
615 PIIKOI ST
HONOLULU, HI 96814

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-103438

UST
Tank Status: Permanently Out of Use
Facility Id: 9-103438

76 East 1/2-1 0.574 mi. 3032 ft. Relative: Higher

MCCULLY UNION SERVICE
2105 S KING ST
HONOLULU, HI 96826

SHWS, LUST, UST, ENG CONTROLS, INST CONTROL, Financial Assurance

U001235168
N/A

Click here for full text details

LUST
Facility Status: Monitored Natural Attenuation
Facility Status: Active Remediation
Facility Id: 9-100341

UST
Tank Status: Permanently Out of Use
Tank Status: Currently In Use
Facility Id: 9-100341

---

77 West 1/2-1 0.621 mi. 3280 ft. Relative: Lower

EVERSHINE X
1230 KAPIOLANI BLVD
HONOLULU, HI 96814

SHWS, VCP

S105262688
N/A

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---

78 SW 1/2-1 0.640 mi. 3380 ft. Relative: Lower

SEARS ALA MOANA
1450 ALA MOANA BLVD
HONOLULU, HI 96814

SHWS

S115488724
N/A

Click here for full text details

---

79 West 1/2-1 0.651 mi. 3436 ft. Relative: Lower

DURANT PROPERTIES
1235 KONA ST
HONOLULU, HI

SHWS, INST CONTROL

S109096045
N/A

Click here for full text details

---

80 South 1/2-1 0.688 mi. 3633 ft. Relative: Lower

HOBRON HOTEL
1744 KAIOO DR
HONOLULU, HI 96815

SHWS

S106817744
N/A

Click here for full text details

81 NW 1/2-1 0.692 mi. 3654 ft. Relative: Higher

1310 PENSACOLA STREET
1310 PENSACOLA ST
HONOLULU, HI

SHWS

S111704658
N/A

Click here for full text details

---

82 SSE 1/2-1 0.703 mi. 3710 ft. Relative: Lower

THE PAVILLION
1925 KALAKAUA AVE
HONOLULU, HI 96815

SHWS, SPILLS

S106820617
N/A

Click here for full text details

---

83 NE 1/2-1 0.718 mi. 3791 ft. Relative: Higher

PUNAHOU SCHOOL - MAINTENANCE SHOP
1601 PUNAHOU ST
HONOLULU, HI 96822

SHWS, LUST, UST, Financial Assurance

U003541737
N/A

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100297

UST
Tank Status: Permanently Out of Use
Tank Status: Currently in Use
Facility Id: 9-101654
Facility Id: 9-100297
Facility Id: 9-101653

---

84 WNW 1/2-1 0.743 mi. 3922 ft. Relative: Higher

AUXILIARY SERVICES - DOE
1039 S KING ST
HONOLULU, HI 96814

SHWS, UST, Financial Assurance

U003154583
N/A

Click here for full text details

UST
Tank Status: Permanently Out of Use
Facility Id: 9-102337

85 West 1/2-1 0.770 mi. 4063 ft. Relative: Lower

KOOLANI TOWER PROJECT — SHWS, SPILLS, ENG CONTROLS, INST CONTROL — S106818609 / N/A
1189 WAIMANU ST
HONOLULU, HI 96814

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86 West 1/2-1 0.805 mi. 4251 ft. Relative: Lower

RESERVE HOUSING TOWER SOIL CONTAMINATION — SHWS, SPILLS — 1006819959 / N/A
1141 WAIMANU ST
HONOLULU, HI 96813

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---

87 SSE 1/2-1 0.813 mi. 4291 ft. Relative: Lower

CHEVRON U.S.A., INC. — SHWS, LUST — U001235436 / N/A
2002 KALAKAUA AVE
HONOLULU, HI 96815

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-101266

---

88 ENE 1/2-1 0.834 mi. 4406 ft. Relative: Higher

1800 VANCOUVER DRIVE — SHWS, INST CONTROL, CDL — S110526102 / N/A
1800 VANCOUVER DR
HONOLULU, HI 96822

Click here for full text details

---

89 West 1/2-1 0.858 mi. 4529 ft. Relative: Lower

SELF STORAGE 1 — SHWS, SPILLS — 1006819998 / N/A
438 KAMAKEE ST
HONOLULU, HI 96814

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90 West 1/2-1 0.883 mi. 4664 ft. Relative: Lower

JAS W GLOVER LTD — RCRA NonGen / NLR, FINDS, SHWS, LUST, UST — 1000135795 / HID981637861
1046 WAIMAMU ST
HONOLULU, HI 96814

Click here for full text details

RCRA NonGen / NLR
EPA Id: HID981637861

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100835

UST
Tank Status: Permanently Out of Use
Facility Id: 9-100835

---

91 West 1/2-1 0.890 mi. 4700 ft. Relative: Lower

PACIFICA CONDOMINIUM — SHWS, LUST — S110765470 / N/A
1009 KAPIOLANI BLVD
HONOLULU, HI 96814

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-103909

---

92 SSE 1/2-1 0.930 mi. 4909 ft. Relative: Lower

ROYAL GARDENS HOTEL DIESEL — SHWS, SPILLS — S110061800 / N/A
440 OLOHANA ST
HONOLULU, HI

Click here for full text details

---

93 SE 1/2-1 0.946 mi. 4995 ft. Relative: Lower

ALA WAI COVE CONDOMINIUM APARTMENTS — SHWS, SPILLS — 1006820430 / N/A
509 UNIVERSITY AVE
HONOLULU, HI 96815

Click here for full text details

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
94 SSE 1/2-1 0.964 mi. 5089 ft.	**KING KALAKAUA PLAZA** **2080 KALAKAUA AVE** **HONOLULU, HI 96815**	**SHWS** **LUST** **UST** **SPILLS** **INST CONTROL**	**U003154872** **N/A**

Relative: Lower

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-103235

UST
Tank Status: Permanently Out of Use
Facility Id: 9-103235

---

95 WNW 1/2-1 0.988 mi. 5219 ft.	**SYMPHONY PARK** **850 KAPIOLANI BLVD** **HONOLULU, HI 96807**	**SHWS** **SPILLS**	**S107022567** **N/A**

Relative: Lower

Click here for full text details

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
HI	AIRS	List of Permitted Facilities	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	BROWNFIELDS	Brownfields Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	CDL	Clandestine Drug Lab Listing	Department of Health	08/04/2010	09/10/2010	10/22/2010
HI	DRYCLEANERS	Permitted Drycleaner Facility Listing	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	ENG CONTROLS	Engineering Control Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	Financial Assurance	Financial Assurance Information Listing	Department of Health	12/01/2014	12/19/2014	01/28/2015
HI	INST CONTROL	Sites with Institutional Controls	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	LUST	Leaking Underground Storage Tank Database	Department of Health	03/02/2015	03/04/2015	03/17/2015
HI	RGA HWS	Recovered Government Archive State Hazardous Waste Facilitie	Department of Health		07/01/2013	01/08/2014
HI	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Health		07/01/2013	01/17/2014
HI	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	Department of Health		07/01/2013	01/03/2014
HI	SHWS	Sites List	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	SPILLS	Release Notifications	Department of Health	12/02/2014	12/22/2014	01/28/2015
HI	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	03/10/2012	01/03/2013	02/11/2013
HI	SWF/LF	Permitted Landfills in the State of Hawaii	Department of Health	09/17/2012	04/03/2013	05/10/2013
HI	UIC	Underground Injection Wells Listing	Department of Health	02/07/2013	02/12/2013	04/09/2013
HI	UST	Underground Storage Tank Database	Department of Health	03/02/2015	03/04/2015	03/17/2015
HI	VCP	Voluntary Response Program Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	04/22/2013	03/03/2015	03/09/2015
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2011	02/26/2013	04/19/2013
US	CERCLIS	Comprehensive Environmental Response, Compensation, and Liab	EPA	10/25/2013	11/11/2013	02/13/2014
US	CERCLIS-NFRAP	CERCLIS No Further Remedial Action Planned	EPA	10/25/2013	11/11/2013	02/13/2014
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	07/01/2014	09/10/2014	10/20/2014
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	01/23/2015	02/13/2015	03/09/2015
US	CORRACTS	Corrective Action Report	EPA	12/09/2014	12/29/2014	01/29/2015
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DELISTED NPL	National Priority List Deletions	EPA	12/16/2014	01/08/2015	02/09/2015
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	07/31/2012	08/07/2012	09/18/2012
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EDR US Hist Auto Stat	EDR Exclusive Historic Gas Stations	EDR, Inc.			
US	EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	09/29/2014	09/30/2014	11/06/2014
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	07/21/2014	10/07/2014	10/20/2014
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
US	FEMA UST	Underground Storage Tank Listing	FEMA	01/01/2010	02/16/2010	04/12/2010
US	FINDS	Facility Index System/Facility Registry System	EPA	08/16/2014	09/10/2014	10/20/2014
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	06/06/2014	09/10/2014	09/18/2014
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	12/29/2014	12/30/2014	03/09/2015
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	01/23/2015	02/06/2015	03/09/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	02/01/2013	05/01/2013	11/01/2013

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	01/30/2015	02/05/2015	03/09/2015
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/10/2015	03/13/2015
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	01/28/2015	01/30/2015	03/13/2015
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	01/08/2015	01/08/2015	02/09/2015
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2005	12/08/2006	01/11/2007
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	02/01/2013	05/01/2013	01/27/2014
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	01/30/2015	02/05/2015	03/13/2015
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/13/2015	03/13/2015
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	01/29/2015	01/30/2015	03/13/2015
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	12/14/2014	02/13/2015	03/13/2015
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	09/29/2014	10/01/2014	11/06/2014
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	11/25/2014	11/26/2014	01/29/2015
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	02/18/2014	03/18/2014	04/24/2014
US	LUCIS	Land Use Control Information System	Department of the Navy	12/03/2014	12/12/2014	01/29/2015
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	12/29/2014	01/08/2015	01/29/2015
US	NPL	National Priority List	EPA	12/16/2014	01/08/2015	02/09/2015
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	07/01/2014	10/15/2014	11/17/2014
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	02/01/2011	10/19/2011	01/10/2012
US	PRP	Potentially Responsible Parties	EPA	10/25/2013	10/17/2014	10/20/2014
US	Proposed NPL	Proposed National Priority List Sites	EPA	12/16/2014	01/08/2015	02/09/2015
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	10/07/2014	10/08/2014	10/20/2014
US	RCRA NonGen / NLR	RCRA - Non Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RMP	Risk Management Plans	Environmental Protection Agency	08/01/2014	08/12/2014	11/06/2014
US	ROD	Records Of Decision	EPA	11/25/2013	12/12/2013	02/24/2014
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	03/07/2011	03/09/2011	05/02/2011
US	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2011	07/31/2013	09/13/2013
US	TSCA	Toxic Substances Control Act	EPA	12/31/2012	01/15/2015	01/29/2015
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	09/14/2010	10/07/2011	03/01/2012
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/16/2014	10/31/2014	11/17/2014
US	US AIRS MINOR	Air Facility System Data	EPA	10/16/2014	10/31/2014	11/17/2014

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	12/22/2014	12/22/2014	01/29/2015
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	11/19/2014	11/21/2014	01/29/2015
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	12/30/2014	12/31/2014	01/29/2015
US	Oil/Gas Pipelines	GeoData Digital Line Graphs from 1:100,000-Scale Maps	USGS			
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
US	USGS 7.5' Topographic Map	Scanned Digital USGS 7.5' Topographic Map (DRG)	USGS			

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

KALAKAUA HOMES
1545 KALAKAUA AVE.
HONOLULU, HI 96814

TARGET PROPERTY COORDINATES

Latitude (North):	21.2956 - 21˚ 17' 44.16''
Longitude (West):	157.8377 - 157˚ 50' 15.72''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	620565.1
UTM Y (Meters):	2355168.5
Elevation:	7 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	21157-C7 HONOLULU, HI
Most Recent Revision:	Not reported

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

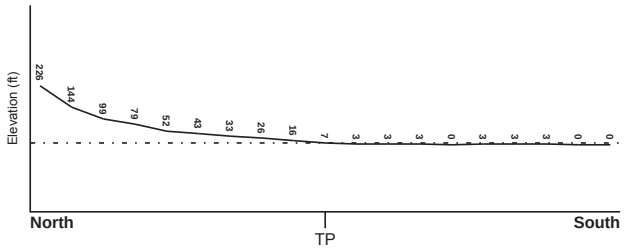
TOPOGRAPHIC INFORMATION

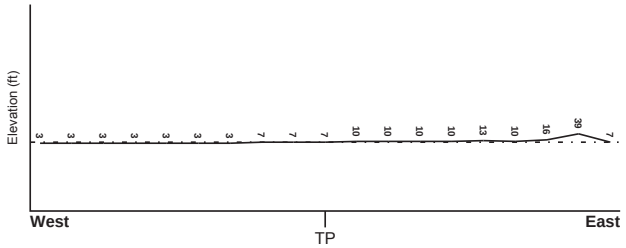
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General South

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 7 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
HONOLULU, HI	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 15003C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
HONOLULU	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

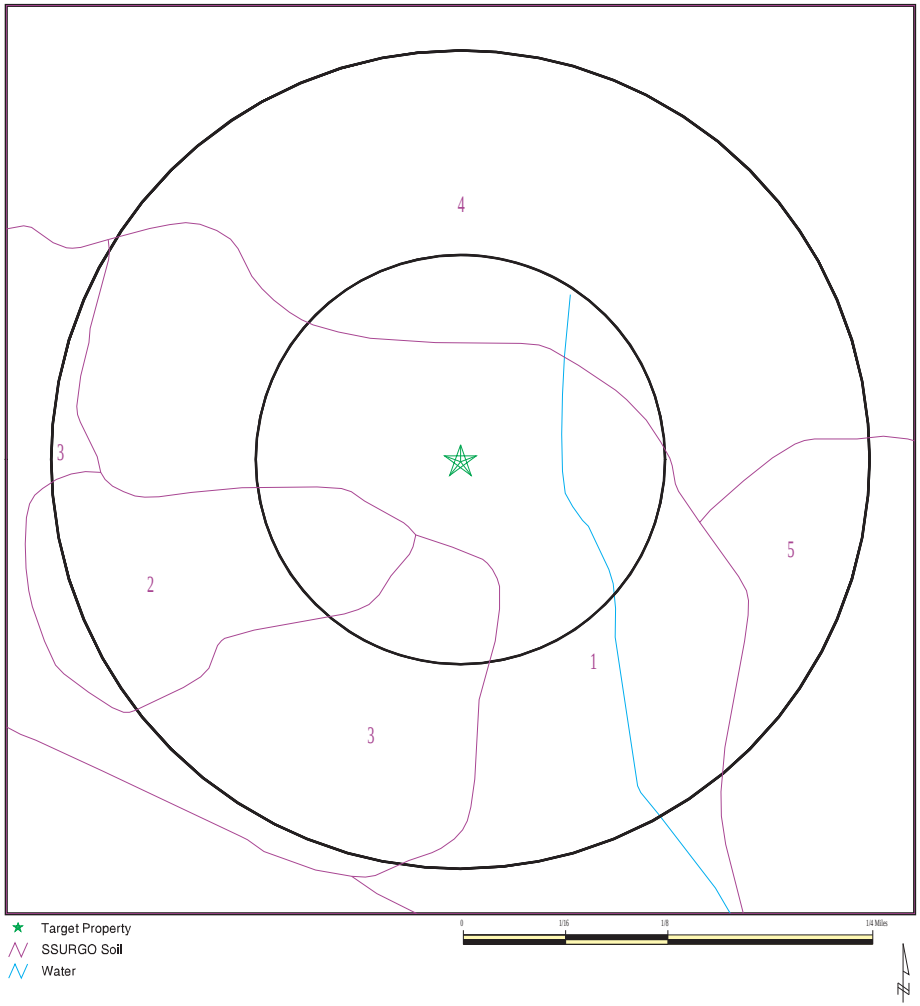
Era: -
System: -
Series: -
Code: N/A *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: -

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4237094.38s



★ Target Property
SSURGO Soil
Water

SITE NAME: Kalakaua Homes ADDRESS: 1545 Kalakaua Ave. Honolulu HI 96814 LAT/LONG: 21.2956 / 157.8377	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.38s DATE: March 18, 2015 7:44 am

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Kawaihapai

Soil Surface Texture: clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		Soil Reaction (pH)
1	0 inches	22 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 42.34 Min: 4.23	Max: 7.3 Min: 6.6
2	22 inches	31 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.14 Min: 14.11	Max: 7.3 Min: 6.6
3	31 inches	53 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.14 Min: 14.11	Max: 7.3 Min: 6.6

Soil Map ID: 2

Soil Component Name: Pearl Harbor

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 30 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4.23 Min: 0.42	Max: 7.3 Min: 6.6
2	11 inches	31 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 8.4 Min: 6.6
3	31 inches	48 inches	muck	A-8	Highly organic soils, Peat.	Max: 0.42 Min: 0.01	Max: 7.8 Min: 7.4

Soil Map ID: 3

Soil Component Name: Ewa

Soil Surface Texture: silty clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Highly organic soils, Peat.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6
2	7 inches	29 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Highly organic soils, Peat.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6
3	29 inches	38 inches	bedrock	Not reported	Not reported	Max: 42 Min: 1	Max: Min:

Soil Map ID: 4

Soil Component Name: Makiki

Soil Surface Texture: clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	20 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Highly organic soils, Peat.	Max: 42 Min: 4.23	Max: 5.5 Min: 5.1
2	20 inches	29 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Highly organic soils, Peat.	Max: 14.11 Min: 4.23	Max: 6 Min: 5.6
3	29 inches	59 inches	paragravelly clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.14 Min: 14.11	Max: 6 Min: 5.6

Soil Map ID: 5

Soil Component Name: Fill land, mixed

Soil Surface Texture: gravelly sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 152 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	gravelly sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 1.41	Max: 7.3 Min: 6.1
2	5 inches	59 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 1.41	Max: 7.3 Min: 6.1
3	59 inches	70 inches	bedrock	Not reported	Not reported	Max: 0.42 Min: 0.02	Max: Min:

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A2	USGS40000269556	0 - 1/8 Mile ESE
B3	USGS40000269567	0 - 1/8 Mile NNE
B5	USGS40000269568	1/8 - 1/4 Mile NNW
B6	USGS40000269571	1/8 - 1/4 Mile NNW
D10	USGS40000269572	1/8 - 1/4 Mile NW
C12	USGS40000269561	1/8 - 1/4 Mile West
E13	USGS40000269580	1/8 - 1/4 Mile NNE
F15	USGS40000269578	1/4 - 1/2 Mile NE
G17	USGS40000269559	1/4 - 1/2 Mile East

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
G19	USGS40000269562	1/4 - 1/2 Mile East
H21	USGS40000269592	1/4 - 1/2 Mile NNW
I22	USGS40000269569	1/4 - 1/2 Mile WNW
J24	USGS40000269570	1/4 - 1/2 Mile ENE
H25	USGS40000269603	1/4 - 1/2 Mile NNW
K28	USGS40000269584	1/4 - 1/2 Mile NW
L29	USGS40000269591	1/4 - 1/2 Mile NE
M32	USGS40000269555	1/4 - 1/2 Mile East
N33	USGS40000269607	1/4 - 1/2 Mile NNE
O34	USGS40000269614	1/4 - 1/2 Mile NNE
P38	USGS40000269575	1/4 - 1/2 Mile ENE
P39	USGS40000269583	1/4 - 1/2 Mile ENE
Q42	USGS40000269590	1/4 - 1/2 Mile NE
P44	USGS40000269574	1/4 - 1/2 Mile ENE
P49	USGS40000269573	1/2 - 1 Mile ENE
S52	USGS40000269632	1/2 - 1 Mile NNW
T54	USGS40000269566	1/2 - 1 Mile ENE
U56	USGS40000269589	1/2 - 1 Mile ENE
T58	USGS40000269565	1/2 - 1 Mile East
U59	USGS40000269587	1/2 - 1 Mile ENE
T62	USGS40000269564	1/2 - 1 Mile East
V64	USGS40000269642	1/2 - 1 Mile NNW
W67	USGS40000269585	1/2 - 1 Mile WNW
X69	USGS40000269611	1/2 - 1 Mile NE
Y71	USGS40000269615	1/2 - 1 Mile NW
Z74	USGS40000269602	1/2 - 1 Mile ENE
Z77	USGS40000269593	1/2 - 1 Mile ENE
AB81	USGS40000269619	1/2 - 1 Mile NW
AA83	USGS40000269599	1/2 - 1 Mile ENE
AA84	USGS40000269600	1/2 - 1 Mile ENE
AA85	USGS40000269596	1/2 - 1 Mile ENE
AA86	USGS40000269595	1/2 - 1 Mile ENE
AA87	USGS40000269598	1/2 - 1 Mile ENE
AA88	USGS40000269597	1/2 - 1 Mile ENE
AA90	USGS40000269601	1/2 - 1 Mile ENE
AB95	USGS40000269620	1/2 - 1 Mile WNW
AC99	USGS40000269497	1/2 - 1 Mile South
AC100	USGS40000269498	1/2 - 1 Mile South
AD101	USGS40000269677	1/2 - 1 Mile NNE
AE103	USGS40000269616	1/2 - 1 Mile WNW
AF106	USGS40000269604	1/2 - 1 Mile WNW
AF107	USGS40000269605	1/2 - 1 Mile WNW
AG110	USGS40000269702	1/2 - 1 Mile North
AI113	USGS40000269494	1/2 - 1 Mile South
AJ115	USGS40000269543	1/2 - 1 Mile ESE
AJ116	USGS40000269544	1/2 - 1 Mile ESE
AK119	USGS40000269644	1/2 - 1 Mile NW
AK123	USGS40000269637	1/2 - 1 Mile NW
AL125	USGS40000269698	1/2 - 1 Mile NNE
AM129	USGS40000269680	1/2 - 1 Mile NE
AE130	USGS40000269622	1/2 - 1 Mile WNW
132	USGS40000269490	1/2 - 1 Mile South

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
AN138	USGS40000269530	1/2 - 1 Mile ESE
AO139	USGS40000269676	1/2 - 1 Mile NE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
Z75	HI0000324	1/2 - 1 Mile ENE

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

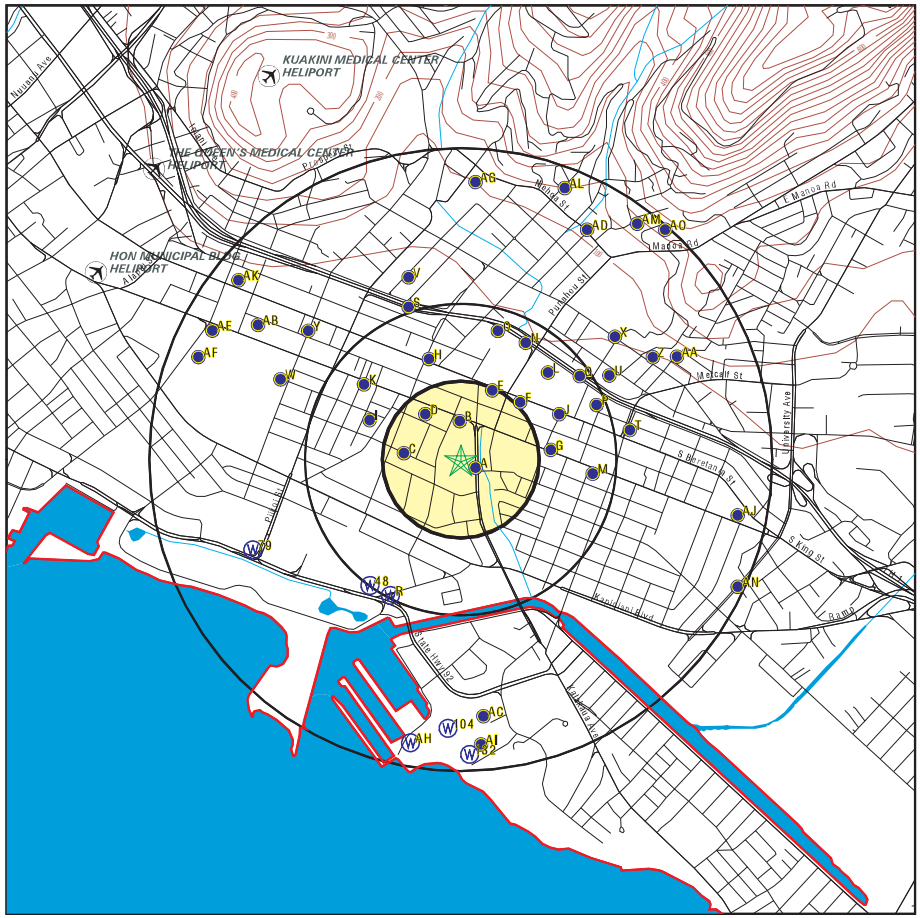
MAP ID	WELL ID	LOCATION FROM TP
A1	HI8000000002117	0 - 1/8 Mile ESE
B4	HI8000000002130	0 - 1/8 Mile NNE
B7	HI8000000002134	1/8 - 1/4 Mile NNW
B8	HI8000000002137	1/8 - 1/4 Mile NNE
C9	HI8000000002120	1/8 - 1/4 Mile West
D11	HI8000000002136	1/8 - 1/4 Mile NW
E14	HI8000000002146	1/8 - 1/4 Mile NNE
F16	HI8000000002145	1/4 - 1/2 Mile NE
G18	HI8000000002123	1/4 - 1/2 Mile East
G20	HI8000000002125	1/4 - 1/2 Mile East
I23	HI8000000002133	1/4 - 1/2 Mile WNW
J26	HI8000000002138	1/4 - 1/2 Mile ENE
H27	HI8000000002170	1/4 - 1/2 Mile NNW
K30	HI8000000002148	1/4 - 1/2 Mile NW
L31	HI8000000002156	1/4 - 1/2 Mile NE
M35	HI8000000002115	1/4 - 1/2 Mile East
N36	HI8000000002181	1/4 - 1/2 Mile NNE
O37	HI8000000002187	1/4 - 1/2 Mile NNE
P40	HI8000000002139	1/4 - 1/2 Mile ENE
Q41	HI8000000002149	1/4 - 1/2 Mile ENE
Q43	HI8000000002157	1/4 - 1/2 Mile NE
R45	HI8000000002088	1/4 - 1/2 Mile SSW
R46	HI8000000002089	1/4 - 1/2 Mile SSW
P47	HI8000000002140	1/4 - 1/2 Mile ENE
48	HI8000000002091	1/4 - 1/2 Mile SW
R50	HI8000000002090	1/2 - 1 Mile SSW
P51	HI8000000002141	1/2 - 1 Mile ENE
S53	HI8000000002209	1/2 - 1 Mile NNW
T55	HI8000000002131	1/2 - 1 Mile ENE
U57	HI8000000002158	1/2 - 1 Mile ENE
T60	HI8000000002128	1/2 - 1 Mile East
U61	HI8000000002154	1/2 - 1 Mile ENE
T63	HI8000000002129	1/2 - 1 Mile East
V65	HI8000000002222	1/2 - 1 Mile NNW
W66	HI8000000002153	1/2 - 1 Mile WNW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
W68	HI8000000002147	1/2 - 1 Mile WNW
X70	HI8000000002183	1/2 - 1 Mile NE
Y72	HI8000000002188	1/2 - 1 Mile NW
W73	HI8000000002155	1/2 - 1 Mile WNW
Z76	HI8000000002174	1/2 - 1 Mile ENE
Z78	HI8000000002165	1/2 - 1 Mile ENE
79	HI8000000002099	1/2 - 1 Mile WSW
AA80	HI8000000002162	1/2 - 1 Mile ENE
AA82	HI8000000002167	1/2 - 1 Mile ENE
AB89	HI8000000002192	1/2 - 1 Mile NW
AA91	HI8000000002163	1/2 - 1 Mile ENE
AA92	HI8000000002176	1/2 - 1 Mile ENE
AA93	HI8000000002175	1/2 - 1 Mile ENE
AA94	HI8000000002168	1/2 - 1 Mile ENE
AB96	HI8000000002191	1/2 - 1 Mile WNW
AC97	HI8000000002053	1/2 - 1 Mile South
AC98	HI8000000002054	1/2 - 1 Mile South
AD102	HI8000000002251	1/2 - 1 Mile NNE
104	HI8000000002049	1/2 - 1 Mile South
AE105	HI8000000002186	1/2 - 1 Mile WNW
AE108	HI8000000002169	1/2 - 1 Mile WNW
AC109	HI8000000002047	1/2 - 1 Mile South
AH111	HI8000000002046	1/2 - 1 Mile South
AH112	HI8000000002045	1/2 - 1 Mile South
AG114	HI8000000002285	1/2 - 1 Mile North
AJ117	HI8000000002105	1/2 - 1 Mile East
AJ118	HI8000000002106	1/2 - 1 Mile East
AH120	HI8000000002042	1/2 - 1 Mile South
AH121	HI8000000002043	1/2 - 1 Mile South
AK122	HI8000000002224	1/2 - 1 Mile NW
AK124	HI8000000002219	1/2 - 1 Mile NW
AH126	HI8000000002040	1/2 - 1 Mile South
AL127	HI8000000002283	1/2 - 1 Mile NNE
AI128	HI8000000002037	1/2 - 1 Mile South
AE131	HI8000000002196	1/2 - 1 Mile WNW
AM133	HI8000000002255	1/2 - 1 Mile NE
AH134	HI8000000002036	1/2 - 1 Mile South
AH135	HI8000000002035	1/2 - 1 Mile South
AF136	HI8000000002166	1/2 - 1 Mile WNW
AN137	HI8000000002092	1/2 - 1 Mile ESE
AO140	HI8000000002252	1/2 - 1 Mile NE

PHYSICAL SETTING SOURCE MAP - 4237094.38s



- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location

SITE NAME: Kalakaua Homes ADDRESS: 1545 Kalakaua Ave. Honolulu HI 96814 LAT/LONG: 21.2956 / 157.8377	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.38s DATE: March 18, 2015 7:44 am

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
A1 **ESE** **0 - 1/8 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002117**
A2 **ESE** **0 - 1/8 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269556**
B3 **NNE** **0 - 1/8 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269567**
B4 **NNE** **0 - 1/8 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002130**
B5 **NNW** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269568**
B6 **NNW** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269571**
B7 **NNW** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002134**
B8 **NNE** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002137**
C9 **West** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002120**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
D10 **NW** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269572**
D11 **NW** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002136**
C12 **West** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269561**
E13 **NNE** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269580**
E14 **NNE** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002146**
F15 **NE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269578**
F16 **NE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002145**
G17 **East** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269559**
G18 **East** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002123**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
G19 **East** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269562**
G20 **East** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002125**
H21 **NNW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269592**
I22 **WNW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269569**
I23 **WNW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002133**
J24 **ENE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269570**
H25 **NNW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269603**
J26 **ENE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002138**
H27 **NNW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002170**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
K28 **NW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269584**
L29 **NE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269591**
K30 **NW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002148**
L31 **NE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002156**
M32 **East** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269555**
N33 **NNE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269607**
O34 **NNE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269614**
M35 **East** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002115**
N36 **NNE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002181**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
O37 **NNE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002187**
P38 **ENE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269575**
P39 **ENE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269583**
P40 **ENE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002139**
Q41 **ENE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002149**
Q42 **NE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269590**
Q43 **NE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002157**
P44 **ENE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269574**
R45 **SSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002088**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
R46 **SSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002089**
P47 **ENE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002140**
48 **SW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002091**
P49 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269573**
R50 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002090**
P51 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002141**
S52 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269632**
S53 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002209**
T54 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269566**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
T55 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002131**
U56 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269589**
U57 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002158**
T58 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269565**
U59 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269587**
T60 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002128**
U61 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002154**
T62 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269564**
T63 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002129**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
V64 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269642**
V65 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002222**
W66 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002153**
W67 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269585**
W68 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002147**
X69 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269611**
X70 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002183**
Y71 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269615**
Y72 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002188**

Map ID Direction Distance Elevation		Database	EDR ID Number
W73 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002155**
Z74 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269602**
Z75 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FRDS PWS**	**HI0000324**
Z76 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002174**
Z77 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269593**
Z78 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002165**
79 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002099**
AA80 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002162**
AB81 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269619**

Map ID Direction Distance Elevation		Database	EDR ID Number
AA82 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002167**
AA83 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269599**
AA84 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269600**
AA85 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269596**
AA86 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269595**
AA87 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269598**
AA88 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269597**
AB89 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002192**
AA90 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269601**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
AA91 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002163**
AA92 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002176**
AA93 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002175**
AA94 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002168**
AB95 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269620**
AB96 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002191**
AC97 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002053**
AC98 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002054**
AC99 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269497**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
AC100 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269498**
AD101 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269677**
AD102 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002251**
AE103 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269616**
104 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002049**
AE105 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002186**
AF106 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269604**
AF107 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269605**
AE108 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002169**

Map ID Direction Distance Elevation		Database	EDR ID Number
AC109 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002047**
AG110 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269702**
AH111 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002046**
AH112 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002045**
AI113 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269494**
AG114 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002285**
AJ115 **ESE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269543**
AJ116 **ESE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269544**
AJ117 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002105**

Map ID Direction Distance Elevation		Database	EDR ID Number
AJ118 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002106**
AK119 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269644**
AH120 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002042**
AH121 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002043**
AK122 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002224**
AK123 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269637**
AK124 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002219**
AL125 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269698**
AH126 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002040**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
AL127 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002283**
AI128 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002037**
AM129 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269680**
AE130 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269622**
AE131 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002196**
132 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269490**
AM133 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002255**
AH134 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002036**
AH135 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002035**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
AF136 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002166**
AN137 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002092**
AN138 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269530**
AO139 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269676**
AO140 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002252**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for HONOLULU County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for HONOLULU COUNTY, HI

Number of sites tested: 209

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.015 pCi/L	100%	0%	0%
Living Area - 2nd Floor	0.125 pCi/L	100%	0%	0%
Basement	0.415 pCi/L	96%	4%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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HAWAII PUBLIC HOUSING AUTHORITY

ENVIRONMENTAL REVIEW

KALĀKAUA HOMES

Honolulu, O`ahu

AMP 34
HPHA No. 1062

Prepared for:

State of Hawaii
Hawaii Public Housing Authority

Prepared by:

HHF PLANNERS
places for people

U.S. Department of Housing and Urban Development
451 Seventh Street, SW
Washington, DC 20410
www.hud.gov

espanol.hud.gov

Environmental Review for Activity/Project that is Categorically Excluded Subject to Section 58.5

Pursuant to 24 CFR 58.35(a)

Project Information

Project Name: Kalākaua Homes (AMP 34)

Responsible Entity: Hawaii Public Housing Authority
1002 North School Street
Honolulu, HI 96817

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

State/Local Identifier: State of Hawaiʻi

Preparer: Mr. Scott Ezer, Vice President
HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaiʻi 96813

Certifying Officer Name and Title: Mr. David Y. Ige
Governor, State of Hawaiʻi

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

Consultant (if applicable): HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaiʻi 96813

Direct Comments to: Mr. Hakim Ouansafi, Executive Director
Hawaii Public Housing Authority
1002 North School Street
Honolulu, Hawaiʻi 96817

Project Location: 1545 Kalākaua Avenue
Honolulu, Hawaiʻi 96826

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]**:**

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a "major construction activity" and would involve one or a combination of several HUD designated categories of actions.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent;
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons;
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland;
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation;
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls);
7. Interior and exterior renovations and rehabilitation;
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site;
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Level of Environmental Review Determination:

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.5. Compliance with and completion of conformance determinations for other statute, executive order, or regulation has been completed and support the Categorical Exclusion.

Funding Information

Grant Number	HUD Program	Funding Amount
To be determined	Capital Fund Grants	To be determined
To be determined	Economic Development Initiative Special Project Grant	To be determined
To be determined	Other Grants	To be determined

Estimated Total HUD Funded Amount:

To be determined by HUD using a formula and based upon Federal budget.

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]**:**

Depends on funds available.

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	*The project is not within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.*
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☒	*Hawai'i has no coastal barriers (http://www.fws.gov/CBRA/Maps/Mapper.html)*
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes ☐ No ☒	*As indicated in the Flood Insurance Rate Map Panels 15003C0362G and 15003C0366G, the project site is located in Zone X and is determined to have minimal flood hazard and is outside the 500-year flood zone. Based on the project description the project includes no activities that would require further evaluation under this section. The project does not require flood insurance or is exempt from flood insurance. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with Flood Insurance requirements*

STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5		
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes ☐ No ☒	*The State of Hawai'i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. EPA's Green Book for currently designated "nonattainment areas" as of June 2015. Planned repair and rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.*
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes ☐ No ☒	*Documentation from the Office of Planning determined that projects receiving federal funds from HUD's Public Housing Capital Fund do not require review for consistency with Hawai'i's CZM program.*
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☐ No ☒	*Based on the results of the EDR report and site visit, there are no known hazardous materials, contamination, or toxic chemicals, gasses or radioactive substances in the immediate vicinity which could affect the health or safety of occupants or conflict with intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gasses, etc.*
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes ☒ No ☐	*The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (USFWS) in their letter dated September 28, 2015 which is included in the Appendices, while project-specific mitigation measures are identified in the following section.*
Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes ☐ No ☒	*There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site.*
Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes ☐ No ☒	*The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. The project is located within the*

		State Land Use Urban District. The existing development is located on urbanized property. No farmlands will be impacted by repair or rehabilitation improvements implemented.
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes No ☐ ☒	*As indicated in the Flood Insurance Rate Map Panel 15003C0362G, the project site is located in Zone X and is determined to have minimal flood hazard and is outside the 500-year flood zone. The project is in compliance with Executive Order 11988.*
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes No ☐ ☒	*Kalakaua Homes is 32 years old and was first occupied in 1993. To be eligible for listing in the National Register of Historic Places (NRHP), a property must meet the National Register criteria for evaluation which involves examining its integrity, significance, and age (generally at least 50 years old). Due to its age, this housing project does not meet the eligibility criteria to be evaluated for the NRHP. In a letter to the State Historic Preservation Officer dated July 23, 2015, the HPHA determined that no historic properties would be affected by repair and rehabilitation improvements for this housing project. No comments or objections about this no effect determination were received.*
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes No ☐ ☒	*The project site is not situated along a highway or major arterial roadway that has a high volume of vehicular traffic that may generate significant noise. The HUD noise level calculator estimated noise levels at the project site to be 62.1 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.*
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes No ☐ ☒	*The housing project is located within the O‘ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation.*

Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☐ No ☒	*There are no known wetlands within the housing project's property, and therefore, no wetlands will be adversely impacted by the project improvements (http://www.fws.gov/wetlands/data/mapper.HTML)*
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes ☐ No ☒	*There are no Wild and Scenic Rivers in Hawai'i, which excludes this project from mitigation or formal consultation requirements (http://www.rivers.gov/map.php) .*
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes ☐ No ☒	*Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, these improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects on minority populations and low-income populations. Improvements should benefit low-income and minority populations living within this housing project.*

Field Inspection (Date and completed by)**:** June 2, 2015
Glenn Tadaki, Planner
HHF Planners

Summary of Findings and Conclusions:

Repair and rehabilitation improvements implemented for this existing housing project by HPHA should not result in significant environmental impacts based upon research data collected, a field inspection, consultation with the site manager and maintenance staff, consultation with pertinent resource agencies, and prior HPHA experience implementing repair and rehabilitation improvements. Therefore, repair and rehabilitation improvements would comply and be consistent with the statutes, executive orders, and regulations addressed. Furthermore, HPHA would evaluate improvements planned to ensure the work is consistent with the designated categories of actions described under the project description section. Compliance with these factors evaluated are further addressed in the attached Source Documentation Statutory Worksheet along with relevant technical reports/assessments.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Law, Authority, or Factor	Mitigation Measure
Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	*Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.* *Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.* *Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.* *Newell's shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.* *Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.* *Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo'i, impoundments or other vegetated water bodies.*

	1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols. *2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.* *3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.* *In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.* *<u>Additional Measures</u>: The following additional measures would be implemented:* *1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.*

Determination:

☒ This categorically excluded activity/project converts to **EXEMPT** per Section 58.34(a)(12), because it does not require any mitigation for compliance with any listed statutes or authorities, nor requires any formal permit or license; **Funds may be committed and drawn down after certification of this part** for this (now) EXEMPT project; OR

☐ This categorically excluded activity/project cannot convert to Exempt status because one or more statutes or authorities listed at Section 58.5 requires formal consultation or mitigation. Complete consultation/mitigation protocol requirements, **publish NOI/RROF and obtain "Authority to Use Grant Funds"** (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR

☐ This project is not categorically excluded OR, if originally categorically excluded, is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

Preparer Signature: Scott Ezer Date: 11-10-15

Name/Title/Organization: Mr. Scott Ezer, Vice President
HHF Planners

Responsible Entity Agency Official Signature:

David Y. Ige Date: APR 28 2016

Name/Title: Mr. David Y. Ige, Governor

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

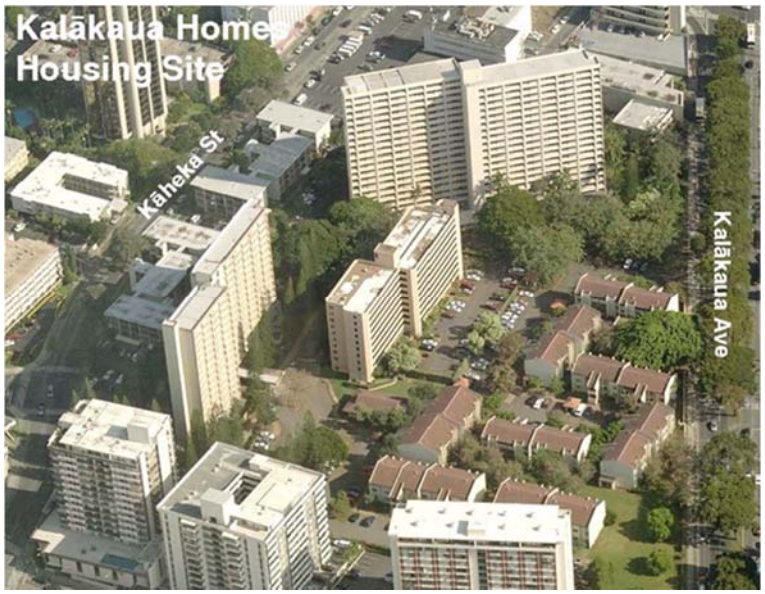
KALĀKAUA HOMES (HA # 1062)

TMK: (1) 2-3-019: 004

Hawai‘i Public Housing Authority (HPHA) Environmental Review

SOURCE DOCUMENTATION (SD) STATUTORY WORKSHEET

Site Visit Date: June 2, 2015
Prepared By: Glenn Tadaki



The Kalākaua Homes housing project is located within the McCully-Mo‘ili‘ili community in the Honolulu district on the island of O‘ahu. McCully-Mo‘ili‘ili is located in urban Honolulu, northeast of Ala Moana Shopping Center.

The project site is situated between Kalākaua Avenue and Kāheka Street and is located on the same tax parcel as the Makua Ali`i and Paoakalani housing projects. Kalākaua Homes is approximately 275 feet west of Washington Middle School and lies within HPHA’s Asset Management Project (AMP) 34 which includes the other two housing projects.

Kalākaua Homes was first occupied in 1983 and has a street address of 1545 Kalākaua Avenue. The housing project covers 4.8 acres, and is identified by Tax Map Key (1) 2-3-019: 004. The project includes eight 3-story townhouses and a 10-story apartment building containing a total of 221 housing units with one, two, or three bedrooms per unit. The property is designated for “Urban” use by the State Land Use Commission and is zoned for “A-3 High Density Apartment” use by the City and County of Honolulu.

The project site is not located within a tsunami evacuation zone, and the entire site is located in Flood Zone X based upon the Flood Insurance Rate Map (Community Panel Numbers 15003C0362G and 15003C0366G, Revised January 19, 2011. Zone X is an area determined to be outside the 0.2 percent annual chance floodplain.

The following figures in Exhibit A provide supporting information on this housing project:

Figure 1: Location Map
Figure 2: TMK Map
Figure 3: Site Map
Figure 4: Flood Map

COMPLIANCE FACTORS

I. AIRPORT CLEAR ZONES AND ACCIDENT POTENTIAL ZONES (24 CFR PART 51D)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The housing project does not lie within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: 24 CFR 51 (D).

Honolulu International Airport Master Plan - 2010 (August 1994), State Department of Transportation, Airports Division; and

*Hawai`i Airports and Flying Safety Guide (2012-13, Fifth Edition, Revision 1)* Hawai`i Department of Transportation, Airports Division.

HDOT website at: http://hidot.hawaii.gov/airports/files/2013/01/Airport-Safety-Guide-2012-2013-5rev1.pdf

II. COASTAL BARRIER RESOURCES (COASTAL BARRIER IMPROVEMENT ACT OF 1990 [16 USC 3501])

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i does not have any designated coastal barrier resource units.

SUPPORTING DOCUMENTATION:

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/cbra/maps/mapper.html (Date accessed: 6/30/15).

III. FLOOD INSURANCE (FLOOD DISASTER PROTECTION ACT OF 1973 AND NATIONAL FLOOD INSURANCE REFORM ACT OF 1994 [42 USC 4001-4128 AND 42 USC 5154a])

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program

The project site is located in Zone X (area of minimal flood hazard) and is located outside the 500-year flood zone. A field inspection and information obtained from the AMP Manager confirmed no major flooding issues within the site. Based on its description, the Kalākaua Homes housing project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal any signs of previous flooding problems. An interview with the Maintenance Supervisor also determined that no major ponding or flooding issues have occurred on the project site.

Printed: City and County of Honolulu, Flood Insurance Rate Map, Hawai'i Community Panel Numbers 15003C0362G and 15003C0366G, Revised January 19, 2011.

Hawai`i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 6/30/15)

IV. CLEAN AIR ACT (40 CFR PARTS 6, 51, 93)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. Environmental Protection Agency's Green Book for currently designated "nonattainment areas" as of June 2015. Planned rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.

SUPPORTING DOCUMENTATION:

Printed: *State of Hawai‘i Annual Summary 2013 Air Quality Data*. State of Hawai'i, Department of Health, July 2014.

U.S. Environmental Protection Agency website at: http://epa.gov/airquality/greenbk/

V. COASTAL ZONE MANAGEMENT ACT (16 USC 1451, SECTIONS 307 (C), (D)

CONTACT:
Mr. John Nakagawa
Office of Planning
Department of Business, Economic Development & Tourism
State of Hawai‘i
P.O. Box 2359
Honolulu, Hawai'i, 96804-2359

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai‘i's Coastal Zone Management (CZM) program.

SUPPORTING DOCUMENTATION:

Contact: In an e-mail to the Office of Planning (OP) dated July 27, 2015, the HPHA determined that the use of HUD funds for the implementation of repair and rehabilitation improvements does not require review for consistency with Hawai‘i's CZM program. The OP confirmed this determination in an e-mail dated July 28, 2015 and included in the Appendices.

Experience: As part of past environmental reviews in December 2010, a letter from the OP dated July 20, 2005 determined that their review for consistency with Hawai‘i's CZM program was not required. A copy of this letter is included in the Appendices.

VI. CONTAMINATION AND TOXIC SUBSTANCES (24 CFR PART 50.3 & 58.5(I)(2))

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Project Not Affected

There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.

SUPPORTING DOCUMENTATION:

Field: A site inspection and interview with the AMP Manager and Maintenance Supervisor revealed no presence of any toxic or radioactive materials on the project site that warrant any concern. A secure storage building behind Makua Ali`i is used to store flammable and hazardous materials for the three housing projects on this tax parcel. The storage building is in acceptable condition and labeled with signage.

Study: Environmental Data Resources, Inc. (EDR), conducted a search of available environmental records and prepared a Radius Map Report (Inquiry Number 4237094.38s, March 18, 2015). EDR reviewed more than 25 federal and statewide regulatory databases for information regarding the treatment, storage, disposal and release of toxic chemicals at the project site and within specific radii (generally 1 mile) of the site. A Detail Map within the EDR report documents those sites identified within a 0.25 mile radius of the project site. Some of the sites contain underground storage tanks (UST) that are currently in use or are permanently out of use. The EDR report in Exhibit B includes the results of their research findings.

The EDR report notes that Kalākaua Homes was inspected for asbestos in 2005 and that the inspection resulted in no violation or enforcement action. It also notes that this housing project is classified as a small, small quantity generator because it produces between 100 to 1,000 kilograms (kg) of hazardous waste per month and accumulates less than 6,000 kg of hazardous waste at any time. No violations were reported for Kalākaua Homes as a small, small quantity generator.

In the vicinity of the project site, the report notes that a former gas station at 1505 S. King Street closed around 2007 and its four gasoline UST (total 36,500 gallons) and one oil UST (550 gallons) are permanently out of use. It also notes that cleanup for a leaking UST at a gas station on 1549 S. King Street was conducted in 2010 and that a drug store at 966 Kāheka Street is a conditionally exempt small quantity generator because it produces 100 kilograms (kg) or less of hazardous waste per month and accumulates 1,000 kg or less of hazardous waste at any time. No violations have been reported for the drug store as a conditionally exempt small quantity generator.

The project site was not identified as a Formerly Used Defense Site (FUDS) by the U.S. Army Corps of Engineers and is not subject to any cleanup actions for Department of Defense-generated contamination.

VII. ENDANGERED SPECIES (50 CFR PART 402)

CONTACT:
Mr. Loyal Mehrhoff, Field Supervisor
Pacific Islands Administrator
Fish and Wildlife Services
U.S. Department of the Interior
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawai'i 96813
Tel. #: 792-9400

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Adverse Effect Subject to Mitigation

The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices.

SUPPORTING DOCUMENTATION:

Contact: A letter from the HPHA dated July 24, 2015 was submitted to the Pacific Island Administrator for the FWS determining that repair and rehabilitation improvements that may be implemented using HUD funds for this housing project would have no likelihood of effect on any listed species or proposed species, or existing or proposed designated critical habitat subject to certain measures. Concurrence with this determination along with proposed minimization and avoidance measures was received from the FWS in a letter dated September 28, 2015 which is included in the Appendices. This housing project is subject to the following minimization and avoidance measures.

Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.

Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.

Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.

Newell's shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the

proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.

Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.

Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo‘i, impoundments or other vegetated water bodies.

1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS’s recommended Hawaiian Waterbird Survey Protocols.
2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.
3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.

In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.

Additional Measures: The following additional measures would be implemented:

1. No vegetation or soil disturbance shall be conducted outside a project’s previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.

Experience: The FWS was previously consulted as part of environmental reviews that were completed in 2005 (39 housing projects) and 2010 (70 housing projects) which supported the determination that repair and rehabilitation improvements would either: 1) have no likelihood of effect for certain housing projects; or 2) not likely adversely affect federally listed species or critical habitat for certain housing projects subject to mitigative measures. A summary of these consultation efforts follows.

2005 Consultation: In a letter dated July 15, 2005, the Housing and Community Development Corporation of Hawai'i (predecessor to the HPHA), determined that the implementation of minor repair and rehabilitation improvements for 39 housing projects would not have an adverse effect on federally-listed species or critical habitat. In a letter dated August 11, 2005, the FWS concurred with the HCDCH determination.

2010 Consultation: In a letter dated May 17, 2010, the HPHA informed the FWS that HUD funds would be used to immediately implement repair and rehabilitation improvements for six housing projects on O'ahu and the island of Hawai`i. In a subsequent letter dated May 21, 2010, the FWS was informed that HPHA would be using HUD funds to implement minor repair and rehabilitation improvements for 64 projects throughout the State. In both letters, the HPHA determined that the repair and rehabilitation improvements were not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat. Based on further consultation and a meeting with FWS staff on June 24, 2010, the HPHA determined that repair and rehabilitation improvements for most of their housing projects would not likely adversely affect any listed or proposed species, or existing or proposed designated habitat, subject o various mitigative measures for certain housing projects.

VIII. EXPLOSIVE AND FLAMMABLE OPERATIONS (24 CFR PART 51C)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

SUPPORTING DOCUMENTATION:

Field: Field inspection was limited to the exterior of residential buildings and associated structures for this housing project. No above-ground explosive or flammable material storage containers in excess of 100 gallons were observed at the site.

Printed: 24 CFR Part 51, Subpart C addresses acceptable separation distance from above-ground explosive or flammable fuels or chemical containers. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

IX. FARMLANDS PROTECTION (7 CFR PART 658)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. Since the property consists of an existing housing development within an urbanized area, no farmlands would be impacted by the implementation of repair and rehabilitation improvements.

Printed: The property is designated for "Urban" use by the State Land Use Commission and is zoned for "A-3 High Density Apartment" use by the City and County of Honolulu.

Hawai`i Office of Planning website at: http://planning.hawaii.gov/gis/
(Date accessed: 6/30/2015)

X. FLOODPLAIN MANAGEMENT (EXECUTIVE ORDER 11988, 24 CFR PART 55)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program

The project site is located in Zone X, an area of minimal flooding (i.e., 0.2% annual chance flood), and is located outside the 500-year flood zone. A field inspection and information obtained from the AMP Manager confirmed no major flooding issues within the project site.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal any signs of previous flooding problems. An interview with the Maintenance Supervisor also determined that no major ponding or flooding issues have occurred on the project site.

Printed: City and County of Honolulu, Flood Insurance Rate Map, Hawai'i Community Panel Numbers 15003C0362G and 15003C0366G, Revised January 19, 2011.

Hawai`i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 6/30/15)

XI. HISTORIC PRESERVATION (NATIONAL HISTORIC PRESERVATION ACT OF 1966; SECTIONS 106 AND 110; 36 CFR, PART 800)

CONTACT:

Ms. Suzanne Case, Chairperson
Department of Land and Natural Resources (DLNR)
State of Hawai'i
1151 Punchbowl Street
Honolulu, Hawai'i 96813
Tel. #: 587-0400

SUPPORTING DOCUMENTS	
X	Field
X	Contact
X	Printed
X	Experience
X	Study

DETERMINATION:

Status Category: Project Not Eligible for National Register Listing / No Effect on Historic Properties

Kalākaua Homes is 32 years old and was initially occupied in 1983. To be eligible for listing in the National Register of Historic Places (NRHP), a property must meet the National Register criteria for evaluation which involves examining its integrity, significance, and age (generally at least 50 years old). Due to its age, this housing project does not meet the eligibility criteria to be evaluated for the NRHP. In a letter to the State Historic Preservation Officer (SHPO) dated July 23, 2015, the HPHA determined that no historic properties would be affected (no effect) by repair and rehabilitation improvements for this housing project. No comments or objections about this no effect determination were received.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the Kalākaua Homes housing project did not locate any existing or potential archaeological sites (e.g., heiau) or cultural features on the property. The project site has undergone extensive ground-altering activities since it was initially developed and improved with buildings, driveways, parking lots, sidewalks, and other related improvements. An interview with the AMP Manager and Maintenance Supervisor indicates that no known sites or features are present on the property.

Contact: A letter from the HPHA dated July 23, 2015, which is included in the Appendix, was submitted to the State Historic Preservation Officer [SHPO] (Chair of State Board of Land and Natural Resources) as part of Section 106 consultation determining that no historic properties would be affected (no effect) by repair and rehabilitation improvements that may be implemented using HUD funds for this housing project. The SHPO did not submit any comments or objections on the "no effect" determination for this housing project, which

included follow-up e-mails with the State Historic Preservation Division regarding a response. On September 28, 2015, notice of HPHA's determination was also distributed to several native Hawaiian organizations and the various County Planning Departments. No concerns or opposition to this determination was received.

Printed: A review of the U.S. National Parks Service website for the National Register of Historic Places did not identify any historic properties within the limits of this housing project. A similar review of the State DLNR website for the State Register of Historic Places revealed that there are no historic properties within the project site.

National Register: U.S. National Park Service website at: http://www.nps.gov/nr/research/ (Date accessed: 7/2/15).

State Register: Hawai`i Department of Land and Natural Resources website at: http://dlnr.hawaii.gov/shpd/state-register/ (Date accessed: 7/2/15).

Experience: In letter to the SHPO dated April 19, 2011, the HPHA determined that minor repair and rehabilitation improvement at 57 public housing projects throughout Hawai`i (including Kalākaua Homes) would have "no effect" on historic properties. The SHPO had no comments or objections on the "no effect" determination.

XII. NOISE ABATEMENT CONTROL (24 CFR PART 51B)

	SUPPORTING DOCUMENTS
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Within HUD Noise Standards

The project site is not situated along a highway or major arterial roadway that has a high volume of vehicular traffic that may generate significant noise. Kalākaua Avenue is a major City roadway along the project site serving vehicular traffic entering and exiting Waikiki along with providing access to other surrounding urban areas. The HUD noise level calculator estimated noise levels at the project site to be 62.1 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

SUPPORTING DOCUMENTATION:

Field: The project site is situated within a block generally surrounded by other existing condominiums, commercial buildings, and the HPHA Makua Ali'i and Paoakalani projects. Noise from surrounding areas and roadways are also mitigated at the project site to some extent from these other concrete buildings and structures serving as barriers from roadways. No significant noise generating sources were identified within the project site during the site inspection. Noise sources are predominantly associated with vehicular traffic along adjacent roadways and voices from surrounding activities.

Study: The HUD day/night noise level calculator was used to estimate approximate traffic noise levels at the project site. Kalākaua Avenue is a major City roadway generally running in a north-south direction along the project site serving vehicular traffic entering and exiting Waikiki along with providing access to other surrounding urban areas. Kāheka Street is located to the west of the project site running in a north-south direction, and provides access to existing uses along that street. Kalākaua Avenue has about 43,900 vehicles a day based upon State Department of Transportation 2013 traffic data. Given the distance of the center lines of this roadway from the project site (about 60 feet), the estimated noise levels at the project site using this HUD calculator was 62.1 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

XIII. SOLE SOURCE AQUIFER (40 CFR PART 149)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact on Sole Source Aquifer

The housing project is located within the O‘ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation. However, if exceptional circumstances require compliance steps with any of these authorities, such compliance must be established and documented prior to approving the site-specific loan or grant.

SUPPORTING DOCUMENTATION:

Printed: This determination was based upon review of the Sole Source Aquifer Memorandum of 4/30/90 (Sections II.B.1 and II.B.2) and consideration of the type of rehabilitation related improvements that would be conducted for this project.

XIV. WETLANDS PROTECTION (EXECUTIVE ORDER 11990)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the property did not identify the presence of any wetlands.

Printed: U.S Fish and Wildlife Service website at: http://www.fws.gov/wetlands/data/mapper.html (Date accessed 6/30/2015).

XV. WILD AND SCENIC RIVERS ACT (16 USC 1271, SECTION 7 (B), (C))

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no Wild and Scenic Rivers in Hawai‘i, which excludes this project from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: National Wild and Scenic Rivers System website at: http://www.rivers.gov/index.php (Date accessed: 6/30/2015).

XVI. ENVIRONMENTAL JUSTICE (EXECUTIVE ORDER NO. 12898)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact on Requirements

Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, repair and rehabilitation improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations. Repair and rehabilitation improvements should benefit low-income and minority populations living within this housing project.

SUPPORTING DOCUMENTATION:

Printed: Executive Order 12898.

U.S. Department of Housing and Urban Development website at:
https://www.hudexchange.info/environmental-review/environmental-justice/

EXHIBIT A

Location Map, TMK Map, Site Map, Flood Map, and Site Photos

Source: State of Hawaiʻi GIS Data and Google Earth Pro - 1/12/13

HONOLULU RAIL TRANSIT

Transit Corridor

Transit Station

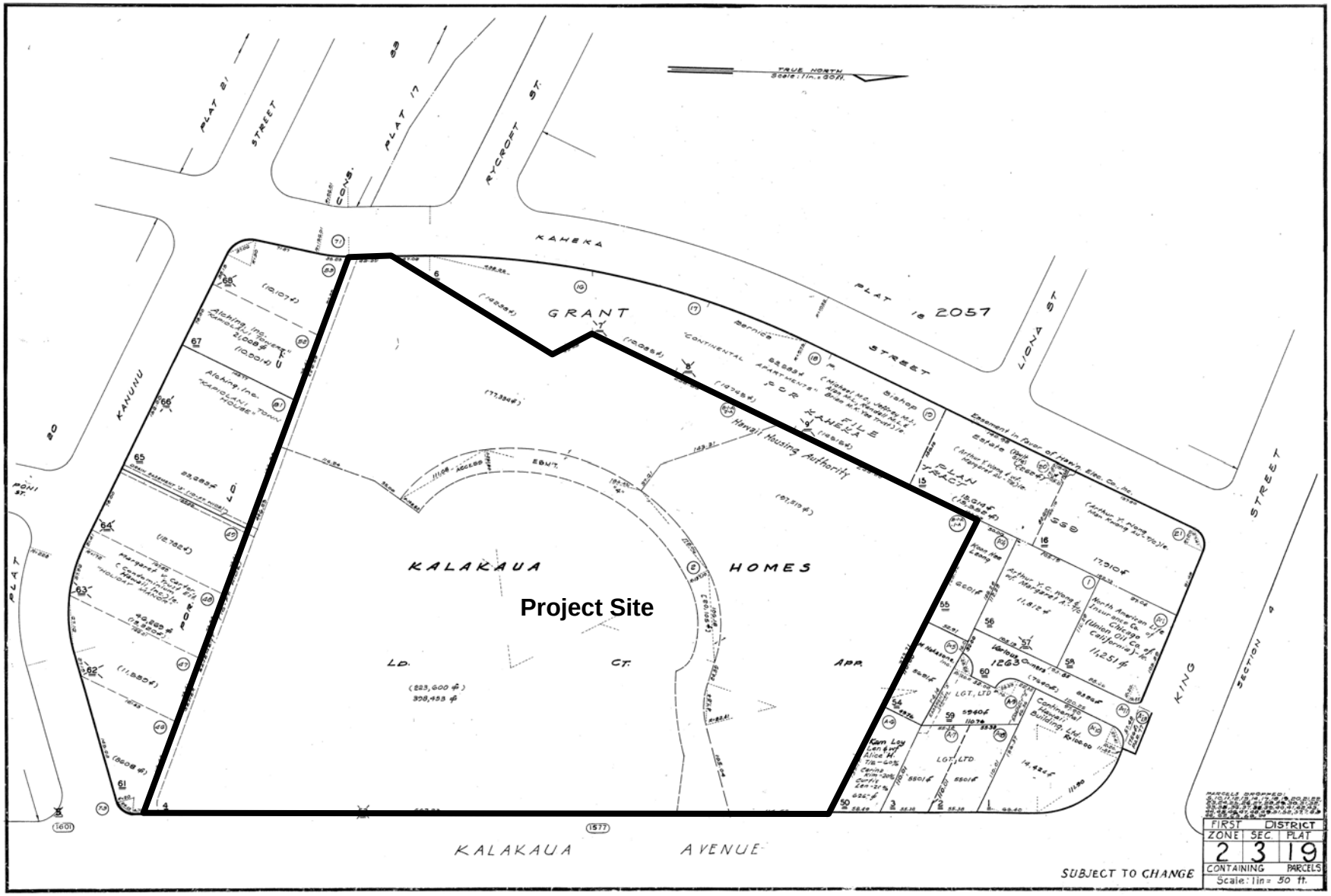
HPHA No. 1062 - Kalākaua Homes (AMP 34)

Figure 1 - Project Location Map

Honolulu, Oʻahu

2,000 FT

HHF PLANNERS
places for people



HPHA No. 1062 - Kalākaua Homes (AMP 34)

Figure 2 - TMK Map

Honolulu, O'ahu

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

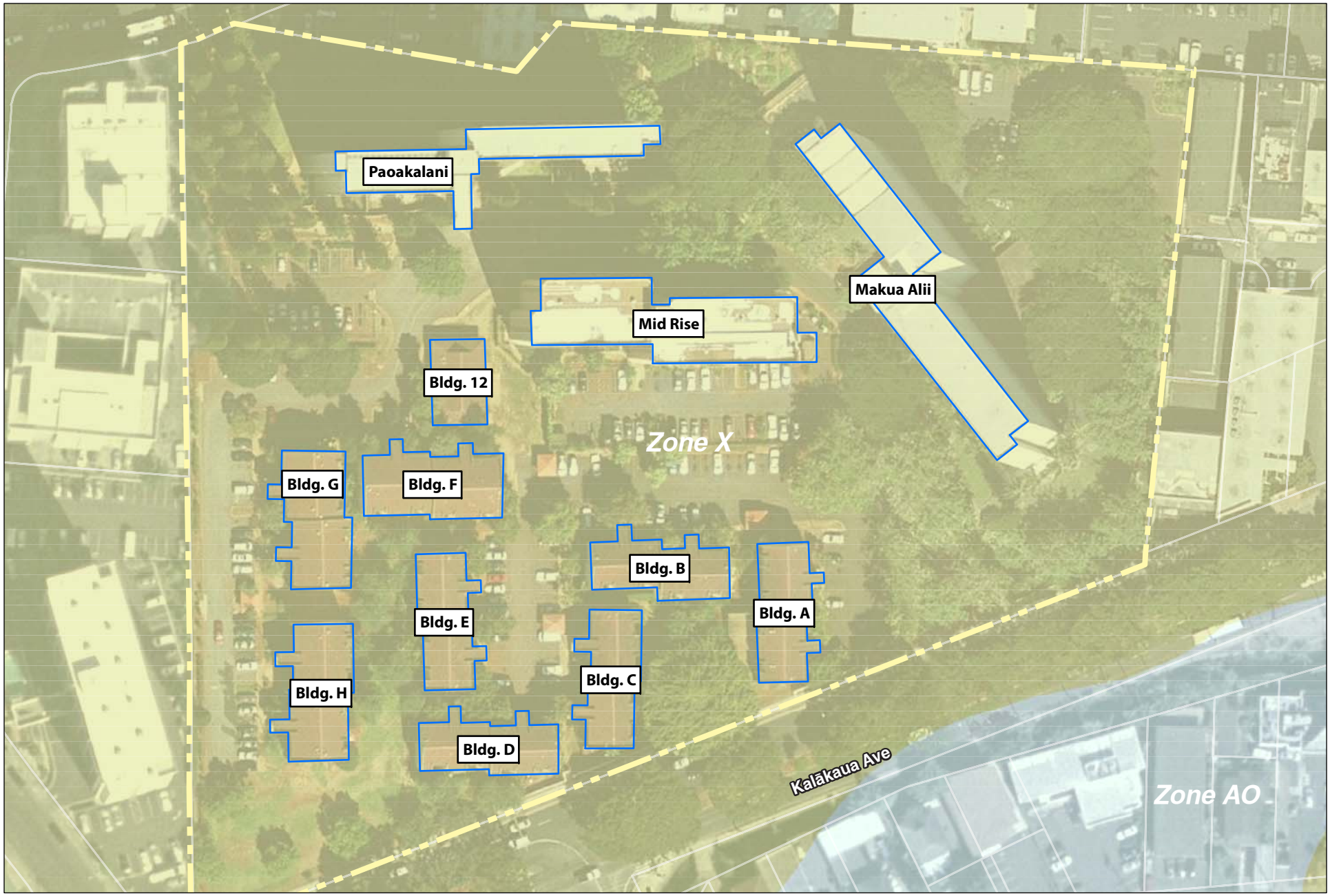
HPHA No. 1062 - Kalākaua Homes (AMP 34)

Figure 3 - Site Map

Honolulu, O'ahu

80 FEET

HHF PLANNERS
places for people



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

LEGEND

- Zone AO - 1% Annual Chance of Shallow Flooding
- Zone X - Outside the 0.2% Annual Chance of Flood

HPHA No. 1062 - Kalākaua Homes (AMP 34)

Figure 4 - Flood Map

Honolulu, O'ahu

80 FEET

HHF PLANNERS
places for people

KALĀKAUA HOMES
SITE PHOTOS

Kalakaua Avenue, fronting housing site, looking north (subject housing on left - not shown)

Kalakaua Avenue, fronting housing site, looking south (subject housing on right). Solid concrete wall buffers housing from street noise.

Kalakaua Avenue, fronting housing site, looking south. Solid concrete wall buffers houing from street noise.

Kalakaua Avenue, fronting housing site, looking south

Entrance; subject housing housing site consists of several low-rise structures and the high-rise shown

Project's southern boundary, looking west

KALĀKAUA HOMES
SITE PHOTOS

Parking lot with roofed trash enclosure and low-rise housing units.

Subject housing units and open yard as seen from Kalakaua Avenue; Paoakalani (high-rise) housing visible, beyond.

Transformer building for entire site, located along Kaheka Street

Backup generator, near project entrance

EXHIBIT B

EDR Radius Map Report

Kalakaua Homes
1545 Kalakaua Ave.
Honolulu, HI 96814

Inquiry Number: 4237094.38s
March 18, 2015

EDR Summary Radius Map Report

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

FORM-NULL-PVC

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

1545 KALAKAUA AVE.
HONOLULU County, HI 96814

COORDINATES

Latitude (North):	21.2956000 - 21˚ 17' 44.16''
Longitude (West):	157.8377000 - 157˚ 50' 15.72''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	620565.1
UTM Y (Meters):	2355168.5
Elevation:	7 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	USGS 7.5 min quad index

MAPPED SITES SUMMARY

Target Property Address:
1545 KALAKAUA AVE.
, HI 96814

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
A1	KALAKAUA HOMES - 17T	1545 KALAKUA AVE,	FTTS, HIST FTTS		TP
A2	KALAKAUA HOMES	1545 KALAKAUA AVE.	RCRA-SQG, FINDS		TP
A3	KALAKAUA HOMES #1910	1545 KALAKAUA AVE.	FTTS, HIST FTTS		TP
4		920 PUNAHOU ST	EDR US Hist Auto Stat	Higher	504, East
B5	LIONELS SERVICE INC	1505 S KING ST	RCRA-SQG	Higher	618, North
B6		1505 S KING ST	EDR US Hist Auto Stat	Higher	618, North
B7	MID PAC PETROLEUM 25	1505 S. KING ST.	LUST, UST, Financial Assurance	Higher	618, North
8	LONGS DRUG STORE NO	966 KAHEKA ST	RCRA-CESQG	Higher	622, NNW
C9	TESORO 2GO 61018	1549 S KING ST	LUST, UST, Financial Assurance	Higher	671, NE
10	GAS PLUS	1524 S KING ST	LUST, UST	Higher	685, NNE
C11		1549 S KING ST	EDR US Hist Auto Stat	Higher	715, NE
C12	O'REILLY AUTO PARTS	1550 SOUTH KING STRE	RCRA-CESQG	Higher	716, NE
C13		1558 S KING ST	EDR US Hist Auto Stat	Higher	722, NE
C14	PUNAHOU REPAIR SHOP	1558 S KING ST	RCRA-CESQG, FINDS	Higher	722, NE
C15	PUNAHOU REPAIR SHOP	1558 S KING ST	LUST, UST	Higher	722, NE
D16		801 KAHEKA ST	EDR US Hist Cleaners	Lower	908, SW
D17		801 KAHEKA ST	EDR US Hist Auto Stat	Lower	908, SW
D18	FIRESTONE STORE	801 KAHEKA ST	LUST, UST, Financial Assurance	Lower	908, SW
D19	HOLIDAY ACTION GAS	801 KAHEKA ST	RCRA-SQG	Lower	908, SW
E20	ALOHA/KING SELF STOR	1414 KALAKAUA AVE	SHWS, ENG CONTROLS, INST CONTROL, VCP	Higher	948, NNE
21	MAUI DIVERS OF HAWAI	1520 LIONA STREET	RCRA-CESQG, FINDS	Higher	973, NW
F22	GAS 'N GLO INC	1670 MAKALOA ST	LUST, UST	Lower	1041, South
E23	7-11 KALAKAUA	1323 KALAKAUA AVE	SHWS, UST, Financial Assurance	Higher	1049, NNE
F24		1665 KALAKAUA AVE	EDR US Hist Auto Stat	Lower	1069, SSE
F25	FORMER KALAKAUA TRAN	1665 KALAKAUA AVE	SHWS, ENG CONTROLS, INST CONTROL	Lower	1069, SSE
F26	KALAKAUA TRANSMISSIO	1665 KALAKAUA AVE	UST	Lower	1069, SSE
F27	KALAKUA TRANSMISSION	1665 KALAKUA AVE	RCRA-CESQG, FINDS	Lower	1073, SSE
28	DEPT OF AGRICULTURE	1428 S KING ST	UST	Higher	1160, NNW
29	C&CH PAWAA FIRE STAT	1610 MAKALOA ST	LUST	Lower	1218, SSW
G30	LIKE LIKE PLAZA PETR	745 KEEAUMOKU ST	SHWS	Higher	1236, West
G31	LIKELIKE DRIVE IN	745 KEEAUMOKU ST	UST	Higher	1236, West
H32	OUTRIGGER HOTELS	1315 KALAKAUA AVE	UST	Higher	1296, NNE
G33	RED BAG 3, LLC	750 KEEAUMOKU ST	RCRA-CESQG, FINDS	Higher	1301, West
H34	ONE KALAKAUA PARTNER	1314 KALAKAUA AVE	UST	Higher	1304, NNE
I35	ROGERS REPAIR INC	1687 KALAKAUA AVE	RCRA-CESQG, FINDS	Lower	1305, SSE
I36	ROGER'S REPAIR INC	1687 KALAKAUA AVE	SHWS	Lower	1305, SSE
37	HECO SUBSTATION: MAK	1544 MAKALOA ST	SHWS, SPILLS, INST CONTROL	Lower	1368, SW
38	MEADOW GOLD DAIRIES	1418 YOUNG ST	SHWS, SPILLS	Higher	1434, NNW
39	YAJIMA OIL OF USA IN	1375 S KING ST	LUST, UST, Financial Assurance	Higher	1449, NW

MAPPED SITES SUMMARY

Target Property Address:
1545 KALAKAUA AVE.
, HI 96814

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
40	HONOLULU STATION - P	1455 S BERETANIA ST	LUST, UST, Financial Assurance	Higher	1493, North
41	WENS LIFE CO., INC	808 SHERIDAN ST	LUST, UST	Higher	1553, WNW
42	NEW OFFICE LOUNGE	1551 KAPIOLANI BLVD	SHWS, LUST, UST	Lower	1558, SW
J43	MAKIKI SHELL	1436 S BERETANIA ST	LUST, UST, Financial Assurance	Higher	1594, North
J44	MID PAC PETROLEUM 25	1406 S BERETANIA ST	LUST, UST, Financial Assurance	Higher	1712, NNW
K45	SUPERBLOCK PROPERTIE	NORTH BLOCK (BLDG N8	LUST, UST	Lower	1777, West
L46	HAKUYOSHA HAWAII, IN	730 SHERIDAN ST	SHWS, SPILLS, INST CONTROL, AIRS	Lower	1806, West
L47	MOTOR SUPPLY	726 SHERIDAN ST	SHWS, INST CONTROL	Lower	1806, West
48	WALGREENS KEEAMOKU	1460 KAPIOLANI BLVD	SHWS	Lower	1824, WSW
L49	SUPERBLOCK PROPERTIE	SOUTH BLOCK (BLDG S1	LUST, UST	Lower	1841, West
K50	SUPERBLOCK PROPERTIE	SOUTH BLOCK (BLDG S2	LUST, UST	Lower	1851, WSW
51	BERETANIA CHEVRON 04	1378 S BERETANIA ST	LUST, UST, Financial Assurance	Higher	1898, NNW
M52	SHRINERS HOSPITALS F	1310 PUNAHOU ST	LUST, UST, Financial Assurance	Higher	1901, NE
N53	FIRST DEVELOPMENT IN	1777 KAPIOLANI BLVD	CERC-NFRAP, RCRA-CESQG, FINDS	Lower	1906, SSE
N54	ALOHA MOTORS 1777 KA	1777 KAPIOLANI BLVD	SHWS, SPILLS	Lower	1906, SSE
O55	HAWAII CONVENTION CE	1801 KALAKAUA AVE	SHWS, SPILLS	Lower	1984, SSE
56	SUPERBLOCK PROPERTIE	SOUTH BLOCK (BLDG S1	LUST, UST	Lower	1995, West
57	SUPERBLOCK PROPERTIE	SOUTH BLOCK (BLDG S2	LUST, UST	Lower	1997, West
O58	FUNAI'S UNION SERVIC	1810 KAPIOLANI BLVD	LUST, UST, Financial Assurance	Lower	1998, SSE
M59	KAPIOLANI WOMEN'S &	1319 PUNAHOU ST	SHWS, UST, AIRS, Financial Assurance	Higher	2013, NE
N60	ALOHA MOTORS	KAPIOLANI BLVD X KAL	LUST, UST	Lower	2039, SSE
61	ALEXANDER TOWER	1226 ALEXANDER ST	LUST, UST	Higher	2096, ENE
62	SUPERBLOCK PROPERTIE	NORTH BLOCK (BLDG N1	LUST, UST	Lower	2108, West
63	CONTINENTAL AUTO SER	1918 ALGAROBA ST	SHWS, SPILLS	Higher	2206, East
64	CARTWRIGHT NEIGHBORH	KEEAUMOKU ST & MATLO	SHWS	Higher	2275, North
65	CUTTER CHEVROLET	1391 KAPIOLANI BLVD	SHWS, LUST, UST, Financial Assurance	Lower	2333, WSW
66	TEXACO STATION 61100	1239 S KING ST	RCRA NonGen / NLR, LUST, UST, SPILLS, Financial...	Higher	2386, NW
67	GRACE OTSUKA APARTME	1233 YOUNG ST	SHWS, ENG CONTROLS, INST CONTROL	Higher	2435, NW
68	WALLYS GARDEN CENTER	1935 S BERETANIA ST	SHWS, SPILLS	Higher	2464, ENE
69	ARCADIA RETIREMENT	1434 PUNAHOU ST	LUST, UST	Higher	2525, NE
70	ALA MOANA UNOCAL	1322 KAPIOLANI BLVD	LUST, UST	Lower	2578, West
71	1012 PIIKOI STREET,	1012 PIIKOI ST	SHWS, SPILLS	Higher	2677, NW
72	YACHT HARBOR TOWERS	1600 ALA MOANA BLVD	SHWS, SPILLS, ENG CONTROLS, INST CONTROL	Lower	2701, SSW
73	SCHUMAN CARRIAGE MOT	1234 S BERETANIA ST	SHWS, LUST, UST, SPILLS, INST CONTROL, Financial...	Higher	2745, NW
74	1609 ALA WAI DIESEL	1609 ALA WAI BLVD	SHWS, SPILLS	Lower	2789, South
75	CENPAC PROPERTIES -	615 PIIKOI ST	SHWS, LUST, UST, SPILLS, Financial Assurance	Lower	2875, West
76	MCCULLY UNION SERVIC	2105 S KING ST	SHWS, LUST, UST, ENG CONTROLS, INST CONTROL,...	Higher	3032, East
77	EVERSHINE X	1230 KAPIOLANI BLVD	SHWS, VCP	Lower	3280, West
78	SEARS ALA MOANA	1450 ALA MOANA BLVD	SHWS	Lower	3380, SW

MAPPED SITES SUMMARY

Target Property Address:
1545 KALAKAUA AVE.
, HI 96814

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
79	DURANT PROPERTIES	1235 KONA ST	SHWS, INST CONTROL	Lower	3436, West
80	HOBRON HOTEL	1744 KAIOO DR	SHWS	Lower	3633, South
81	1310 PENSACOLA STREE	1310 PENSACOLA ST	SHWS	Higher	3654, NW
82	THE PAVILLION	1925 KALAKAUA AVE	SHWS, SPILLS	Lower	3710, SSE
83	PUNAHOU SCHOOL - MAI	1601 PUNAHOU ST	SHWS, LUST, UST, Financial Assurance	Higher	3791, NE
84	AUXILIARY SERVICES -	1039 S KING ST	SHWS, UST, Financial Assurance	Higher	3922, WNW
85	KOOLANI TOWER PROJEC	1189 WAIMANU ST	SHWS, SPILLS, ENG CONTROLS, INST CONTROL	Lower	4063, West
86	RESERVE HOUSING TOWE	1141 WAIMANU ST	SHWS, SPILLS	Lower	4251, West
87	CHEVRON U.S.A., INC.	2002 KALAKAUA AVE	SHWS, LUST	Lower	4291, SSE
88	1800 VANCOUVER DRIVE	1800 VANCOUVER DR	SHWS, INST CONTROL, CDL	Higher	4406, ENE
89	SELF STORAGE 1	438 KAMAKEE ST	SHWS, SPILLS	Lower	4529, West
90	JAS W GLOVER LTD	1046 WAIMAMU ST	RCRA NonGen / NLR, FINDS, SHWS, LUST, UST	Lower	4664, West
91	PACIFICA CONDOMINIUM	1009 KAPIOLANI BLVD	SHWS, LUST	Lower	4700, West
92	ROYAL GARDENS HOTEL	440 OLOHANA ST	SHWS, SPILLS	Lower	4909, SSE
93	ALA WAI COVE CONDOMI	509 UNIVERSITY AVE	SHWS, SPILLS	Lower	4995, SE
94	KING KALAKAUA PLAZA	2080 KALAKAUA AVE	SHWS, LUST, UST, SPILLS, INST CONTROL	Lower	5089, SSE
95	SYMPHONY PARK	850 KAPIOLANI BLVD	SHWS, SPILLS	Lower	5219, WNW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 7 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
KALAKAUA HOMES - 17T 1545 KALAKUA AVE, HONOLULU, HI 96815	FTTS HIST FTTS	N/A
KALAKAUA HOMES 1545 KALAKAUA AVE. HONOLULU, HI 96826	RCRA-SQG FINDS	HIP000142166
KALAKAUA HOMES #1910 1545 KALAKAUA AVE. HONOLULU, HI 96826	FTTS HIST FTTS	N/A

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal CERCLIS NFRAP site List

CERC-NFRAP: A review of the CERC-NFRAP list, as provided by EDR, and dated 10/25/2013 has revealed that there is 1 CERC-NFRAP site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
FIRST DEVELOPMENT IN	***1777 KAPIOLANI BLVD***	***SSE 1/4 - 1/2 (0.361 mi.)***	***N53***	***19***

EXECUTIVE SUMMARY

Federal RCRA generators list

RCRA-SQG: A review of the RCRA-SQG list, as provided by EDR, and dated 12/09/2014 has revealed that there are 2 RCRA-SQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LIONELS SERVICE INC	1505 S KING ST	N 0 - 1/8 (0.117 mi.)	B5	7

Lower Elevation	Address	Direction / Distance	Map ID	Page
HOLIDAY ACTION GAS	801 KAHEKA ST	SW 1/8 - 1/4 (0.172 mi.)	D19	11

RCRA-CESQG: A review of the RCRA-CESQG list, as provided by EDR, and dated 12/09/2014 has revealed that there are 7 RCRA-CESQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LONGS DRUG STORE NO	966 KAHEKA ST	NNW 0 - 1/8 (0.118 mi.)	8	8
O'REILLY AUTO PARTS	1550 SOUTH KING STRE	NE 1/8 - 1/4 (0.136 mi.)	C12	9
PUNAHOU REPAIR SHOP	***1558 S KING ST***	***NE 1/8 - 1/4 (0.137 mi.)***	***C14***	***9***
MAUI DIVERS OF HAWAI	***1520 LIONA STREET***	***NW 1/8 - 1/4 (0.184 mi.)***	***21***	***11***
RED BAG 3, LLC	***750 KEEAUMOKU ST***	***W 1/8 - 1/4 (0.246 mi.)***	***G33***	***13***

Lower Elevation	Address	Direction / Distance	Map ID	Page
KALAKUA TRANSMISSION	***1665 KALAKUA AVE***	***SSE 1/8 - 1/4 (0.203 mi.)***	***F27***	***12***
ROGERS REPAIR INC	***1687 KALAKAUA AVE***	***SSE 1/8 - 1/4 (0.247 mi.)***	***I35***	***14***

State- and tribal - equivalent CERCLIS

SHWS: A review of the SHWS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 44 SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ALOHA/KING SELF STOR	***1414 KALAKAUA AVE***	***NNE 1/8 - 1/4 (0.180 mi.)***	***E20***	***11***
7-11 KALAKAUA	***1323 KALAKAUA AVE***	***NNE 1/8 - 1/4 (0.199 mi.)***	***E23***	***11***
LIKE LIKE PLAZA PETR	745 KEEAUMOKU ST	W 1/8 - 1/4 (0.234 mi.)	G30	13
MEADOW GOLD DAIRIES	***1418 YOUNG ST***	***NNW 1/4 - 1/2 (0.272 mi.)***	***38***	***14***
KAPIOLANI WOMEN'S &	***1319 PUNAHOU ST***	***NE 1/4 - 1/2 (0.381 mi.)***	***M59***	***20***
CONTINENTAL AUTO SER	***1918 ALGAROBA ST***	***E 1/4 - 1/2 (0.418 mi.)***	***63***	***21***
CARTWRIGHT NEIGHBORH	KEEAUMOKU ST & MATLO	N 1/4 - 1/2 (0.431 mi.)	64	22
GRACE OTSUKA APARTME	***1233 YOUNG ST***	***NW 1/4 - 1/2 (0.461 mi.)***	***67***	***22***
WALLYS GARDEN CENTER	***1935 S BERETANIA ST***	***ENE 1/4 - 1/2 (0.467 mi.)***	***68***	***23***
1012 PIIKOI STREET,	***1012 PIIKOI ST***	***NW 1/2 - 1 (0.507 mi.)***	***71***	***23***
SCHUMAN CARRIAGE MOT	***1234 S BERETANIA ST***	***NW 1/2 - 1 (0.520 mi.)***	***73***	***24***
MCCULLY UNION SERVIC	***2105 S KING ST***	***E 1/2 - 1 (0.574 mi.)***	***76***	***25***
1310 PENSACOLA STREE	1310 PENSACOLA ST	NW 1/2 - 1 (0.692 mi.)	81	26
PUNAHOU SCHOOL - MAI	***1601 PUNAHOU ST***	***NE 1/2 - 1 (0.718 mi.)***	***83***	***26***
AUXILIARY SERVICES -	***1039 S KING ST***	***WNW 1/2 - 1 (0.743 mi.)***	***84***	***26***
1800 VANCOUVER DRIVE	***1800 VANCOUVER DR***	***ENE 1/2 - 1 (0.834 mi.)***	***88***	***27***

Lower Elevation	Address	Direction / Distance	Map ID	Page
FORMER KALAKAUA TRAN	***1665 KALAKAUA AVE***	***SSE 1/8 - 1/4 (0.202 mi.)***	***F25***	***12***
ROGER'S REPAIR INC	1687 KALAKAUA AVE	SSE 1/8 - 1/4 (0.247 mi.)	I36	14
HECO SUBSTATION: MAK	***1544 MAKALOA ST***	***SW 1/4 - 1/2 (0.259 mi.)***	***37***	***14***
NEW OFFICE LOUNGE	***1551 KAPIOLANI BLVD***	***SW 1/4 - 1/2 (0.295 mi.)***	***42***	***16***
HAKUYOSHA HAWAII, IN	***730 SHERIDAN ST***	***W 1/4 - 1/2 (0.342 mi.)***	***L46***	***17***
MOTOR SUPPLY	***726 SHERIDAN ST***	***W 1/4 - 1/2 (0.342 mi.)***	***L47***	***17***
WALGREENS KEEAMOKU	1460 KAPIOLANI BLVD	WSW 1/4 - 1/2 (0.345 mi.)	48	17
ALOHA MOTORS 1777 KA	***1777 KAPIOLANI BLVD***	***SSE 1/4 - 1/2 (0.361 mi.)***	***N54***	***19***
HAWAII CONVENTION CE	***1801 KALAKAUA AVE***	***SSE 1/4 - 1/2 (0.376 mi.)***	***O55***	***19***
CUTTER CHEVROLET	***1391 KAPIOLANI BLVD***	***WSW 1/4 - 1/2 (0.442 mi.)***	***65***	***22***
YACHT HARBOR TOWERS	***1600 ALA MOANA BLVD***	***SSW 1/2 - 1 (0.512 mi.)***	***72***	***24***
1609 ALA WAI DIESEL	***1609 ALA WAI BLVD***	***S 1/2 - 1 (0.528 mi.)***	***74***	***24***
CENPAC PROPERTIES -	***615 PIIKOI ST***	***W 1/2 - 1 (0.545 mi.)***	***75***	***24***
EVERSHINE X	***1230 KAPIOLANI BLVD***	***W 1/2 - 1 (0.621 mi.)***	***77***	***25***
SEARS ALA MOANA	1450 ALA MOANA BLVD	SW 1/2 - 1 (0.640 mi.)	78	25
DURANT PROPERTIES	***1235 KONA ST***	***W 1/2 - 1 (0.651 mi.)***	***79***	***25***
HOBRON HOTEL	1744 KAIOO DR	S 1/2 - 1 (0.688 mi.)	80	25
THE PAVILLION	***1925 KALAKAUA AVE***	***SSE 1/2 - 1 (0.703 mi.)***	***82***	***26***
KOOLANI TOWER PROJEC	***1189 WAIMANU ST***	***W 1/2 - 1 (0.770 mi.)***	***85***	***27***
RESERVE HOUSING TOWE	***1141 WAIMANU ST***	***W 1/2 - 1 (0.805 mi.)***	***86***	***27***
CHEVRON U.S.A., INC.	***2002 KALAKAUA AVE***	***SSE 1/2 - 1 (0.813 mi.)***	***87***	***27***
SELF STORAGE 1	***438 KAMAKEE ST***	***W 1/2 - 1 (0.858 mi.)***	***89***	***27***
JAS W GLOVER LTD	***1046 WAIMAMU ST***	***W 1/2 - 1 (0.883 mi.)***	***90***	***28***
PACIFICA CONDOMINIUM	***1009 KAPIOLANI BLVD***	***W 1/2 - 1 (0.890 mi.)***	***91***	***28***
ROYAL GARDENS HOTEL	***440 OLOHANA ST***	***SSE 1/2 - 1 (0.930 mi.)***	***92***	***28***
ALA WAI COVE CONDOMI	***509 UNIVERSITY AVE***	***SE 1/2 - 1 (0.946 mi.)***	***93***	***28***
KING KALAKAUA PLAZA	***2080 KALAKAUA AVE***	***SSE 1/2 - 1 (0.964 mi.)***	***94***	***29***
SYMPHONY PARK	***850 KAPIOLANI BLVD***	***WNW 1/2 - 1 (0.988 mi.)***	***95***	***29***

State and tribal leaking storage tank lists

LUST: A review of the LUST list, as provided by EDR, and dated 03/02/2015 has revealed that there are 28 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MID PAC PETROLEUM 25	***1505 S. KING ST.***	***N 0 - 1/8 (0.117 mi.)***	***B7***	***8***
Facility Status: Site Cleanup Completed (NFA)				
TESORO 2GO 61018	***1549 S KING ST***	***NE 1/8 - 1/4 (0.127 mi.)***	***C9***	***8***
Facility Status: LUST Cleanup Initiated				
GAS PLUS	***1524 S KING ST***	***NNE 1/8 - 1/4 (0.130 mi.)***	***10***	***9***
Facility Status: Site Cleanup Completed (NFA)				
PUNAHOU REPAIR SHOP	***1558 S KING ST***	***NE 1/8 - 1/4 (0.137 mi.)***	***C15***	***10***
Facility Status: Site Cleanup Completed (NFA)				
YAJIMA OIL OF USA IN	***1375 S KING ST***	***NW 1/4 - 1/2 (0.274 mi.)***	***39***	***15***
Facility Status: Site Cleanup Completed (NFA)				
HONOLULU STATION - P	***1455 S BERETANIA ST***	***N 1/4 - 1/2 (0.283 mi.)***	***40***	***15***
Facility Status: Site Cleanup Completed (NFA)				
WENS LIFE CO., INC	***808 SHERIDAN ST***	***WNW 1/4 - 1/2 (0.294 mi.)***	***41***	***15***
Facility Status: Site Cleanup Completed (NFA)				

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MAKIKI SHELL	***1436 S BERETANIA ST***	***N 1/4 - 1/2 (0.302 mi.)***	***J43***	***16***
Facility Status: Site Cleanup Completed (NFA)				
MID PAC PETROLEUM 25	***1406 S BERETANIA ST***	***NNW 1/4 - 1/2 (0.324 mi.)***	***J44***	***16***
Facility Status: Site Cleanup Completed (NFA)				
Facility Status: Site Cleanup Completed with EHMP				
BERETANIA CHEVRON 04	***1378 S BERETANIA ST***	***NNW 1/4 - 1/2 (0.359 mi.)***	***51***	***18***
Facility Status: Site Cleanup Completed (NFA)				
SHRINERS HOSPITALS F	***1310 PUNAHOU ST***	***NE 1/4 - 1/2 (0.360 mi.)***	***M52***	***18***
Facility Status: Site Cleanup Completed (NFA)				
ALEXANDER TOWER	***1226 ALEXANDER ST***	***ENE 1/4 - 1/2 (0.397 mi.)***	***61***	***21***
Facility Status: Site Cleanup Completed (NFA)				
TEXACO STATION 61100	***1239 S KING ST***	***NW 1/4 - 1/2 (0.452 mi.)***	***66***	***22***
Facility Status: Site Cleanup Completed (NFA)				
ARCADIA RETIREMENT	***1434 PUNAHOU ST***	***NE 1/4 - 1/2 (0.478 mi.)***	***69***	***23***
Facility Status: Site Cleanup Completed (NFA)				

Lower Elevation	Address	Direction / Distance	Map ID	Page
FIRESTONE STORE	***801 KAHEKA ST***	***SW 1/8 - 1/4 (0.172 mi.)***	***D18***	***10***
Facility Status: Site Cleanup Completed with EHE/EHMP				
Facility Status: Site Cleanup Completed (NFA)				
GAS 'N GLO INC	***1670 MAKALOA ST***	***S 1/8 - 1/4 (0.197 mi.)***	***F22***	***11***
Facility Status: Site Cleanup Completed (NFA)				
C&CH PAWAA FIRE STAT	1610 MAKALOA ST	SSW 1/8 - 1/4 (0.231 mi.)	29	13
Facility Status: Site Cleanup Completed (NFA)				
NEW OFFICE LOUNGE	***1551 KAPIOLANI BLVD***	***SW 1/4 - 1/2 (0.295 mi.)***	***42***	***16***
Facility Status: Site Cleanup Completed (NFA)				
SUPERBLOCK PROPERTIE	***NORTH BLOCK (BLDG N8***	***W 1/4 - 1/2 (0.337 mi.)***	***K45***	***17***
Facility Status: Site Cleanup Completed (NFA)				
SUPERBLOCK PROPERTIE	***SOUTH BLOCK (BLDG S1***	***W 1/4 - 1/2 (0.349 mi.)***	***L49***	***17***
Facility Status: Site Cleanup Completed (NFA)				
SUPERBLOCK PROPERTIE	***SOUTH BLOCK (BLDG S2***	***WSW 1/4 - 1/2 (0.351 mi.)***	***K50***	***18***
Facility Status: Site Cleanup Completed (NFA)				
SUPERBLOCK PROPERTIE	***SOUTH BLOCK (BLDG S1***	***W 1/4 - 1/2 (0.378 mi.)***	***56***	***19***
Facility Status: Site Cleanup Completed (NFA)				
SUPERBLOCK PROPERTIE	***SOUTH BLOCK (BLDG S2***	***W 1/4 - 1/2 (0.378 mi.)***	***57***	***20***
Facility Status: Site Cleanup Completed (NFA)				
FUNAI'S UNION SERVIC	***1810 KAPIOLANI BLVD***	***SSE 1/4 - 1/2 (0.378 mi.)***	***O58***	***20***
Facility Status: Site Cleanup Completed (NFA)				
ALOHA MOTORS	***KAPIOLANI BLVD X KAL***	***SSE 1/4 - 1/2 (0.386 mi.)***	***N60***	***20***
Facility Status: Site Cleanup Completed (NFA)				
SUPERBLOCK PROPERTIE	***NORTH BLOCK (BLDG N1***	***W 1/4 - 1/2 (0.399 mi.)***	***62***	***21***
Facility Status: Site Cleanup Completed (NFA)				
CUTTER CHEVROLET	***1391 KAPIOLANI BLVD***	***WSW 1/4 - 1/2 (0.442 mi.)***	***65***	***22***
Facility Status: Site Cleanup Completed (NFA)				
ALA MOANA UNOCAL	***1322 KAPIOLANI BLVD***	***W 1/4 - 1/2 (0.488 mi.)***	***70***	***23***
Facility Status: Site Cleanup Completed (NFA)				

State and tribal registered storage tank lists

UST: A review of the UST list, as provided by EDR, and dated 03/02/2015 has revealed that there are 12 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MID PAC PETROLEUM 25	***1505 S. KING ST.***	***N 0 - 1/8 (0.117 mi.)***	***B7***	***8***
TESORO 2GO 61018	***1549 S KING ST***	***NE 1/8 - 1/4 (0.127 mi.)***	***C9***	***8***
GAS PLUS	***1524 S KING ST***	***NNE 1/8 - 1/4 (0.130 mi.)***	***10***	***9***
PUNAHOU REPAIR SHOP	***1558 S KING ST***	***NE 1/8 - 1/4 (0.137 mi.)***	***C15***	***10***
7-11 KALAKAUA	***1323 KALAKAUA AVE***	***NNE 1/8 - 1/4 (0.199 mi.)***	***E23***	***11***
DEPT OF AGRICULTURE	1428 S KING ST	NNW 1/8 - 1/4 (0.220 mi.)	28	12
LIKELIKE DRIVE IN	745 KEEAUMOKU ST	W 1/8 - 1/4 (0.234 mi.)	G31	13
OUTRIGGER HOTELS	1315 KALAKAUA AVE	NNE 1/8 - 1/4 (0.245 mi.)	H32	13
ONE KALAKAUA PARTNER	1314 KALAKAUA AVE	NNE 1/8 - 1/4 (0.247 mi.)	H34	14

Lower Elevation	Address	Direction / Distance	Map ID	Page
FIRESTONE STORE	***801 KAHEKA ST***	***SW 1/8 - 1/4 (0.172 mi.)***	***D18***	***10***
GAS 'N GLO INC	***1670 MAKALOA ST***	***S 1/8 - 1/4 (0.197 mi.)***	***F22***	***11***
KALAKAUA TRANSMISSIO	1665 KALAKAUA AVE	SSE 1/8 - 1/4 (0.202 mi.)	F26	12

State and tribal institutional control / engineering control registries

ENG CONTROLS: A review of the ENG CONTROLS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 3 ENG CONTROLS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ALOHA/KING SELF STOR	***1414 KALAKAUA AVE***	***NNE 1/8 - 1/4 (0.180 mi.)***	***E20***	***11***
GRACE OTSUKA APARTME	***1233 YOUNG ST***	***NW 1/4 - 1/2 (0.461 mi.)***	***67***	***22***

Lower Elevation	Address	Direction / Distance	Map ID	Page
FORMER KALAKAUA TRAN	***1665 KALAKAUA AVE***	***SSE 1/8 - 1/4 (0.202 mi.)***	***F25***	***12***

INST CONTROL: A review of the INST CONTROL list, as provided by EDR, and dated 12/02/2014 has revealed that there are 6 INST CONTROL sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ALOHA/KING SELF STOR	***1414 KALAKAUA AVE***	***NNE 1/8 - 1/4 (0.180 mi.)***	***E20***	***11***
GRACE OTSUKA APARTME	***1233 YOUNG ST***	***NW 1/4 - 1/2 (0.461 mi.)***	***67***	***22***

Lower Elevation	Address	Direction / Distance	Map ID	Page
FORMER KALAKAUA TRAN	***1665 KALAKAUA AVE***	***SSE 1/8 - 1/4 (0.202 mi.)***	***F25***	***12***
HECO SUBSTATION: MAK	***1544 MAKALOA ST***	***SW 1/4 - 1/2 (0.259 mi.)***	***37***	***14***
HAKUYOSHA HAWAII, IN	***730 SHERIDAN ST***	***W 1/4 - 1/2 (0.342 mi.)***	***L46***	***17***
MOTOR SUPPLY	***726 SHERIDAN ST***	***W 1/4 - 1/2 (0.342 mi.)***	***L47***	***17***

State and tribal voluntary cleanup sites

VCP: A review of the VCP list, as provided by EDR, and dated 12/02/2014 has revealed that there is 1 VCP site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ALOHA/KING SELF STOR	***1414 KALAKAUA AVE***	***NNE 1/8 - 1/4 (0.180 mi.)***	***E20***	***11***

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Auto Stat: A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there are 6 EDR US Hist Auto Stat sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	920 PUNAHOU ST	E 0 - 1/8 (0.095 mi.)	4	7
Not reported	1505 S KING ST	N 0 - 1/8 (0.117 mi.)	B6	8
Not reported	1549 S KING ST	NE 1/8 - 1/4 (0.135 mi.)	C11	9
Not reported	1558 S KING ST	NE 1/8 - 1/4 (0.137 mi.)	C13	9

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	801 KAHEKA ST	SW 1/8 - 1/4 (0.172 mi.)	D17	10
Not reported	1665 KALAKAUA AVE	SSE 1/8 - 1/4 (0.202 mi.)	F24	12

EDR US Hist Cleaners: A review of the EDR US Hist Cleaners list, as provided by EDR, has revealed that there is 1 EDR US Hist Cleaners site within approximately 0.25 miles of the target property.

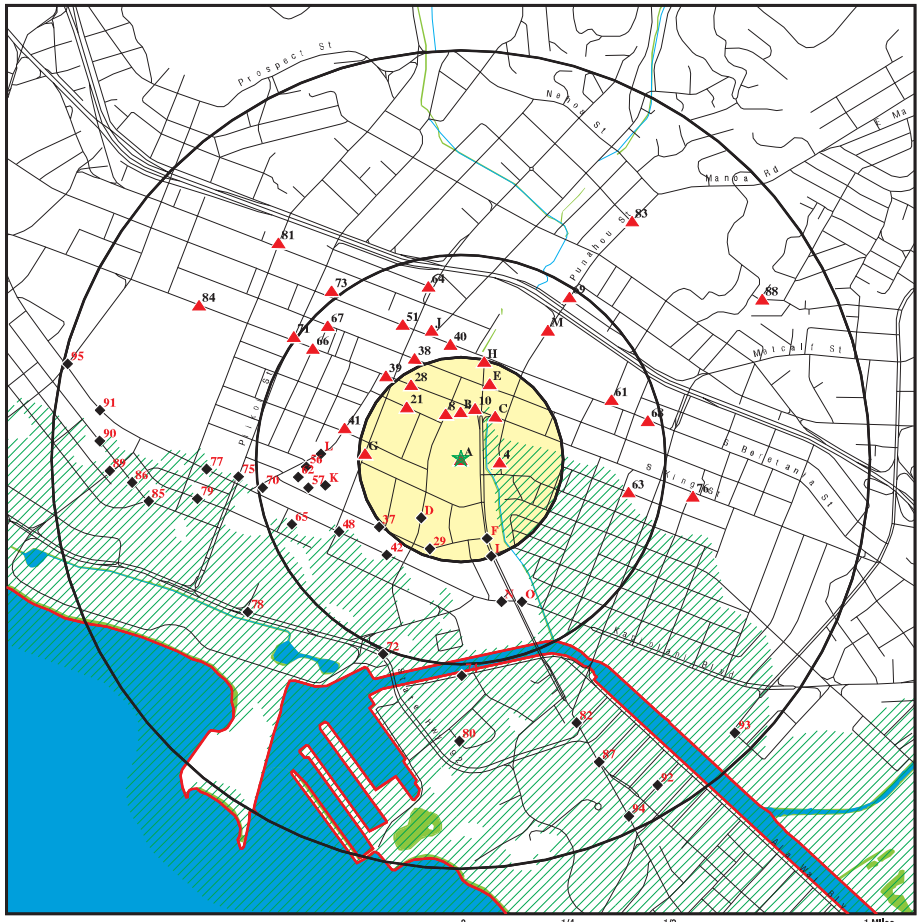
Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	801 KAHEKA ST	SW 1/8 - 1/4 (0.172 mi.)	D16	10

Count: 17 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
HONOLULU	S111704669	ALA WAI HARBOR BOAT REPAIR YARD	ALA MOANA BLVD		SHWS
HONOLULU	S112375188	MAKIKI STREAM KING STREET AND KALA	KALAKAUA ST AND KING ST	96826	SPILLS 90
HONOLULU	S107023655	MAKIKI STREAM AT KALAKAUA AVENUE	KALAKAUA AVE	96815	SPILLS
HONOLULU	1008919686	KALAKAUA AVENUE WATER SYSTEM IMPRO	KALAKAUA AVENUE	96815	FINDS
HONOLULU	S112375236	MAKIKI STREAM KING STREET AND KALA	KALAKAUA ST AND KING ST		SPILLS 90
HONOLULU	S106818084	KALAKAUA AVENUE, SEWAGE SPILL	KALAKAUA AVE	96815	SPILLS
HONOLULU	S107023352	MAKIKI STREAM, ALONG KALAKAUA AVEN	KALAKAUA AVE		SPILLS
HONOLULU	S107023711	KALAKAUA AVENUE, UNKNOWN CHEMICALS	KALAKAUA AVE	96815	SPILLS
HONOLULU	S107024027	KALAKAUA AVENUE & RYCROFT ST, WAIK	KALAKAUA AVE & RYCROFT ST	96815	SPILLS
HONOLULU	S115555360	MAKIKI STREAM, KING STREET AND KAL	KALAKAUA ST & KING ST		SPILLS
HONOLULU	S106818081	KALAKAUA AVENUE	KALAKAUA AVE		SPILLS
HONOLULU	S107023195	ALA WAI CANAL BY KALAKAUA AVENUE	KALAKAUA AVE	96815	SPILLS
HONOLULU	1008171358	KALAKAUA AVENUE BRIDGE	KALAKAUA AVENUE	96826	FINDS
HONOLULU	S109096053	JCRA INVESTMENTS	1685 KAPIOLANI PROPERTY	96814	LUST
HONOLULU	S106818337	KEEAUMOKU SUPERBLOCK PROJECT	KEEAUMOKU ST		SHWS, SPILLS
HONOLULU	1014696845	FY10/FY11 WAIKIKI IMPROVEMENTS - K	VARIOUS SECTIONS ALONG KALAKAU	96815	FINDS
MOKULEIA	S106817395	HAWAIIAN BITUMULS PAVING & PRECAST	FARRINGTON HWY	96826	SHWS

OVERVIEW MAP - 4237094.38S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Kalakaua Homes ADDRESS: 1545 Kalakaua Ave. Honolulu HI 96814 LAT/LONG: 21.2956 / 157.8377	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.38s DATE: March 18, 2015 7:44 am

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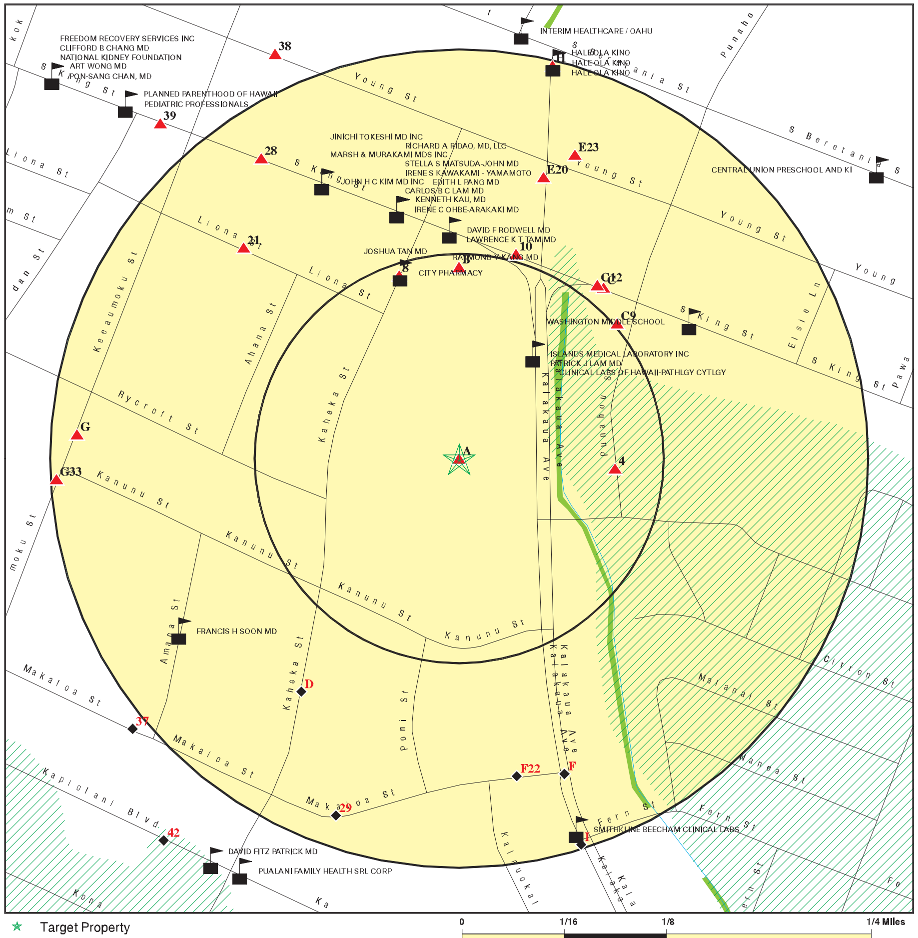
DETAIL MAP - 4237094.38S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Kalakaua Homes ADDRESS: 1545 Kalakaua Ave. Honolulu HI 96814 LAT/LONG: 21.2956 / 157.8377	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.38s DATE: March 18, 2015 7:44 am

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	1	NR	NR	1
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250	1	1	1	NR	NR	NR	3
RCRA-CESQG	0.250		1	6	NR	NR	NR	7
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
SHWS	1.000		0	5	14	25	NR	44
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		1	6	21	NR	NR	28
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250		1	11	NR	NR	NR	12

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		0	2	1	NR	NR	3
INST CONTROL	0.500		0	2	4	NR	NR	6
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	1	0	NR	NR	1
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP	2	NR	NR	NR	NR	NR	2
HIST FTTS	TP	2	NR	NR	NR	NR	NR	2
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP	1	NR	NR	NR	NR	NR	1
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		2	4	NR	NR	NR	6
EDR US Hist Cleaners	0.250		0	1	NR	NR	NR	1
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
RGA HWS	TP		NR	NR	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1
Target Property
Actual: 7 ft.

KALAKAUA HOMES - 17TH FLOOR
1545 KALAKUA AVE,
HONOLULU, HI 96815

FTTS **1008893467**
HIST FTTS **N/A**

Click here for full text details

A2
Target Property
Actual: 7 ft.

KALAKAUA HOMES
1545 KALAKAUA AVE.
HONOLULU, HI 96826

RCRA-SQG **1016675603**
FINDS **HIP000142166**

Click here for full text details

RCRA-SQG
EPA Id: HIP000142166

A3
Target Property
Actual: 7 ft.

KALAKAUA HOMES #1910 & #1911
1545 KALAKAUA AVE.
HONOLULU, HI 96826

FTTS **1008893509**
HIST FTTS **N/A**

Click here for full text details

4
East
< 1/8
0.095 mi.
504 ft.
Relative: Higher

920 PUNAHOU ST
HONOLULU, HI 96826

EDR US Hist Auto Stat **1015675164**
N/A

Click here for full text details

B5
North
< 1/8
0.117 mi.
618 ft.
Relative: Higher

LIONELS SERVICE INC
1505 S KING ST
HONOLULU, HI 96826

RCRA-SQG **1000823234**
HID984468736

Click here for full text details

RCRA-SQG
EPA Id: HID984468736

B6
North
< 1/8
0.117 mi.
618 ft.
Relative: Higher

1505 S KING ST
HONOLULU, HI 96826

EDR US Hist Auto Stat **1015239122**
N/A

Click here for full text details

B7
North
< 1/8
0.117 mi.
618 ft.
Relative: Higher

MID PAC PETROLEUM 253943 (PREV: LIONEL'S UNOCAL)
1505 S. KING ST.
HONOLULU, HI 96826

LUST **U001235016**
UST **N/A**
Financial Assurance

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100041

UST
Tank Status: Permanently Out of Use
Tank Status: Permanently out of Use
Facility Id: 9-100041

8
NNW
< 1/8
0.118 mi.
622 ft.
Relative: Higher

LONGS DRUG STORE NO 6889
966 KAHEKA ST
HONOLULU, HI 96814

RCRA-CESQG **1014389656**
HIR000140038

Click here for full text details

RCRA-CESQG
EPA Id: HIR000140038

C9
NE
1/8-1/4
0.127 mi.
671 ft.
Relative: Higher

TESORO 2GO 61018
1549 S KING ST
HONOLULU, HI 96826

LUST **U003402801**
UST **N/A**
Financial Assurance

Click here for full text details

LUST
Facility Status: LUST Cleanup Initiated
Facility Id: 9-100059

UST
Tank Status: Currently In Use
Tank Status: Permanently out of Use
Facility Id: 9-100059

10 NNE 1/8-1/4 0.130 mi. 685 ft.
Relative: Higher

GAS PLUS — LUST, UST — U001235103, N/A
1524 S KING ST
HONOLULU, HI 96826

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100224

UST
Tank Status: Permanently Out of Use
Facility Id: 9-100224

C11 NE 1/8-1/4 0.135 mi. 715 ft.
Relative: Higher

1549 S KING ST
HONOLULU, HI 96826

EDR US Hist Auto Stat — 1015246246, N/A

Click here for full text details

C12 NE 1/8-1/4 0.136 mi. 716 ft.
Relative: Higher

O'REILLY AUTO PARTS STORE 3479 — RCRA-CESQG — 1016675612, HIR000142000
1550 SOUTH KING STREET
HONOLULU, HI 96826

Click here for full text details

RCRA-CESQG
EPA Id: HIR000142000

C13 NE 1/8-1/4 0.137 mi. 722 ft.
Relative: Higher

1558 S KING ST
HONOLULU, HI 96826

EDR US Hist Auto Stat — 1015247485, N/A

Click here for full text details

C14 NE 1/8-1/4 0.137 mi. 722 ft.
Relative: Higher

PUNAHOU REPAIR SHOP INC — RCRA-CESQG, FINDS — 1004688805, HID981657208
1558 S KING ST
HONOLULU, HI 96826

Click here for full text details

RCRA-CESQG
EPA Id: HID981657208

C15 NE 1/8-1/4 0.137 mi. 722 ft.
Relative: Higher

PUNAHOU REPAIR SHOP — LUST, UST — 1000146579, N/A
1558 S KING ST
HONOLULU, HI 96826

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-101387

UST
Tank Status: Permanently Out of Use
Facility Id: 9-101387

D16 SW 1/8-1/4 0.172 mi. 908 ft.
Relative: Lower

801 KAHEKA ST
HONOLULU, HI 96814

EDR US Hist Cleaners — 1015096937, N/A

Click here for full text details

D17 SW 1/8-1/4 0.172 mi. 908 ft.
Relative: Lower

801 KAHEKA ST
HONOLULU, HI 96814

EDR US Hist Auto Stat — 1015638698, N/A

Click here for full text details

D18 SW 1/8-1/4 0.172 mi. 908 ft.
Relative: Lower

FIRESTONE STORE — LUST, UST, Financial Assurance — U001235963, N/A
801 KAHEKA ST
HONOLULU, HI 96814

Click here for full text details

LUST
Facility Status: Site Cleanup Completed with EHE/EHMP
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-102591
Facility Id: 9-102403

UST
Tank Status: Permanently Out of Use
Facility Id: 9-102591
Facility Id: 9-102403

D19
SW
1/8-1/4
0.172 mi.
908 ft.

Relative: Lower

HOLIDAY ACTION GAS — **RCRA-SQG** — **1000223098**, **HID981577265**
801 KAHEKA ST
HONOLULU, HI 96814

Click here for full text details

RCRA-SQG
EPA Id: HID981577265

E20
NNE
1/8-1/4
0.180 mi.
948 ft.

Relative: Higher

ALOHA/KING SELF STORAGE — **SHWS**, **ENG CONTROLS**, **INST CONTROL**, **VCP** — **S106816203**, **N/A**
1414 KALAKAUA AVE
HONOLULU, HI

Click here for full text details

21
NW
1/8-1/4
0.184 mi.
973 ft.

Relative: Higher

MAUI DIVERS OF HAWAII LTD# — **RCRA-CESQG**, **FINDS** — **1000244830**, **HID009116757**
1520 LIONA STREET
HONOLULU, HI 96814

Click here for full text details

RCRA-CESQG
EPA Id: HID009116757

F22
South
1/8-1/4
0.197 mi.
1041 ft.

Relative: Lower

GAS 'N GLO INC — **LUST**, **UST** — **U001235256**, **N/A**
1670 MAKALOA ST
HONOLULU, HI 96814

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100834

UST
Tank Status: Permanently Out of Use
Facility Id: 9-100834

E23
NNE
1/8-1/4
0.199 mi.
1049 ft.

Relative: Higher

7-11 KALAKAUA — **SHWS**, **UST**, **Financial Assurance** — **U001235396**, **N/A**
1323 KALAKAUA AVE
HONOLULU, HI 96826

Click here for full text details

UST
Tank Status: Currently In Use
Tank Status: Currently in Use
Tank Status: Permanently out of Use

7-11 KALAKAUA (Continued) — **U001235396**
Facility Id: 9-101172

F24
SSE
1/8-1/4
0.202 mi.
1069 ft.

Relative: Lower

EDR US Hist Auto Stat — **1015261837**, **N/A**
1665 KALAKAUA AVE
HONOLULU, HI 96826

Click here for full text details

F25
SSE
1/8-1/4
0.202 mi.
1069 ft.

Relative: Lower

FORMER KALAKAUA TRANSMISSION INC — **SHWS**, **ENG CONTROLS**, **INST CONTROL** — **S106817112**, **N/A**
1665 KALAKAUA AVE
HONOLULU, HI 96826

Click here for full text details

F26
SSE
1/8-1/4
0.202 mi.
1069 ft.

Relative: Lower

KALAKAUA TRANSMISSION INC. — **UST** — **1000147228**, **N/A**
1665 KALAKAUA AVE
HONOLULU, HI 96826

Click here for full text details

UST
Tank Status: Permanently Out of Use
Facility Id: 9-100763

F27
SSE
1/8-1/4
0.203 mi.
1073 ft.

Relative: Lower

KALAKUA TRANSMISSION INC — **RCRA-CESQG**, **FINDS** — **1004688784**, **HID981637564**
1665 KALAKUA AVE
HONOLULU, HI 96826

Click here for full text details

RCRA-CESQG
EPA Id: HID981637564

28
NNW
1/8-1/4
0.220 mi.
1160 ft.

Relative: Higher

DEPT OF AGRICULTURE — **UST** — **U003154533**, **N/A**
1428 S KING ST
HONOLULU, HI 96814

Click here for full text details

UST
Tank Status: Permanently Out of Use
Facility Id: 9-101926

29 SSW 1/8-1/4 0.231 mi. 1218 ft. Relative: Lower

C&CH PAWAA FIRE STATION
1610 MAKALOA ST
HONOLULU, HI 96814

LUST — **1006843337** / **N/A**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100087

G30 West 1/8-1/4 0.234 mi. 1236 ft. Relative: Higher

LIKE LIKE PLAZA PETROLEUM CONTAMINATION
745 KEEAUMOKU ST
HONOLULU, HI 96814

SHWS — **1006819347** / **N/A**

Click here for full text details

G31 West 1/8-1/4 0.234 mi. 1236 ft. Relative: Higher

LIKELIKE DRIVE IN
745 KEEAUMOKU ST
HONOLULU, HI 96800

UST — **U003154728** / **N/A**

Click here for full text details

UST
Tank Status: Permanently Out of Use
Facility Id: 9-102931

H32 NNE 1/8-1/4 0.245 mi. 1296 ft. Relative: Higher

OUTRIGGER HOTELS
1315 KALAKAUA AVE
HONOLULU, HI 96815

UST — **U001235483** / **N/A**

Click here for full text details

UST
Tank Status: Permanently Out of Use
Facility Id: 9-101431

G33 West 1/8-1/4 0.246 mi. 1301 ft. Relative: Higher

RED BAG 3, LLC
750 KEEAUMOKU ST
HONOLULU, HI 96814

RCRA-CESQG, FINDS — **1007447433** / **HIR000136036**

Click here for full text details

RCRA-CESQG
EPA Id: HIR000136036

H34 NNE 1/8-1/4 0.247 mi. 1304 ft. Relative: Higher

ONE KALAKAUA PARTNERS
1314 KALAKAUA AVE
HONOLULU, HI 96823

UST — **U003154847** / **N/A**

Click here for full text details

UST
Tank Status: Permanently Out of Use
Facility Id: 9-103140

I35 SSE 1/8-1/4 0.247 mi. 1305 ft. Relative: Lower

ROGERS REPAIR INC
1687 KALAKAUA AVE
HONOLULU, HI 96826

RCRA-CESQG, FINDS — **1000742297** / **HID981615222**

Click here for full text details

RCRA-CESQG
EPA Id: HID981615222

I36 SSE 1/8-1/4 0.247 mi. 1305 ft. Relative: Lower

ROGER'S REPAIR INC
1687 KALAKAUA AVE
HONOLULU, HI 96826

SHWS — **S106820247** / **N/A**

Click here for full text details

---

37 SW 1/4-1/2 0.259 mi. 1368 ft. Relative: Lower

HECO SUBSTATION: MAKALOA SUBSTATION
1544 MAKALOA ST
HONOLULU, HI 96814

SHWS, SPILLS, INST CONTROL — **S106817457** / **N/A**

Click here for full text details

---

38 NNW 1/4-1/2 0.272 mi. 1434 ft. Relative: Higher

MEADOW GOLD DAIRIES (ICE CREAM PLANT)
1418 YOUNG ST
HONOLULU, HI 96814

SHWS, SPILLS — **S104657475** / **N/A**

Click here for full text details

39 NW 1/4-1/2 0.274 mi. 1449 ft.
Relative: Higher

YAJIMA OIL OF USA INC — LUST, UST, Financial Assurance — U001235254 / N/A
1375 S KING ST
HONOLULU, HI 96814

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100832

UST
Tank Status: Permanently Out of Use
Tank Status: Currently in Use
Facility Id: 9-100832

---

40 North 1/4-1/2 0.283 mi. 1493 ft.
Relative: Higher

HONOLULU STATION - PAWAA ANNEX — LUST, UST, Financial Assurance — U001235050 / N/A
1455 S BERETANIA ST
HONOLULU, HI 96814

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100114

UST
Tank Status: Permanently Out of Use
Facility Id: 9-100114

---

41 WNW 1/4-1/2 0.294 mi. 1553 ft.
Relative: Higher

WENS LIFE CO., INC — LUST, UST — U001235446 / N/A
808 SHERIDAN ST
HONOLULU, HI 96814

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-101330

UST
Tank Status: Permanently Out of Use
Facility Id: 9-101330

42 SW 1/4-1/2 0.295 mi. 1558 ft.
Relative: Lower

NEW OFFICE LOUNGE — SHWS, LUST, UST — 1006843573 / N/A
1551 KAPIOLANI BLVD
HONOLULU, HI 96814

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-103517

UST
Tank Status: Permanently out of Use
Facility Id: 9-103517

J43 North 1/4-1/2 0.302 mi. 1594 ft.
Relative: Higher

MAKIKI SHELL — LUST, UST, Financial Assurance — U003188504 / N/A
1436 S BERETANIA ST
HONOLULU, HI 96814

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100833

UST
Tank Status: Permanently Out of Use
Facility Id: 9-100833

J44 NNW 1/4-1/2 0.324 mi. 1712 ft.
Relative: Higher

MID PAC PETROLEUM 250344 (PREV: DON'S MAKIKI) — LUST, UST, Financial Assurance — U001235010 / N/A
1406 S BERETANIA ST
HONOLULU, HI 96814

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Status: Site Cleanup Completed with EHMP
Facility Id: 9-100035

UST
Tank Status: Permanently Out of Use
Tank Status: Currently In Use
Facility Id: 9-100035

K45 West 1/4-1/2 0.337 mi. 1777 ft. Relative: Lower

SUPERBLOCK PROPERTIES
NORTH BLOCK (BLDG N8) / KEEAUMOKU ST
HONOLULU, HI 96814

LUST **UST** | **U003221767** **N/A**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-102594

UST
Tank Status: Permanently Out of Use
Facility Id: 9-102594

L46 West 1/4-1/2 0.342 mi. 1806 ft. Relative: Lower

HAKUYOSHA HAWAII, INC
730 SHERIDAN ST
HONOLULU, HI 96814

SHWS **SPILLS** **INST CONTROL** **AIRS** | **S106817254** **N/A**

Click here for full text details

AIRS
Facility Id: 0462-01-N
Facility Id: 0564-01-C

L47 West 1/4-1/2 0.342 mi. 1806 ft. Relative: Lower

MOTOR SUPPLY
726 SHERIDAN ST
HONOLULU, HI 96814

SHWS **INST CONTROL** | **S108008592** **N/A**

Click here for full text details

---

48 WSW 1/4-1/2 0.345 mi. 1824 ft. Relative: Lower

WALGREENS KEEAMOKU
1460 KAPIOLANI BLVD
HONOLULU, HI 96814

SHWS | **S115488729** **N/A**

Click here for full text details

L49 West 1/4-1/2 0.349 mi. 1841 ft. Relative: Lower

SUPERBLOCK PROPERTIES
SOUTH BLOCK (BLDG S13) / MAKALOA ST
HONOLULU, HI 96814

LUST **UST** | **U001235971** **N/A**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-102600

UST

SUPERBLOCK PROPERTIES (Continued) | **U001235971**

Tank Status: Permanently Out of Use
Facility Id: 9-102600

K50 WSW 1/4-1/2 0.351 mi. 1851 ft. Relative: Lower

SUPERBLOCK PROPERTIES
SOUTH BLOCK (BLDG S20) / MAKALOA ST
HONOLULU, HI 96814

LUST **UST** | **U001235973** **N/A**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-102602

UST
Tank Status: Permanently Out of Use
Facility Id: 9-102602

---

51 NNW 1/4-1/2 0.359 mi. 1898 ft. Relative: Higher

BERETANIA CHEVRON 0423
1378 S BERETANIA ST
HONOLULU, HI 96814

LUST **UST** **Financial Assurance** | **U003221686** **N/A**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-101720

UST
Tank Status: Currently in Use
Tank Status: Currently In Use
Facility Id: 9-101720

M52 NE 1/4-1/2 0.360 mi. 1901 ft. Relative: Higher

SHRINERS HOSPITALS FOR CRIPPLED CHILDREN
1310 PUNAHOU ST
HONOLULU, HI 96826

LUST **UST** **Financial Assurance** | **U001235903** **N/A**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-102410

UST
Tank Status: Permanently Out of Use
Tank Status: Permanently out of Use
Facility Id: 9-102410

N53
SSE
1/4-1/2
0.361 mi.
1906 ft.

Relative: Lower

FIRST DEVELOPMENT INC
1777 KAPIOLANI BLVD
HONOLULU, HI 96814

CERC-NFRAP
RCRA-CESQG
FINDS

1003879446
HID984466060

Click here for full text details

CERC-NFRAP
EPA Id: HID984466060

RCRA-CESQG
EPA Id: HID984466060

N54
SSE
1/4-1/2
0.361 mi.
1906 ft.

Relative: Lower

ALOHA MOTORS 1777 KAPIOLANI BLVD
1777 KAPIOLANI BLVD
HONOLULU, HI 96813

SHWS
SPILLS

1006820308
N/A

Click here for full text details

O55
SSE
1/4-1/2
0.376 mi.
1984 ft.

Relative: Lower

HAWAII CONVENTION CENTER
1801 KALAKAUA AVE
HONOLULU, HI 96814

SHWS
SPILLS

1006820847
N/A

Click here for full text details

56
West
1/4-1/2
0.378 mi.
1995 ft.

Relative: Lower

SUPERBLOCK PROPERTIES
SOUTH BLOCK (BLDG S1) / SHERIDAN ST
HONOLULU, HI 96814

LUST
UST

U003221769
N/A

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-102596

UST
Tank Status: Permanently Out of Use
Facility Id: 9-102596

57
West
1/4-1/2
0.378 mi.
1997 ft.

Relative: Lower

SUPERBLOCK PROPERTIES
SOUTH BLOCK (BLDG S25) / MAKALOA ST
HONOLULU, HI 96814

LUST
UST

U001235974
N/A

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-102603

UST
Tank Status: Permanently Out of Use
Facility Id: 9-102603

O58
SSE
1/4-1/2
0.378 mi.
1998 ft.

Relative: Lower

FUNAI'S UNION SERVICE L-5583
1810 KAPIOLANI BLVD
HONOLULU, HI 96813

LUST
UST
Financial Assurance

U001235021
N/A

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100047

UST
Tank Status: Permanently Out of Use
Facility Id: 9-100047

M59
NE
1/4-1/2
0.381 mi.
2013 ft.

Relative: Higher

KAPIOLANI WOMEN'S & CHILDREN'S MEDICAL CENTER
1319 PUNAHOU ST
HONOLULU, HI 96826

SHWS
UST
AIRS
Financial Assurance

U001235208
N/A

Click here for full text details

UST
Tank Status: Permanently out of Use
Tank Status: Permanently Out of Use
Facility Id: 9-100740

AIRS
Facility Id: 0588-01-N

N60
SSE
1/4-1/2
0.386 mi.
2039 ft.

Relative: Lower

ALOHA MOTORS
KAPIOLANI BLVD X KALAKAUA AVE
HONOLULU, HI 96815

LUST
UST

U001235755
N/A

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)

ALOHA MOTORS (Continued) — **U001235755**

Facility Id: 9-102160

UST
Tank Status: Permanently Out of Use
Facility Id: 9-102160

---

61 ENE 1/4-1/2 0.397 mi. 2096 ft. Relative: Higher

ALEXANDER TOWER
1226 ALEXANDER ST
HONOLULU, HI 96826

LUST, UST — **U003711696**, **N/A**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-103531

UST
Tank Status: Permanently Out of Use
Facility Id: 9-103531

---

62 West 1/4-1/2 0.399 mi. 2108 ft. Relative: Lower

SUPERBLOCK PROPERTIES
NORTH BLOCK (BLDG N15) / SHERIDAN ST
HONOLULU, HI 96814

LUST, UST — **U003221768**, **N/A**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-102595

UST
Tank Status: Permanently Out of Use
Facility Id: 9-102595

---

63 East 1/4-1/2 0.418 mi. 2206 ft. Relative: Higher

CONTINENTAL AUTO SERVICES
1918 ALGAROBA ST
HONOLULU, HI 96826

SHWS, SPILLS — **S104534121**, **N/A**

Click here for full text details

64 North 1/4-1/2 0.431 mi. 2275 ft. Relative: Higher

CARTWRIGHT NEIGHBORHOOD PARK
KEEAUMOKU ST & MATLOCK AVE
HONOLULU, HI 96814

SHWS — **1006820122**, **N/A**

Click here for full text details

---

65 WSW 1/4-1/2 0.442 mi. 2333 ft. Relative: Lower

CUTTER CHEVROLET
1391 KAPIOLANI BLVD
HONOLULU, HI 96814

SHWS, LUST, UST, Financial Assurance — **U001235085**, **N/A**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100185

UST
Tank Status: Permanently Out of Use
Facility Id: 9-100185

---

66 NW 1/4-1/2 0.452 mi. 2386 ft. Relative: Higher

TEXACO STATION 611000090
1239 S KING ST
HONOLULU, HI 96814

RCRA NonGen / NLR, LUST, UST, SPILLS, Financial Assurance — **1000601548**, **HID984467852**

Click here for full text details

RCRA NonGen / NLR
EPA Id: HID984467852

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100340

UST
Tank Status: Permanently Out of Use
Facility Id: 9-100340

---

67 NW 1/4-1/2 0.461 mi. 2435 ft. Relative: Higher

GRACE OTSUKA APARTMENT COMPLEX
1233 YOUNG ST
HONOLULU, HI 96814

SHWS, ENG CONTROLS, INST CONTROL — **S110061466**, **N/A**

Click here for full text details

68 ENE 1/4-1/2 0.467 mi. 2464 ft. Relative: Higher

WALLYS GARDEN CENTER — SHWS, SPILLS — S111678012, N/A
1935 S BERETANIA ST
HONOLULU, HI

Click here for full text details

---

69 NE 1/4-1/2 0.478 mi. 2525 ft. Relative: Higher

ARCADIA RETIREMENT — LUST, UST — U003402852, N/A
1434 PUNAHOU ST
HONOLULU, HI 96822

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-103458

UST
Tank Status: Permanently Out of Use
Facility Id: 9-103458

---

70 West 1/4-1/2 0.488 mi. 2578 ft. Relative: Lower

ALA MOANA UNOCAL — LUST, UST — U001235012, N/A
1322 KAPIOLANI BLVD
HONOLULU, HI 96814

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100037

UST
Tank Status: Permanently Out of Use
Facility Id: 9-100037

---

71 NW 1/2-1 0.507 mi. 2677 ft. Relative: Higher

1012 PIIKOI STREET, ANIN-PIIKOI BUILDING — SHWS, SPILLS — S106815117, N/A
1012 PIIKOI ST
HONOLULU, HI 96814

Click here for full text details

72 SSW 1/2-1 0.512 mi. 2701 ft. Relative: Lower

YACHT HARBOR TOWERS — SHWS, SPILLS, ENG CONTROLS, INST CONTROL — S106821166, N/A
1600 ALA MOANA BLVD
HONOLULU, HI 96815

Click here for full text details

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73 NW 1/2-1 0.520 mi. 2745 ft. Relative: Higher

SCHUMAN CARRIAGE MOTORS, LTD. — SHWS, LUST, UST, SPILLS, INST CONTROL, Financial Assurance — U003221663, N/A
1234 S BERETANIA ST
HONOLULU, HI 96814

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-101276

UST
Tank Status: Permanently Out of Use
Facility Id: 9-101276

---

74 South 1/2-1 0.528 mi. 2789 ft. Relative: Lower

1609 ALA WAI DIESEL RELEASE — SHWS, SPILLS — S108008656, N/A
1609 ALA WAI BLVD
HONOLULU, HI

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75 West 1/2-1 0.545 mi. 2875 ft. Relative: Lower

CENPAC PROPERTIES - OFFICE BUILDING — SHWS, LUST, UST, SPILLS, Financial Assurance — U003402842, N/A
615 PIIKOI ST
HONOLULU, HI 96814

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LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-103438

UST
Tank Status: Permanently Out of Use
Facility Id: 9-103438

76 East 1/2-1 0.574 mi. 3032 ft. Relative: Higher

MCCULLY UNION SERVICE
2105 S KING ST
HONOLULU, HI 96826

SHWS, LUST, UST, ENG CONTROLS, INST CONTROL, Financial Assurance

U001235168
N/A

Click here for full text details

LUST
Facility Status: Monitored Natural Attenuation
Facility Status: Active Remediation
Facility Id: 9-100341

UST
Tank Status: Permanently Out of Use
Tank Status: Currently In Use
Facility Id: 9-100341

---

77 West 1/2-1 0.621 mi. 3280 ft. Relative: Lower

EVERSHINE X
1230 KAPIOLANI BLVD
HONOLULU, HI 96814

SHWS, VCP

S105262688
N/A

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---

78 SW 1/2-1 0.640 mi. 3380 ft. Relative: Lower

SEARS ALA MOANA
1450 ALA MOANA BLVD
HONOLULU, HI 96814

SHWS

S115488724
N/A

Click here for full text details

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79 West 1/2-1 0.651 mi. 3436 ft. Relative: Lower

DURANT PROPERTIES
1235 KONA ST
HONOLULU, HI

SHWS, INST CONTROL

S109096045
N/A

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80 South 1/2-1 0.688 mi. 3633 ft. Relative: Lower

HOBRON HOTEL
1744 KAIOO DR
HONOLULU, HI 96815

SHWS

S106817744
N/A

Click here for full text details

81 NW 1/2-1 0.692 mi. 3654 ft. Relative: Higher

1310 PENSACOLA STREET
1310 PENSACOLA ST
HONOLULU, HI

SHWS

S111704658
N/A

Click here for full text details

---

82 SSE 1/2-1 0.703 mi. 3710 ft. Relative: Lower

THE PAVILLION
1925 KALAKAUA AVE
HONOLULU, HI 96815

SHWS, SPILLS

S106820617
N/A

Click here for full text details

---

83 NE 1/2-1 0.718 mi. 3791 ft. Relative: Higher

PUNAHOU SCHOOL - MAINTENANCE SHOP
1601 PUNAHOU ST
HONOLULU, HI 96822

SHWS, LUST, UST, Financial Assurance

U003541737
N/A

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100297

UST
Tank Status: Permanently Out of Use
Tank Status: Currently in Use
Facility Id: 9-101654
Facility Id: 9-100297
Facility Id: 9-101653

---

84 WNW 1/2-1 0.743 mi. 3922 ft. Relative: Higher

AUXILIARY SERVICES - DOE
1039 S KING ST
HONOLULU, HI 96814

SHWS, UST, Financial Assurance

U003154583
N/A

Click here for full text details

UST
Tank Status: Permanently Out of Use
Facility Id: 9-102337

85 West 1/2-1 0.770 mi. 4063 ft. Relative: Lower

KOOLANI TOWER PROJECT — SHWS, SPILLS, ENG CONTROLS, INST CONTROL — S106818609 / N/A
1189 WAIMANU ST
HONOLULU, HI 96814

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86 West 1/2-1 0.805 mi. 4251 ft. Relative: Lower

RESERVE HOUSING TOWER SOIL CONTAMINATION — SHWS, SPILLS — 1006819959 / N/A
1141 WAIMANU ST
HONOLULU, HI 96813

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87 SSE 1/2-1 0.813 mi. 4291 ft. Relative: Lower

CHEVRON U.S.A., INC. — SHWS, LUST — U001235436 / N/A
2002 KALAKAUA AVE
HONOLULU, HI 96815

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LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-101266

---

88 ENE 1/2-1 0.834 mi. 4406 ft. Relative: Higher

1800 VANCOUVER DRIVE — SHWS, INST CONTROL, CDL — S110526102 / N/A
1800 VANCOUVER DR
HONOLULU, HI 96822

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89 West 1/2-1 0.858 mi. 4529 ft. Relative: Lower

SELF STORAGE 1 — SHWS, SPILLS — 1006819998 / N/A
438 KAMAKEE ST
HONOLULU, HI 96814

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90 West 1/2-1 0.883 mi. 4664 ft. Relative: Lower

JAS W GLOVER LTD — RCRA NonGen / NLR, FINDS, SHWS, LUST, UST — 1000135795 / HID981637861
1046 WAIMAMU ST
HONOLULU, HI 96814

Click here for full text details

RCRA NonGen / NLR
EPA Id: HID981637861

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100835

UST
Tank Status: Permanently Out of Use
Facility Id: 9-100835

---

91 West 1/2-1 0.890 mi. 4700 ft. Relative: Lower

PACIFICA CONDOMINIUM — SHWS, LUST — S110765470 / N/A
1009 KAPIOLANI BLVD
HONOLULU, HI 96814

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-103909

---

92 SSE 1/2-1 0.930 mi. 4909 ft. Relative: Lower

ROYAL GARDENS HOTEL DIESEL — SHWS, SPILLS — S110061800 / N/A
440 OLOHANA ST
HONOLULU, HI

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93 SE 1/2-1 0.946 mi. 4995 ft. Relative: Lower

ALA WAI COVE CONDOMINIUM APARTMENTS — SHWS, SPILLS — 1006820430 / N/A
509 UNIVERSITY AVE
HONOLULU, HI 96815

Click here for full text details

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
94 SSE 1/2-1 0.964 mi. 5089 ft.	**KING KALAKAUA PLAZA** **2080 KALAKAUA AVE** **HONOLULU, HI 96815**	**SHWS** **LUST** **UST** **SPILLS** **INST CONTROL**	**U003154872** **N/A**

Relative: Lower

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-103235

UST
Tank Status: Permanently Out of Use
Facility Id: 9-103235

---

95 WNW 1/2-1 0.988 mi. 5219 ft.	**SYMPHONY PARK** **850 KAPIOLANI BLVD** **HONOLULU, HI 96807**	**SHWS** **SPILLS**	**S107022567** **N/A**

Relative: Lower

Click here for full text details

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
HI	AIRS	List of Permitted Facilities	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	BROWNFIELDS	Brownfields Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	CDL	Clandestine Drug Lab Listing	Department of Health	08/04/2010	09/10/2010	10/22/2010
HI	DRYCLEANERS	Permitted Drycleaner Facility Listing	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	ENG CONTROLS	Engineering Control Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	Financial Assurance	Financial Assurance Information Listing	Department of Health	12/01/2014	12/19/2014	01/28/2015
HI	INST CONTROL	Sites with Institutional Controls	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	LUST	Leaking Underground Storage Tank Database	Department of Health	03/02/2015	03/04/2015	03/17/2015
HI	RGA HWS	Recovered Government Archive State Hazardous Waste Facilitie	Department of Health		07/01/2013	01/08/2014
HI	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Health		07/01/2013	01/17/2014
HI	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	Department of Health		07/01/2013	01/03/2014
HI	SHWS	Sites List	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	SPILLS	Release Notifications	Department of Health	12/02/2014	12/22/2014	01/28/2015
HI	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	03/10/2012	01/03/2013	02/11/2013
HI	SWF/LF	Permitted Landfills in the State of Hawaii	Department of Health	09/17/2012	04/03/2013	05/10/2013
HI	UIC	Underground Injection Wells Listing	Department of Health	02/07/2013	02/12/2013	04/09/2013
HI	UST	Underground Storage Tank Database	Department of Health	03/02/2015	03/04/2015	03/17/2015
HI	VCP	Voluntary Response Program Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	04/22/2013	03/03/2015	03/09/2015
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2011	02/26/2013	04/19/2013
US	CERCLIS	Comprehensive Environmental Response, Compensation, and Liab	EPA	10/25/2013	11/11/2013	02/13/2014
US	CERCLIS-NFRAP	CERCLIS No Further Remedial Action Planned	EPA	10/25/2013	11/11/2013	02/13/2014
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	07/01/2014	09/10/2014	10/20/2014
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	01/23/2015	02/13/2015	03/09/2015
US	CORRACTS	Corrective Action Report	EPA	12/09/2014	12/29/2014	01/29/2015
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DELISTED NPL	National Priority List Deletions	EPA	12/16/2014	01/08/2015	02/09/2015
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	07/31/2012	08/07/2012	09/18/2012
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EDR US Hist Auto Stat	EDR Exclusive Historic Gas Stations	EDR, Inc.			
US	EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	09/29/2014	09/30/2014	11/06/2014
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	07/21/2014	10/07/2014	10/20/2014
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
US	FEMA UST	Underground Storage Tank Listing	FEMA	01/01/2010	02/16/2010	04/12/2010
US	FINDS	Facility Index System/Facility Registry System	EPA	08/16/2014	09/10/2014	10/20/2014
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	06/06/2014	09/10/2014	09/18/2014
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	12/29/2014	12/30/2014	03/09/2015
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	01/23/2015	02/06/2015	03/09/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	02/01/2013	05/01/2013	11/01/2013

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	01/30/2015	02/05/2015	03/09/2015
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/10/2015	03/13/2015
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	01/28/2015	01/30/2015	03/13/2015
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	01/08/2015	01/08/2015	02/09/2015
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2005	12/08/2006	01/11/2007
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	02/01/2013	05/01/2013	01/27/2014
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	01/30/2015	02/05/2015	03/13/2015
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/13/2015	03/13/2015
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	01/29/2015	01/30/2015	03/13/2015
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	12/14/2014	02/13/2015	03/13/2015
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	09/29/2014	10/01/2014	11/06/2014
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	11/25/2014	11/26/2014	01/29/2015
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	02/18/2014	03/18/2014	04/24/2014
US	LUCIS	Land Use Control Information System	Department of the Navy	12/03/2014	12/12/2014	01/29/2015
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	12/29/2014	01/08/2015	01/29/2015
US	NPL	National Priority List	EPA	12/16/2014	01/08/2015	02/09/2015
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	07/01/2014	10/15/2014	11/17/2014
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	02/01/2011	10/19/2011	01/10/2012
US	PRP	Potentially Responsible Parties	EPA	10/25/2013	10/17/2014	10/20/2014
US	Proposed NPL	Proposed National Priority List Sites	EPA	12/16/2014	01/08/2015	02/09/2015
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	10/07/2014	10/08/2014	10/20/2014
US	RCRA NonGen / NLR	RCRA - Non Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RMP	Risk Management Plans	Environmental Protection Agency	08/01/2014	08/12/2014	11/06/2014
US	ROD	Records Of Decision	EPA	11/25/2013	12/12/2013	02/24/2014
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	03/07/2011	03/09/2011	05/02/2011
US	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2011	07/31/2013	09/13/2013
US	TSCA	Toxic Substances Control Act	EPA	12/31/2012	01/15/2015	01/29/2015
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	09/14/2010	10/07/2011	03/01/2012
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/16/2014	10/31/2014	11/17/2014
US	US AIRS MINOR	Air Facility System Data	EPA	10/16/2014	10/31/2014	11/17/2014

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	12/22/2014	12/22/2014	01/29/2015
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	11/19/2014	11/21/2014	01/29/2015
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	12/30/2014	12/31/2014	01/29/2015
US	Oil/Gas Pipelines	GeoData Digital Line Graphs from 1:100,000-Scale Maps	USGS			
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
US	USGS 7.5' Topographic Map	Scanned Digital USGS 7.5' Topographic Map (DRG)	USGS			

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

KALAKAUA HOMES
1545 KALAKAUA AVE.
HONOLULU, HI 96814

TARGET PROPERTY COORDINATES

Latitude (North):	21.2956 - 21˚ 17' 44.16''
Longitude (West):	157.8377 - 157˚ 50' 15.72''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	620565.1
UTM Y (Meters):	2355168.5
Elevation:	7 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	21157-C7 HONOLULU, HI
Most Recent Revision:	Not reported

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

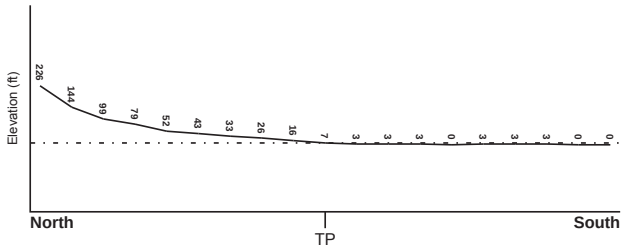
TOPOGRAPHIC INFORMATION

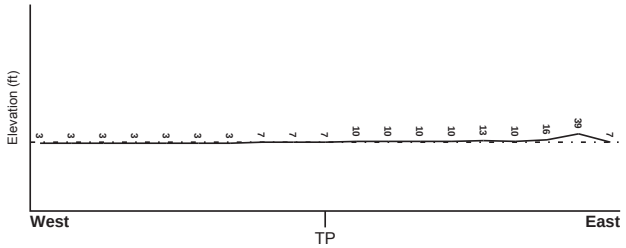
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General South

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 7 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
HONOLULU, HI	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 15003C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
HONOLULU	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

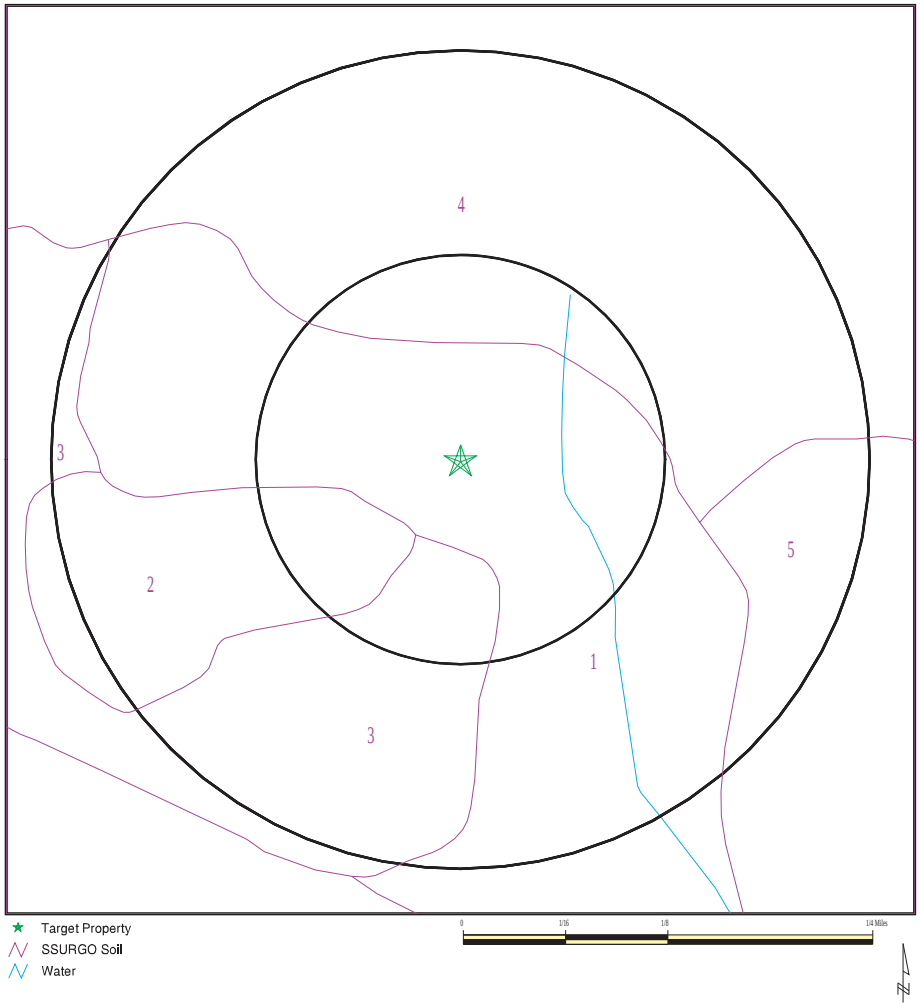
Era: -
System: -
Series: -
Code: N/A *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: -

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4237094.38s



★ Target Property
SSURGO Soil
Water

SITE NAME: Kalakaua Homes ADDRESS: 1545 Kalakaua Ave. Honolulu HI 96814 LAT/LONG: 21.2956 / 157.8377	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.38s DATE: March 18, 2015 7:44 am

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Kawaihapai

Soil Surface Texture: clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		Soil Reaction (pH)
1	0 inches	22 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 42.34 Min: 4.23	Max: 7.3 Min: 6.6
2	22 inches	31 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.14 Min: 14.11	Max: 7.3 Min: 6.6
3	31 inches	53 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.14 Min: 14.11	Max: 7.3 Min: 6.6

Soil Map ID: 2

Soil Component Name: Pearl Harbor

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 30 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4.23 Min: 0.42	Max: 7.3 Min: 6.6
2	11 inches	31 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 8.4 Min: 6.6
3	31 inches	48 inches	muck	A-8	Highly organic soils, Peat.	Max: 0.42 Min: 0.01	Max: 7.8 Min: 7.4

Soil Map ID: 3

Soil Component Name: Ewa

Soil Surface Texture: silty clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Highly organic soils, Peat.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6
2	7 inches	29 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Highly organic soils, Peat.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6
3	29 inches	38 inches	bedrock	Not reported	Not reported	Max: 42 Min: 1	Max: Min:

Soil Map ID: 4

Soil Component Name: Makiki

Soil Surface Texture: clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	20 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Highly organic soils, Peat.	Max: 42 Min: 4.23	Max: 5.5 Min: 5.1
2	20 inches	29 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Highly organic soils, Peat.	Max: 14.11 Min: 4.23	Max: 6 Min: 5.6
3	29 inches	59 inches	paragravelly clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.14 Min: 14.11	Max: 6 Min: 5.6

Soil Map ID: 5

Soil Component Name: Fill land, mixed

Soil Surface Texture: gravelly sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 152 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	gravelly sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 1.41	Max: 7.3 Min: 6.1
2	5 inches	59 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 1.41	Max: 7.3 Min: 6.1
3	59 inches	70 inches	bedrock	Not reported	Not reported	Max: 0.42 Min: 0.02	Max: Min:

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A2	USGS40000269556	0 - 1/8 Mile ESE
B3	USGS40000269567	0 - 1/8 Mile NNE
B5	USGS40000269568	1/8 - 1/4 Mile NNW
B6	USGS40000269571	1/8 - 1/4 Mile NNW
D10	USGS40000269572	1/8 - 1/4 Mile NW
C12	USGS40000269561	1/8 - 1/4 Mile West
E13	USGS40000269580	1/8 - 1/4 Mile NNE
F15	USGS40000269578	1/4 - 1/2 Mile NE
G17	USGS40000269559	1/4 - 1/2 Mile East

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
G19	USGS40000269562	1/4 - 1/2 Mile East
H21	USGS40000269592	1/4 - 1/2 Mile NNW
I22	USGS40000269569	1/4 - 1/2 Mile WNW
J24	USGS40000269570	1/4 - 1/2 Mile ENE
H25	USGS40000269603	1/4 - 1/2 Mile NNW
K28	USGS40000269584	1/4 - 1/2 Mile NW
L29	USGS40000269591	1/4 - 1/2 Mile NE
M32	USGS40000269555	1/4 - 1/2 Mile East
N33	USGS40000269607	1/4 - 1/2 Mile NNE
O34	USGS40000269614	1/4 - 1/2 Mile NNE
P38	USGS40000269575	1/4 - 1/2 Mile ENE
P39	USGS40000269583	1/4 - 1/2 Mile ENE
Q42	USGS40000269590	1/4 - 1/2 Mile NE
P44	USGS40000269574	1/4 - 1/2 Mile ENE
P49	USGS40000269573	1/2 - 1 Mile ENE
S52	USGS40000269632	1/2 - 1 Mile NNW
T54	USGS40000269566	1/2 - 1 Mile ENE
U56	USGS40000269589	1/2 - 1 Mile ENE
T58	USGS40000269565	1/2 - 1 Mile East
U59	USGS40000269587	1/2 - 1 Mile ENE
T62	USGS40000269564	1/2 - 1 Mile East
V64	USGS40000269642	1/2 - 1 Mile NNW
W67	USGS40000269585	1/2 - 1 Mile WNW
X69	USGS40000269611	1/2 - 1 Mile NE
Y71	USGS40000269615	1/2 - 1 Mile NW
Z74	USGS40000269602	1/2 - 1 Mile ENE
Z77	USGS40000269593	1/2 - 1 Mile ENE
AB81	USGS40000269619	1/2 - 1 Mile NW
AA83	USGS40000269599	1/2 - 1 Mile ENE
AA84	USGS40000269600	1/2 - 1 Mile ENE
AA85	USGS40000269596	1/2 - 1 Mile ENE
AA86	USGS40000269595	1/2 - 1 Mile ENE
AA87	USGS40000269598	1/2 - 1 Mile ENE
AA88	USGS40000269597	1/2 - 1 Mile ENE
AA90	USGS40000269601	1/2 - 1 Mile ENE
AB95	USGS40000269620	1/2 - 1 Mile WNW
AC99	USGS40000269497	1/2 - 1 Mile South
AC100	USGS40000269498	1/2 - 1 Mile South
AD101	USGS40000269677	1/2 - 1 Mile NNE
AE103	USGS40000269616	1/2 - 1 Mile WNW
AF106	USGS40000269604	1/2 - 1 Mile WNW
AF107	USGS40000269605	1/2 - 1 Mile WNW
AG110	USGS40000269702	1/2 - 1 Mile North
AI113	USGS40000269494	1/2 - 1 Mile South
AJ115	USGS40000269543	1/2 - 1 Mile ESE
AJ116	USGS40000269544	1/2 - 1 Mile ESE
AK119	USGS40000269644	1/2 - 1 Mile NW
AK123	USGS40000269637	1/2 - 1 Mile NW
AL125	USGS40000269698	1/2 - 1 Mile NNE
AM129	USGS40000269680	1/2 - 1 Mile NE
AE130	USGS40000269622	1/2 - 1 Mile WNW
132	USGS40000269490	1/2 - 1 Mile South

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
AN138	USGS40000269530	1/2 - 1 Mile ESE
AO139	USGS40000269676	1/2 - 1 Mile NE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
Z75	HI0000324	1/2 - 1 Mile ENE

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

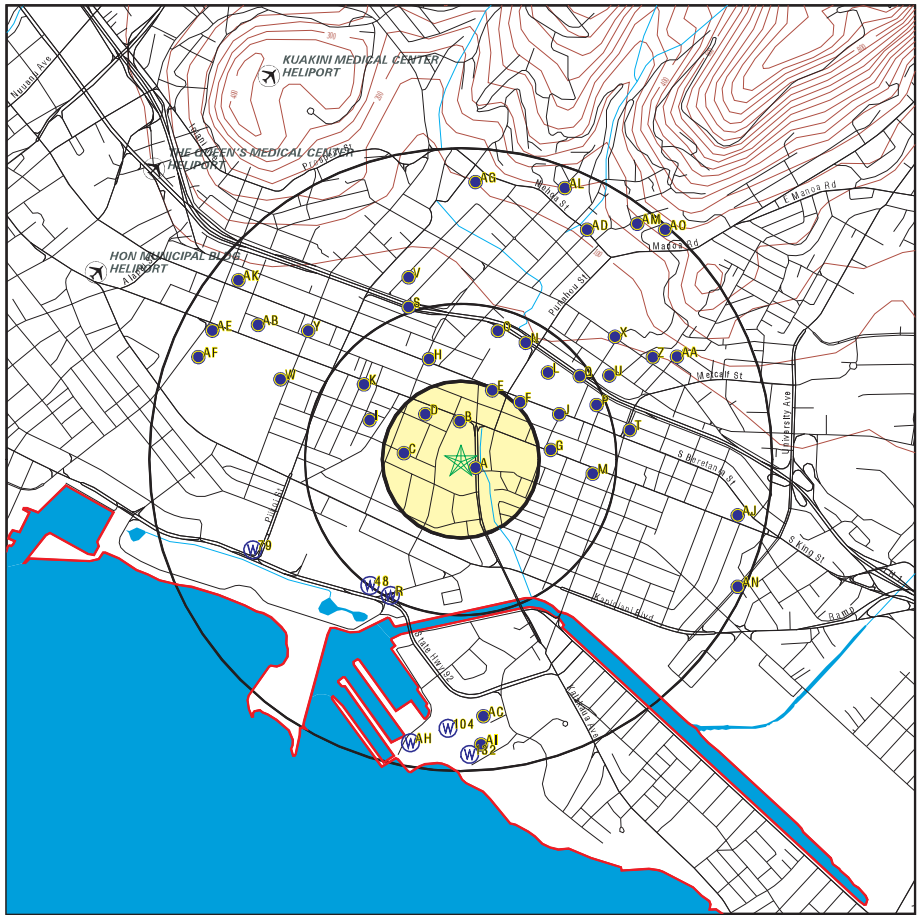
MAP ID	WELL ID	LOCATION FROM TP
A1	HI8000000002117	0 - 1/8 Mile ESE
B4	HI8000000002130	0 - 1/8 Mile NNE
B7	HI8000000002134	1/8 - 1/4 Mile NNW
B8	HI8000000002137	1/8 - 1/4 Mile NNE
C9	HI8000000002120	1/8 - 1/4 Mile West
D11	HI8000000002136	1/8 - 1/4 Mile NW
E14	HI8000000002146	1/8 - 1/4 Mile NNE
F16	HI8000000002145	1/4 - 1/2 Mile NE
G18	HI8000000002123	1/4 - 1/2 Mile East
G20	HI8000000002125	1/4 - 1/2 Mile East
I23	HI8000000002133	1/4 - 1/2 Mile WNW
J26	HI8000000002138	1/4 - 1/2 Mile ENE
H27	HI8000000002170	1/4 - 1/2 Mile NNW
K30	HI8000000002148	1/4 - 1/2 Mile NW
L31	HI8000000002156	1/4 - 1/2 Mile NE
M35	HI8000000002115	1/4 - 1/2 Mile East
N36	HI8000000002181	1/4 - 1/2 Mile NNE
O37	HI8000000002187	1/4 - 1/2 Mile NNE
P40	HI8000000002139	1/4 - 1/2 Mile ENE
Q41	HI8000000002149	1/4 - 1/2 Mile ENE
Q43	HI8000000002157	1/4 - 1/2 Mile NE
R45	HI8000000002088	1/4 - 1/2 Mile SSW
R46	HI8000000002089	1/4 - 1/2 Mile SSW
P47	HI8000000002140	1/4 - 1/2 Mile ENE
48	HI8000000002091	1/4 - 1/2 Mile SW
R50	HI8000000002090	1/2 - 1 Mile SSW
P51	HI8000000002141	1/2 - 1 Mile ENE
S53	HI8000000002209	1/2 - 1 Mile NNW
T55	HI8000000002131	1/2 - 1 Mile ENE
U57	HI8000000002158	1/2 - 1 Mile ENE
T60	HI8000000002128	1/2 - 1 Mile East
U61	HI8000000002154	1/2 - 1 Mile ENE
T63	HI8000000002129	1/2 - 1 Mile East
V65	HI8000000002222	1/2 - 1 Mile NNW
W66	HI8000000002153	1/2 - 1 Mile WNW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
W68	HI8000000002147	1/2 - 1 Mile WNW
X70	HI8000000002183	1/2 - 1 Mile NE
Y72	HI8000000002188	1/2 - 1 Mile NW
W73	HI8000000002155	1/2 - 1 Mile WNW
Z76	HI8000000002174	1/2 - 1 Mile ENE
Z78	HI8000000002165	1/2 - 1 Mile ENE
79	HI8000000002099	1/2 - 1 Mile WSW
AA80	HI8000000002162	1/2 - 1 Mile ENE
AA82	HI8000000002167	1/2 - 1 Mile ENE
AB89	HI8000000002192	1/2 - 1 Mile NW
AA91	HI8000000002163	1/2 - 1 Mile ENE
AA92	HI8000000002176	1/2 - 1 Mile ENE
AA93	HI8000000002175	1/2 - 1 Mile ENE
AA94	HI8000000002168	1/2 - 1 Mile ENE
AB96	HI8000000002191	1/2 - 1 Mile WNW
AC97	HI8000000002053	1/2 - 1 Mile South
AC98	HI8000000002054	1/2 - 1 Mile South
AD102	HI8000000002251	1/2 - 1 Mile NNE
104	HI8000000002049	1/2 - 1 Mile South
AE105	HI8000000002186	1/2 - 1 Mile WNW
AE108	HI8000000002169	1/2 - 1 Mile WNW
AC109	HI8000000002047	1/2 - 1 Mile South
AH111	HI8000000002046	1/2 - 1 Mile South
AH112	HI8000000002045	1/2 - 1 Mile South
AG114	HI8000000002285	1/2 - 1 Mile North
AJ117	HI8000000002105	1/2 - 1 Mile East
AJ118	HI8000000002106	1/2 - 1 Mile East
AH120	HI8000000002042	1/2 - 1 Mile South
AH121	HI8000000002043	1/2 - 1 Mile South
AK122	HI8000000002224	1/2 - 1 Mile NW
AK124	HI8000000002219	1/2 - 1 Mile NW
AH126	HI8000000002040	1/2 - 1 Mile South
AL127	HI8000000002283	1/2 - 1 Mile NNE
AI128	HI8000000002037	1/2 - 1 Mile South
AE131	HI8000000002196	1/2 - 1 Mile WNW
AM133	HI8000000002255	1/2 - 1 Mile NE
AH134	HI8000000002036	1/2 - 1 Mile South
AH135	HI8000000002035	1/2 - 1 Mile South
AF136	HI8000000002166	1/2 - 1 Mile WNW
AN137	HI8000000002092	1/2 - 1 Mile ESE
AO140	HI8000000002252	1/2 - 1 Mile NE

PHYSICAL SETTING SOURCE MAP - 4237094.38s



- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location

SITE NAME: Kalakaua Homes ADDRESS: 1545 Kalakaua Ave. Honolulu HI 96814 LAT/LONG: 21.2956 / 157.8377	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.38s DATE: March 18, 2015 7:44 am

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
A1 **ESE** **0 - 1/8 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002117**
A2 **ESE** **0 - 1/8 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269556**
B3 **NNE** **0 - 1/8 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269567**
B4 **NNE** **0 - 1/8 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002130**
B5 **NNW** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269568**
B6 **NNW** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269571**
B7 **NNW** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002134**
B8 **NNE** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002137**
C9 **West** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002120**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
D10 **NW** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269572**
D11 **NW** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002136**
C12 **West** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269561**
E13 **NNE** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269580**
E14 **NNE** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002146**
F15 **NE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269578**
F16 **NE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002145**
G17 **East** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269559**
G18 **East** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002123**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
G19 **East** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269562**
G20 **East** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002125**
H21 **NNW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269592**
I22 **WNW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269569**
I23 **WNW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002133**
J24 **ENE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269570**
H25 **NNW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269603**
J26 **ENE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002138**
H27 **NNW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002170**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
K28 **NW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269584**
L29 **NE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269591**
K30 **NW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002148**
L31 **NE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002156**
M32 **East** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269555**
N33 **NNE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269607**
O34 **NNE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269614**
M35 **East** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002115**
N36 **NNE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002181**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
O37 **NNE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002187**
P38 **ENE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269575**
P39 **ENE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269583**
P40 **ENE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002139**
Q41 **ENE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002149**
Q42 **NE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269590**
Q43 **NE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002157**
P44 **ENE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269574**
R45 **SSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002088**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
R46 **SSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002089**
P47 **ENE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002140**
48 **SW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002091**
P49 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269573**
R50 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002090**
P51 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002141**
S52 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269632**
S53 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002209**
T54 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269566**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
T55 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002131**
U56 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269589**
U57 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002158**
T58 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269565**
U59 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269587**
T60 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002128**
U61 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002154**
T62 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269564**
T63 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002129**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
V64 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269642**
V65 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002222**
W66 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002153**
W67 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269585**
W68 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002147**
X69 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269611**
X70 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002183**
Y71 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269615**
Y72 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002188**

Map ID Direction Distance Elevation		Database	EDR ID Number
W73 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002155**
Z74 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269602**
Z75 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FRDS PWS**	**HI0000324**
Z76 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002174**
Z77 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269593**
Z78 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002165**
79 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002099**
AA80 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002162**
AB81 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269619**

Map ID Direction Distance Elevation		Database	EDR ID Number
AA82 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002167**
AA83 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269599**
AA84 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269600**
AA85 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269596**
AA86 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269595**
AA87 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269598**
AA88 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269597**
AB89 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002192**
AA90 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269601**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
AA91 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002163**
AA92 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002176**
AA93 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002175**
AA94 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002168**
AB95 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269620**
AB96 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002191**
AC97 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002053**
AC98 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002054**
AC99 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269497**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
AC100 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269498**
AD101 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269677**
AD102 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002251**
AE103 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269616**
104 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002049**
AE105 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002186**
AF106 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269604**
AF107 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269605**
AE108 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002169**

Map ID Direction Distance Elevation		Database	EDR ID Number
AC109 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002047**
AG110 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269702**
AH111 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002046**
AH112 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002045**
AI113 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269494**
AG114 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002285**
AJ115 **ESE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269543**
AJ116 **ESE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269544**
AJ117 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002105**

Map ID Direction Distance Elevation		Database	EDR ID Number
AJ118 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002106**
AK119 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269644**
AH120 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002042**
AH121 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002043**
AK122 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002224**
AK123 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269637**
AK124 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002219**
AL125 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269698**
AH126 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002040**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
AL127 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002283**
AI128 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002037**
AM129 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269680**
AE130 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269622**
AE131 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002196**
132 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269490**
AM133 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002255**
AH134 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002036**
AH135 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002035**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
AF136 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002166**
AN137 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002092**
AN138 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269530**
AO139 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269676**
AO140 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002252**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for HONOLULU County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for HONOLULU COUNTY, HI

Number of sites tested: 209

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.015 pCi/L	100%	0%	0%
Living Area - 2nd Floor	0.125 pCi/L	100%	0%	0%
Basement	0.415 pCi/L	96%	4%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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HAWAII PUBLIC HOUSING AUTHORITY

ENVIRONMENTAL REVIEW

PUNCHBOWL HOMES

Honolulu, O`ahu

AMP 35
HPHA No. 1011

Prepared for:

State of Hawaii
Hawaii Public Housing Authority

Prepared by:

HHF PLANNERS
places for people

U.S. Department of Housing and Urban Development
451 Seventh Street, SW
Washington, DC 20410
www.hud.gov

espanol.hud.gov

Environmental Review for Activity/Project that is Categorically Excluded Subject to Section 58.5

Pursuant to 24 CFR 58.35(a)

Project Information

Project Name: Punchbowl Homes (AMP 35)

Responsible Entity: Hawaii Public Housing Authority
1002 North School Street
Honolulu, HI 96817

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

State/Local Identifier: State of Hawai‘i

Preparer: Mr. Scott Ezer, Vice President
HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawai‘i 96813

Certifying Officer Name and Title: Mr. David Y. Ige
Governor, State of Hawai‘i

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

Consultant (if applicable): HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawai‘i 96813

Direct Comments to: Mr. Hakim Ouansafi, Executive Director
Hawaii Public Housing Authority
1002 North School Street
Honolulu, Hawai‘i 96817

Project Location: 730 Captain Cook Ave
Honolulu, Hawai‘i 96813

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]**:**

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a "major construction activity" and would involve one or a combination of several HUD designated categories of actions.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent;
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons;
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland;
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation;
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls);
7. Interior and exterior renovations and rehabilitation;
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site;
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Level of Environmental Review Determination:

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.5. Compliance with and completion of conformance determinations for other statute, executive order, or regulation has been completed and support the Categorical Exclusion.

Funding Information

Grant Number	HUD Program	Funding Amount
To be determined	Capital Fund	To be determined
To be determined	Economic Development Initiative Special Project Grant	To be determined
To be determined	Other Grants	To be determined

Estimated Total HUD Funded Amount:

To be determined by HUD using a formula and based upon Federal budget.

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]**:**

Depends upon funds available.

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	*The project is not within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.*
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☒	*The State of Hawai'i does not have any designated coastal barrier resource units. (http://www.fws.gov/CBRA/Maps/Mapper.html)*
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes ☐ No ☒	*As indicated in the Flood Insurance Rate Panel Number 15003C0362G, Effective: January 19, 2011, Index Date: November 05, 2014, this housing project is located within Flood Hazard Zone X (areas determined to be outside the 0.2% annual chance floodplain). A field inspection and information obtained from the site manager confirmed no major flooding issues within the site. Based on its description, this project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.*

STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5		
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes ☐ No ☒	*The State of Hawai'i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. EPA's Green Book for currently designated "nonattainment areas" as of June 2015. Planned repair and rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.*
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes ☐ No ☒	*Documentation from the Office of Planning determined that projects receiving federal funds do not require review for consistency with Hawai'i's Coastal Zone Management (CZM) program.*
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☐ No ☒	*There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.*
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes ☒ No ☐	*The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices, while project-specific mitigation measures are identified in the following section.*
Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes ☐ No ☒	*There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.*

Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes ☐ No ☒	*The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.*
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes ☐ No ☒	*This housing project is located in Zone X, an area of minimal flooding (i.e., 0.2% annual chance flood), and is located outside the 500-year flood zone. A field inspection and information obtained from AMP Manager confirmed no major flooding issues within the project site.*
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes ☒ No ☐	*The housing site was built in 1960 and is 55 years old. A Historic Property Evaluation (HPE) conducted in 2010 determined that the project is eligible for listing in the National Register of Historic Places. In a letter dated December 2, 2015, the State Historic Preservation Officer concurred with the HPHA's determination that repair and rehabilitation improvements for this housing project would have "no adverse effect" on historic properties pursuant to NHPA Section 106 and subject to certain mitigative measures*
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes ☒ No ☐	*The project site is situated along a highway that has a high volume of vehicular traffic. Based on HUD's Day-Night Level (DNL) calculator, the housing project is presently exposed to vehicular noise levels in the Normally Unacceptable category (above 65 dBA but not exceeding 75 dBA). Traffic volumes along the highway will likely increase in the future due to growth and development and would expose the project to even higher traffic noise levels. Repair and rehabilitation improvements would not contribute to an increase in vehicle traffic and traffic noise. However, appropriate sound attenuation measures should be provided in order to reduce exposure to traffic noise particularly for the buildings located along the highway.*
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes ☐ No ☒	*The housing project is located within the O'ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation.*

Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☐ No ☒	*There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.* *(http://www.fws.gov/wetlands/data/mapper.HTML)*
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes ☐ No ☒	*There are no Wild and Scenic Rivers in Hawai'i, which excludes this project from mitigation or formal consultation requirements (http://www.rivers.gov/map.php)*
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes ☐ No ☒	*Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, these improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects on minority populations and low-income populations. Improvements should benefit low-income and minority populations living within this housing project.*

Field Inspection (Date and completed by)**:** May 29, 2015
Joseph Tamburello, Planner
HHF Planners

Summary of Findings and Conclusions:

Repair and rehabilitation improvements implemented for this existing housing project by HPHA should not result in significant environmental impacts based upon research data collected, a field inspection, consultation with the site manager and maintenance staff, consultation with pertinent resource agencies, and prior HPHA experience implementing repair and rehabilitation improvements. Therefore, repair and rehabilitation improvements would comply and be consistent with the statutes, executive orders, and regulations addressed. Furthermore, HPHA would evaluate improvements planned to ensure the work is consistent with the designated categories of actions described under the project description section. Compliance with these factors evaluated are further addressed in the attached Source Documentation Statutory Worksheet along with relevant technical reports/assessments.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Law, Authority, or Factor	Mitigation Measure
Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	*Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.* *Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.* *Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.* *Newell's shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.* *Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.* *Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo'i, impoundments or other vegetated water bodies.*

	1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols. *2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.* *3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.* *In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.* *<u>Additional Measures:</u> The following additional measures would be implemented:* *1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.*
National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	*1.When considering rehabilitation improvements or building modifications: 1) the buildings' character-defining features shall be retained to the extent practicable; and 2) the renovations shall adhere to the Secretary of the Interior's (SOI) Standards for Rehabilitation.* *2. If rehabilitation improvements or building modifications cannot retain the character-defining features or adhere to the SOI's Standards, a Historic American Buildings Survey (HABS) will be conducted subject to the following conditions:* *a. Level II HABS documentation will be conducted in accordance with the National Park Service standards; and* *b. A representative sample of multiple building types would be selected for HABS documentation due to the multiple types of buildings constructed for housing projects.* *3. If ground disturbing activity is anticipated, HPHA must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation.* *a. Submit detailed plans, specifications and a detailed scope of work once the plans have been developed.*

	b. Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation. *c. Submit a TMK map showing the full extent of the project area within the affected parcel/s.* *d. Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area.* *e. Summary of land use history, such as previous intensive cultivation, grubbing or grading.* *f. Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.* *In addition to these mitigation measures, the HPHA would enter into a Programmatic Agreement with the SHPO to address the implementation of future repair and rehabilitation improvements to State housing projects after the current Section 106 review process is completed and prior to the next environmental review process in approximately five years. Furthermore, should subsurface human remains or other traces of human activity greater than 50 years old be encountered during construction, all work in the vicinity of the find would immediately stop and the SHPD would be promptly notified. The treatment of any human remains that are encountered would be conducted in accordance with applicable requirements of Chapter 6E, Hawai'i Revised Statutes (Historic Preservation) and Chapter 13-300, Hawai'i Administrative Rules (Rules of Practice and Procedure Relating to Burial Sites and Human Remains).*

Determination:

☒ This categorically excluded activity/project converts to **EXEMPT** per Section 58.34(a)(12), because it does not require any mitigation for compliance with any listed statutes or authorities, nor requires any formal permit or license; **Funds may be committed and drawn down after certification of this part** for this (now) EXEMPT project; OR

☐ This categorically excluded activity/project cannot convert to Exempt status because one or more statutes or authorities listed at Section 58.5 requires formal consultation or mitigation. Complete consultation/mitigation protocol requirements, **publish NOI/RROF and obtain "Authority to Use Grant Funds"** (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR

☐ This project is not categorically excluded OR, if originally categorically excluded, is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

Preparer Signature: _____ Date: 12-17-15

Name/Title/Organization: Mr. Scott Ezer, Vice President
HHF Planners

Responsible Entity Agency Official Signature:

_____ Date: APR 28 2016

Name/Title: Mr. David Y. Ige, Governor

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

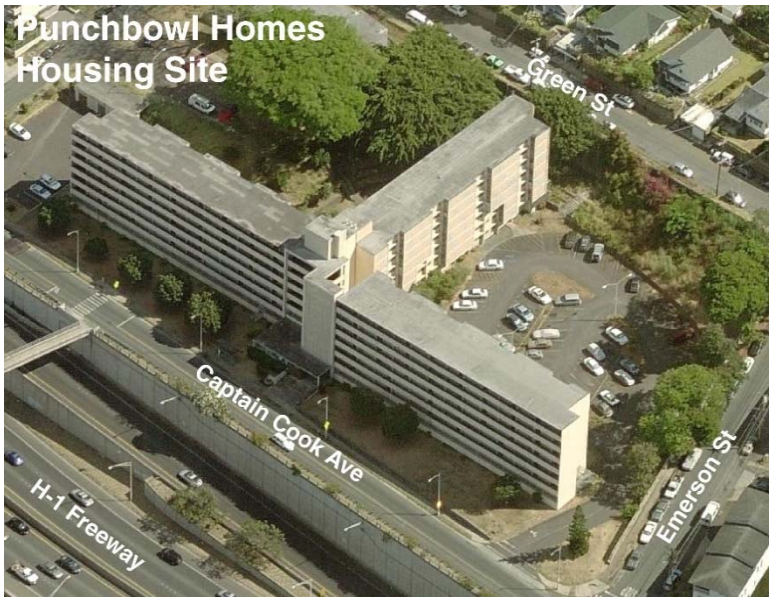
Punchbowl Homes (HA # 1011)

TMK: (1) 2-1-039:012

Hawai‘i Public Housing Authority (HPHA) Environmental Review

SOURCE DOCUMENTATION (SD) STATUTORY WORKSHEET

Site Visit Date: May 29, 2015
Prepared By: Joseph Tamburello



The Punchbowl Homes housing project is located south of the Punchbowl crater and the National Memorial Cemetery of the Pacific. The Punchbowl crater and surrounding neighborhood are located directly northeast of downtown Honolulu.

The housing site is bordered by Captain Cook Avenue and the H-1 Freeway to the south, Emerson Street to the east, Green Street to the north, and Alapai Street to the west. This housing project is within HPHA’s Asset Management Project (AMP) 35 which includes four other housing projects in urban Honolulu from Nu‘uanu to Makiki.

Punchbowl Homes was first occupied in 1960 and has a street address of 730 Captain Cook Avenue. This property consists of 2.94 acres, and it is identified as Tax Map Key (TMK) No. (1) 2-1-039:012. The housing project is comprised of one 7-story mid-rise apartment building (Building A) that has three wings (Wings A-1 to A-3) and one 3-story low-rise apartment building (Building B). The two buildings have housing units ranging from 1-, 2-, and 3- bedrooms per unit. The State’s land use designation for the property is the “Urban District”, and the City’s zoning for the site is A-2 Medium-Density Apartment.

The project site is not located within a tsunami evacuation zone, and the entire site is located in Flood Zone X, an area of minimal flood hazard (Community Panel Numbers 15003C0362G, Effective: January 19, 2011, Index Date: November 05, 2014).

The following figures in Exhibit A provide supporting information on this housing project:

Figure 1: Location Map
Figure 2: TMK Map
Figure 3: Site Map
Figure 4: Flood Map

COMPLIANCE FACTORS

I. AIRPORT CLEAR ZONES AND ACCIDENT POTENTIAL ZONES (24 CFR PART 51D)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The housing project does not lie within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: 24 CFR 51 (D).

Honolulu International Airport Master Plan - 2010 (August 1994), State Department of Transportation, Airports Division;

*Hawai`i Airports and Flying Safety Guide (2012-13, Fifth Edition, Revision 1)* Hawai`i Department of Transportation, Airports Division; and

http://hidot.hawaii.gov/airports/files/2013/01/Airport-Safety-Guide-2012-2013-5rev1.pdf

II. COASTAL BARRIER RESOURCES (COASTAL BARRIER IMPROVEMENT ACT OF 1990 [16 USC 3501])

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i does not have any designated coastal barrier resource units.

SUPPORTING DOCUMENTATION:

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/cbra/maps/mapper.html (Date accessed: 6/30/15).

III. FLOOD INSURANCE (FLOOD DISASTER PROTECTION ACT OF 1973 AND NATIONAL FLOOD INSURANCE REFORM ACT OF 1994 [42 USC 4001-4128 AND 42 USC 5154a])

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program.

As indicated in the Flood Insurance Rate Panel Number 15003C0362G, Effective: January 19, 2011, Index Date: November 05, 2014, this housing project is located within Flood Hazard Zone X (areas determined to be outside the 0.2% annual chance floodplain). A field inspection and information obtained from the site manager confirmed no major flooding issues within the site. Based on its description, this project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal signs of flooding problems. An interview with the AMP Manager also determined that major ponding or flooding issues are currently not an issue for the project site.

Printed: Flood Insurance Rate Map, Community Panel Numbers 15003C0362G, Effective: January 19, 2011, Index Date: November 05, 2014

Hawai`i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 7/27/15)

IV. CLEAN AIR ACT (40 CFR PARTS 6, 51, 93)

SUPPORTING DOCUMENTS	
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. Environmental Protection Agency's Green Book for currently designated "nonattainment areas" as of June 2015. Planned rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.

SUPPORTING DOCUMENTATION:

Printed: *State of Hawai‘i Annual Summary 2013 Air Quality Data*. State of Hawai'i, Department of Health, July 2014.

U.S. Environmental Protection Agency website at: http://epa.gov/airquality/greenbk/

V. COASTAL ZONE MANAGEMENT ACT (16 USC 1451, SECTIONS 307 (C), (D)

CONTACT:

Mr. John Nakagawa
Office of Planning
Department of Business, Economic Development & Tourism
State of Hawai‘i
P.O. Box 2359
Honolulu, Hawai'i, 96804-2359

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

Documentation from the Office of Planning determined that projects receiving federal funds do not require review for consistency with Hawai‘i's Coastal Zone Management (CZM) program.

SUPPORTING DOCUMENTATION:

Contact: In an email to the Office of Planning (OP) dated July 27, 2015, the HPHA determined that the use of HUD funds for the implementation of repair and rehabilitation improvements does not require review for consistency with Hawai‘i's CZM program. The OP confirmed this determination in an email dated July 28, 2015 and it is included in the Appendices.

Experience: Previous reviews conducted by OP in 2003, 2005, and 2010 determined that projects receiving federal funds from HUD do not require CZM federal consistency review. OP's current determination confirms this condition is still applicable. Copies of these prior documentations are included in the Appendices.

VI. CONTAMINATION AND TOXIC SUBSTANCES (24 CFR PART 50.3 & 58.5(I)(2))

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Project Not Affected.

There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.

SUPPORTING DOCUMENTATION:

Field: A site inspection and interview with the Asset Management Project (AMP) Manager revealed no presence of any toxic or radioactive materials on the project site that warrant concern.

Study: Environmental Data Resources, Inc. (EDR), conducted a search of available environmental records and prepared a Radius Map Report (Inquiry Number 4237094.54s, March 17, 2015). EDR reviewed more than 25 federal and statewide regulatory databases for information regarding the treatment, storage, disposal and release of toxic chemicals at the project site and within specific radii (generally 1 mile) of the site. A Detail Map within the EDR report documents those sites identified within a 0.25 mile radius of the project site. The EDR report in Exhibit B includes the results of their research findings.

The EDR report notes the following activities within a 0.125 mile radius of the project site: Queen's Physicians' Office Building (769 feet away) has two UST, Status: Permanently Out of Use. 1510 Frear Street (978 feet away) had a small amount of motor oil release that has attenuated; Use Restrictions: No Hazard Present for Unrestricted Residential Use. Eco Dream (1070 feet away) is classified as a Non-Generator (Handler). City and County of Honolulu Police (1087 feet away) is Classified as a Non-Generator (Handler), no violations found; LUST Status: Site Assessment Ongoing; Two UST Status: (1,550 gallons, Substance: Used Oil and Mixture) Currently in Use, Multiple UST Status: Permanently Out of Use and Temporarily Out of Use. Honolulu Police Crime Lab (1087 feet away) is Classified as a Conditionally Exempt Small Quantity Generator, no violations found.

This project site was not identified as a Formerly Used Defense Site (FUDS) by the U.S. Army Corps of Engineers and is not subject to any cleanup actions for Department of Defense-generated contamination.

VII. ENDANGERED SPECIES (50 CFR PART 402)

CONTACT:
Mr. Loyal Mehrhoff, Field Supervisor
Pacific Islands Administrator
Fish and Wildlife Services
U.S. Department of the Interior
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawai'i 96813
Tel. #: 792-9400

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Adverse Effect Subject to Mitigation

The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received by the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices.

SUPPORTING DOCUMENTATION:

Contact: A letter from the HPHA dated July 24, 2015 was submitted to the Pacific Island Administrator for the FWS determining that repair and rehabilitation improvements that may be implemented using HUD funds for this housing project would have no likelihood of effect on any listed species or proposed species, or existing or proposed designated critical habitat subject to certain measures. Concurrence with this determination along with proposed minimization and avoidance measures was received from the FWS in a letter dated September 28, 2015 which is included in the Appendices. This housing project is subject to the following minimization and avoidance measures.

Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.

Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.

Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.

Newell's shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If

nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.

Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.

Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo‘i, impoundments or other vegetated water bodies.

1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS’s recommended Hawaiian Waterbird Survey Protocols.
2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.
3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.

In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.

Additional Measures: The following additional measures would be implemented:

1. No vegetation or soil disturbance shall be conducted outside a project’s previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.

Experience: The FWS was previously consulted as part of environmental reviews that were completed in 2005 (39 housing projects) and 2010 (70 housing projects) which supported the determination that repair and rehabilitation improvements would either: 1) have no likelihood of effect for certain housing projects; or 2) not likely adversely affect federally listed species or critical habitat for certain housing projects subject to mitigative measures. A summary of these consultation efforts follows.

2005 Consultation: In a letter dated July 15, 2005, the Housing and Community Development Corporation of Hawai‘i (predecessor to the HPHA), determined that the implementation of minor repair and rehabilitation improvements for 39 housing projects

would not have an adverse effect on federally-listed species or critical habitat. In a letter dated August 11, 2005, the FWS concurred with the HCDCH determination.

2010 Consultation: In a letter dated May 17, 2010, the HPHA informed the FWS that HUD funds would be used to immediately implement repair and rehabilitation improvements for six housing projects on O'ahu and the island of Hawai`i. In a subsequent letter dated May 21, 2010, the FWS was informed that HPHA would be using HUD funds to implement minor repair and rehabilitation improvements for 64 projects throughout the State. In both letters, the HPHA determined that the repair and rehabilitation improvements were not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat. Based on further consultation and a meeting with FWS staff on June 24, 2010, the HPHA determined that repair and rehabilitation improvements for most of their housing projects would not likely adversely affect any listed or proposed species, or existing or proposed designated habitat, subject to various mitigative measures for certain housing projects.

VIII. EXPLOSIVE AND FLAMMABLE OPERATIONS (24 CFR PART 51C)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

SUPPORTING DOCUMENTATION:

Field: Field inspection was limited to the exterior of residential buildings and associated structures for this housing project. No above-ground explosive or flammable material storage containers in excess of 100 gallons were observed at the site. The generator room stores a small amount of gasoline for fuel.

Printed: 24 CFR Part 51, Subpart C addresses acceptable separation distance from above-ground explosive or flammable fuels or chemical containers. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

IX. FARMLANDS PROTECTION (7 CFR PART 658)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. Since the property consists of an existing housing development within an urbanized area, no farmlands would be impacted by the implementation of repair and rehabilitation improvements.

Printed: The property is designated for "Urban" use by the State Land Use Commission and the County's zoning for the parcel is RD-3.75 Double-Family Residential District.

Hawai`i Office of Planning website at: http://planning.hawaii.gov/gis/
(Date accessed: 6/30/2015)

X. FLOODPLAIN MANAGEMENT (EXECUTIVE ORDER 11988, 24 CFR PART 55)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program

This housing project is located in Zone X, an area of minimal flooding (i.e., 0.2% annual chance flood), and is located outside the 500-year flood zone. A field inspection and information obtained from AMP Manager confirmed no major flooding issues within the project site.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal signs of previous flooding problems. An interview with the AMP Manager also determined that no major ponding or flooding issues occur on the project site.

Printed: Flood Insurance Rate Map, Community Panel Numbers 15003C0362G, Effective: January 19, 2011, Index Date: November 05, 2014.

Hawai`i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/ (Date accessed7/21/15)

XI. HISTORIC PRESERVATION (NATIONAL HISTORIC PRESERVATION ACT OF 1966; SECTIONS 106 AND 110; 36 CFR, PART 800)

CONTACT:	SUPPORTING DOCUMENTS	
Ms. Suzanne Case, Chairperson	X	Field
Department of Land and Natural Resources (DLNR)	X	Contact
State of Hawai‘i	X	Printed
1151 Punchbowl Street		Experience
Honolulu, Hawai‘i 96813	X	Study
Tel. #: 587-0400		

DETERMINATION:

Status Category: No Adverse Effect on Historic Properties with Mitigation.

The housing site was initially occupied in 1960 and is 55 years old. A Historic Property Evaluation (HPE) conducted in 2010 determined that the project is eligible for listing in the National Register of Historic Places (NRHP). In a letter dated December 2, 2015, the SHPO concurred with the HPHA’s determination and provided additional conditions for ground-disturbing activities. In responding to this letter, the HPHA concurred with the conditions set forth by the SHPO.

SUPPORTING DOCUMENTATION:

Field: A site inspection of this housing project did not locate any existing or potential archaeological sites (e.g., heiau) or cultural features on the property. An interview with the Maintenance Foreman indicates that no known sites or features are present on the property.

Contact: Based on the findings and recommendations of the 2015 AIS, the HPHA submitted a letter to the State Historic Preservation Officer dated August 20, 2015 regarding 28 housing projects, which is included in the Appendix. Of this total, 15 housing projects did not meet National Register eligibility criteria, therefore, a “no historic properties affected” determination was proposed for these repair and rehabilitation improvements. Repair and rehabilitation improvements for the other 13 housing projects (including Punchbowl Homes) were determined to meet National Register eligibility criteria and were proposed to have “no adverse effect” on historic properties subject to certain mitigative measures.

In a letter dated December 2, 2015, the SHPO concurred with the HPHA’s determination that repair and rehabilitation improvements for this housing project would have “no

adverse effect" on historic properties pursuant to NHPA Section 106 and subject to the following mitigative measures. . In response to this letter, the HPHA concurred with the conditions set forth by the SHPO. A copy of these letters are included in Exhibit C.

1. When considering rehabilitation improvements or building modifications: 1) the buildings' character-defining features shall be retained to the extent practicable; and 2) the renovations shall adhere to the Secretary of the Interior's (SOI) Standards for Rehabilitation.

2. If rehabilitation improvements or building modifications cannot retain the character-defining features or adhere to the SOI's Standards, a Historic American Buildings Survey (HABS) will be conducted subject to the following conditions:

    a. Level II HABS documentation will be conducted in accordance with the National Park Service standards; and

    b. A representative sample of multiple building types would be selected for HABS documentation due to the multiple types of buildings constructed for housing projects.

3. If ground disturbing activity is anticipated, HPHA must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation.

    a. Submit detailed plans, specifications and a detailed scope of work once the plans have been developed.

    b. Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation.

    c. Submit a TMK map showing the full extent of the project area within the affected parcel/s.

    d. Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area.

    e. Summary of land use history, such as previous intensive cultivation, grubbing or grading.

    f. Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

In addition to these mitigation measures, the HPHA would enter into a Programmatic Agreement with the SHPO to address the implementation of future repair and rehabilitation improvements to State housing projects after the current Section 106 review process is completed and prior to the next environmental review process in approximately five years. Furthermore, should subsurface human remains or other traces of human activity greater than 50 years old be encountered during construction, all work in the vicinity of the find would immediately stop and the SHPD would be promptly notified. The treatment of any human remains that are encountered would be conducted in accordance with applicable requirements of Chapter 6E, Hawai'i Revised Statutes (Historic Preservation) and Chapter

13-300, Hawai‘i Administrative Rules (Rules of Practice and Procedure Relating to Burial Sites and Human Remains).

Printed: A review of the U.S. National Parks Service website for the National Register of Historic Places did not identify any historic properties within the limits of this housing project. A similar review of the State DLNR website for the State Register of Historic Places revealed that there are no historic properties within the project site.

National Register: U.S. National Park Service website at: http://www.nps.gov/nr/research/ (Date accessed: 7/2/15).

State Register: Hawai`i Department of Land and Natural Resources website at: http://dlnr.hawaii.gov/shpd/state-register/ (Date accessed: 7/2/15).

Study: A Historic Property Evaluation (HPE) conducted in 2010 determined that the project is eligible for listing in the National Register of Historic Places (NRHP). The evaluation determined that this project retains its integrity of location, setting, feeling, design, materials, workmanship and association. Character defining features include: full length exterior hallways along the entry side, original windows and doors, lanais with ornamental masonry grille work, and the main entry and lobby. This project is significant because of its association with public housing and with the social history of Hawai‘i. The project represents the first housing planned by the Territory and the State for the elderly and disabled.

XII. NOISE ABATEMENT CONTROL (24 CFR PART 51B)

SUPPORTING DOCUMENTS

X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Consultation with State Needed on Mitigation

The project site is situated along a highway that has a high volume of vehicular traffic. Based on HUD’s Day-Night Level (DNL) calculator, the housing project is presently exposed to vehicular noise levels in the Normally Unacceptable category (above 65 dBA but not exceeding 75 dBA). Traffic volumes along the highway will likely increase in the future due to growth and development and would expose the project to even higher traffic noise levels. Repair and rehabilitation improvements would not contribute to an increase in vehicle traffic and traffic noise. However, appropriate sound attenuation measures should be provided in order to reduce exposure to traffic noise particularly for the buildings located along the highway. The measures identified below would address this condition:

1. Conduct a noise assessment study to better analyze the effects of existing traffic noise on the project and identify appropriate measures that could be implemented to reduce exposure to traffic noise.
2. Consult the State Department of Transportation to provide noise attenuation measures in connection with future highway improvements.

SUPPORTING DOCUMENTATION:

Field: No significant noise generating sources were identified within the project site during the site inspection. The subject housing site is located within an urban residential neighborhood. H-1 Highway is a principal arterial interstate road that runs parallel to the subject site. However, it is located approximately 50 feet below the housing site, which helps to buffer the site from traffic noise. An interview with the AMP Manager identified Queen's Hospital as a noise source, but the ambulance entry is located approximately 1,300 feet from the housing site and is buffered by several tall buildings, the H-1 Highway and the hospital building itself. Ambulance noise would be intermittent and typical of urban environments. As a result, notable noise sources are predominantly associated with vehicular traffic along the H-1 Highway.

Study: The HUD day/night noise level calculator was used to estimate approximate traffic noise. Traffic counts were based on 2013 Hawai'i State Department of Transportation data taken along the H-1 Highway (a principal interstate arterial). Using this HUD calculator, the estimated noise levels at the project site is 69.1 dBA. This noise level reading falls within the Normally Unacceptable category (above 65 dBA but not exceeding 75 dBA). This requires the consideration of some form of mitigation in order to reduce traffic noise exposure.

Repair and rehabilitation improvements would not contribute to an increase in vehicle traffic and traffic noise. However, appropriate sound attenuation measures should be provided in order to reduce exposure to traffic noise particularly for the buildings located along the highway. The measures identified below would address this condition:

1. Conduct a noise assessment study to better analyze the effects of existing traffic noise on the project and identify appropriate measures that could be implemented to reduce exposure to traffic noise.
2. Consult the State Department of Transportation to provide noise attenuation measures in connection with future highway improvements.

XIII. SOLE SOURCE AQUIFER (40 CFR PART 149)

	SUPPORTING DOCUMENTS
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact on Sole Source Aquifer

The housing project is located within the O'ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation. However, if exceptional circumstances require compliance steps with any of these

authorities, such compliance must be established and documented prior to approving the site-specific loan or grant.

SUPPORTING DOCUMENTATION:

Printed: This determination was based upon review of the Sole Source Aquifer Memorandum of 4/30/90 (Sections II.B.1 and II.B.2) and consideration of the type of rehabilitation related improvements that would be conducted for this project.

XIV. WETLANDS PROTECTION (EXECUTIVE ORDER 11990)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the property did not identify the presence of any wetlands.

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/wetlands/data/mapper.html (Date accessed 7/23/2015).

XV. WILD AND SCENIC RIVERS ACT (16 USC 1271, SECTION 7 (B), (C))

SUPPORTING DOCUMENTS	
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no Wild and Scenic Rivers in Hawai‘i, which excludes this project from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: National Wild and Scenic Rivers System website at: http://www.rivers.gov/index.php (Date accessed: 6/30/2015).

XVI. ENVIRONMENTAL JUSTICE (EXECUTIVE ORDER NO. 12898)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Conflict with Requirements

Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, repair and rehabilitation improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations. Repair and rehabilitation improvements should benefit low-income and minority populations living within this housing project.

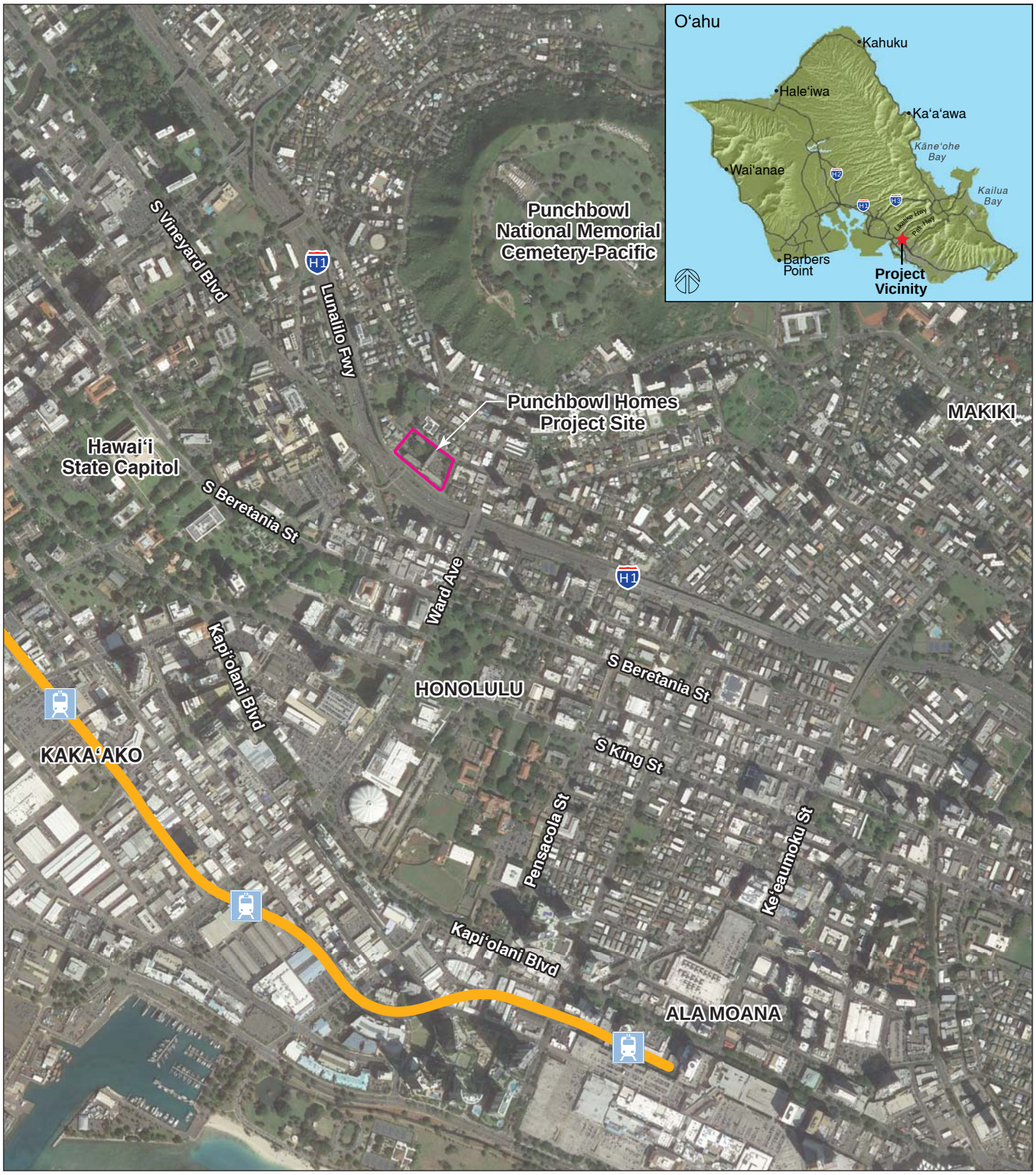
SUPPORTING DOCUMENTATION:

Printed: Executive Order 12898.

U.S. Department of Housing and Urban Development website at: https://www.hudexchange.info/environmental-review/environmental-justice/

EXHIBIT A

Location Map, TMK Map, Site Map, Flood Map, and Site Photos



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

HONOLULU RAIL TRANSIT

Transit Corridor

Transit Station

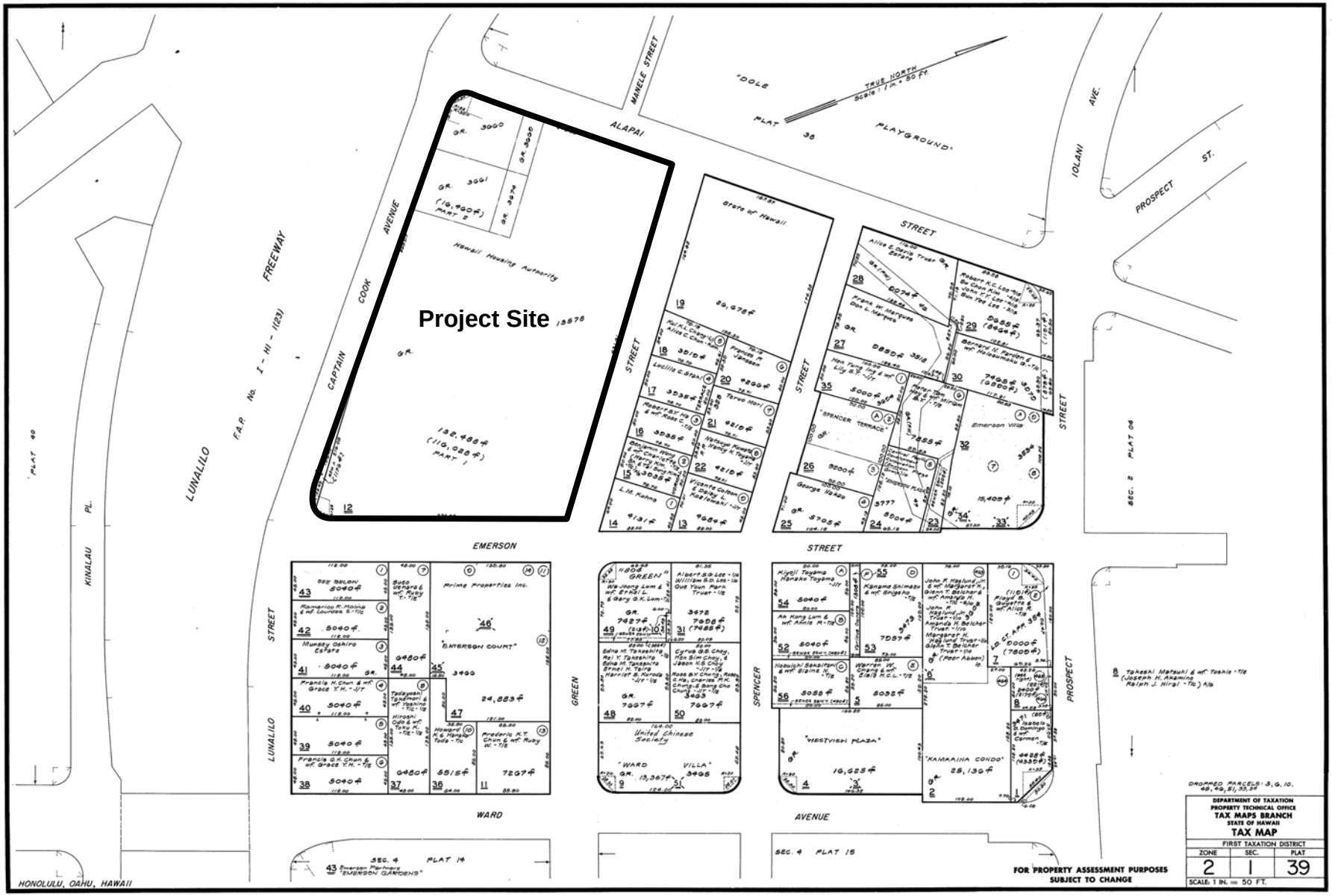
HPHA No. 1011 - Punchbowl Homes (AMP 35)

Figure 1 - Project Location Map

Honolulu, O'ahu

1,000 FT

HHF PLANNERS
places for people



HPHA No. 1011 - Punchbowl Homes (AMP 35)

Figure 2 - TMK Map

Honolulu, O'ahu

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1011 - Punchbowl Homes (AMP 35)

Figure 3 - Site Map

Honolulu, O'ahu

40 FEET

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

LEGEND

Zone X - Outside the 0.2% Annual Chance of Flood

HPHA No. 1011 - Punchbowl Homes (AMP 35)

Figure 4 - Flood Map

Honolulu, O'ahu

40 FEET

HHF PLANNERS
places for people

PUNCHBOWL HOMES
SITE PHOTOS

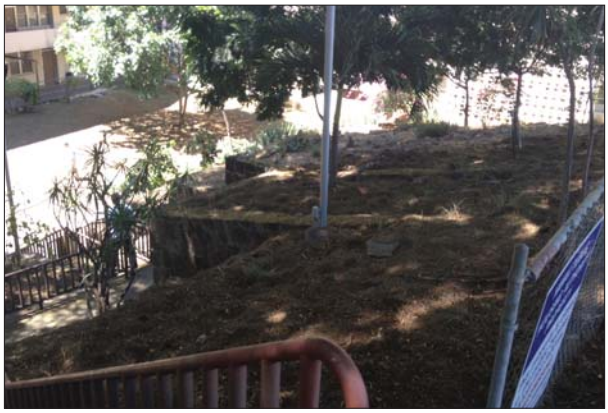
Low retaining wall along a portion of Captain Cook Ave frontage

Bus stop and landscaping along Captain Cook Ave frontage

Alapai Street; project site on the right

Emerson Street, project site on the left

Buidling B, side yard (east)



Terracing between Building A & B

PUNCHBOWL HOMES
SITE PHOTOS

Walkway and sloped grade fronting Building B

Retaining walls between Building A & B

Project's northern boundary condition

View of project site from Green Street; project on the left

Secure storage area

Trash pickup area

EXHIBIT B

EDR Radius Map Report

Punchbowl E
730 Captain Cooke Ave.
Honolulu, HI 96813

Inquiry Number: 4237094.54s
March 17, 2015

EDR Summary Radius Map Report

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

FORM-NULL-PVC

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

730 CAPTAIN COOKE AVE.
HONOLULU County, HI 96813

COORDINATES

Latitude (North):	21.3072000 - 21˚ 18' 25.92''
Longitude (West):	157.8499000 - 157˚ 50' 59.64''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	619290.1
UTM Y (Meters):	2356443.2
Elevation:	101 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	USGS 7.5 min quad index

MAPPED SITES SUMMARY

Target Property Address:
730 CAPTAIN COOKE AVE.
, HI 96813

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
1		706 SPENCER ST	EDR US Hist Cleaners	Higher	411, North
2	QUEEN'S PHYSICIANS'	1329 LUSITANA ST	HI UST, HI Financial Assurance	Lower	769, WSW
3	1510 FREAR STREET	1510 FREAR ST	HI SHWS, HI SPILLS	Lower	978, NW
4	ECO DREAM INC	1420 VICTORIA ST	RCRA NonGen / NLR	Lower	1070, ESE
A5	CITY AND COUNTY OF H	801 S BERETANIA ST	RCRA NonGen / NLR	Lower	1087, SSW
A6	HONOLULU POLICE DEPT	801 S BERETANIA ST	HI LUST, HI UST, HI Financial Assurance	Lower	1087, SSW
A7	HONOLULU POLICE CRIM	801 S BERETANIA ST	RCRA-CESQG, FINDS	Lower	1087, SSW
B8	ACADEMY FASTBREAK SS	882 BERETANIA ST	RCRA-SQG	Lower	1127, South
B9	MID PAC PETROLEUM LL	882 S BERETANIA ST	HI LUST, HI UST, HI Financial Assurance	Lower	1127, South
B10		882 S BERETANIA ST	EDR US Hist Auto Stat	Lower	1127, South
11	C&CH BOARD OF WATER	630 S BERETANIA ST	HI LUST, HI UST, HI Financial Assurance	Lower	1423, WSW
12	801 SOUTH HOTEL STRE	801 S HOTEL ST	HI SHWS	Lower	1444, SSW
13	STRAUB CLINIC & HOSP	888 SOUTH KING STREE	MLTS, HI LUST, HI UST, HI Financial Assurance	Lower	1614, SSW
14	SCAN LINE BUILDING	788 S KING ST	HI LUST, HI UST	Lower	1619, SSW
15	THE QUEEN'S MEDICAL	1301 PUNCHBOWL ST	HI SHWS, HI LUST, HI UST, HI AIRS, HI Financial...	Lower	1768, WNW
16	MTL BUS FACILITY	1133 ALAPAI ST	HI LUST, HI UST	Lower	1785, SW
17	RODS AUTO SERVICE	1489 POUNCHBOWL STRE	RCRA NonGen / NLR, HI LUST, HI UST	Lower	1796, NW
C18	ONE ARCHER LANE (FOR	809 S KING ST	HI LUST, HI UST	Lower	1811, SSW
C19	ONE ARCHER LANE	801 S KING ST	HI SHWS, HI SPILLS	Lower	1815, SSW
20	TESORO 2GO # 61024	759 S KING ST	HI LUST, HI UST, HI SPILLS, HI Financial Assurance	Lower	1964, SSW
21	KALANIMOKU BLDG	TMK 2-1-24:011151 PU	HI LUST, HI UST	Lower	2009, West
22	BMW OF HONOLULU LTD	1075 S BERETANIA ST	HI LUST, HI UST	Lower	2226, SE
23	1310 PENSACOLA STREE	1310 PENSACOLA ST	HI SHWS	Lower	2291, SE
24	AUXILIARY SERVICES -	1039 S KING ST	HI SHWS, HI UST, HI Financial Assurance	Lower	2351, SSE
25	PUNCHBOWL MILITARY R	2177 PUOWAINA DRIVE	HI LUST, HI UST	Higher	2369, NE
D26	MIKE'S AUTOMOTIVE/SU	225 S VINEYARD BLVD	HI LUST, HI UST, HI Financial Assurance	Lower	2394, NW
E27	HECO PAD-MOUNTED #65	650 KAPIOLANI BLVD	HI SHWS, HI SPILLS, HI INST CONTROL	Lower	2418, SW
D28	IMM VINEYARD	215 S VINEYARD BLVD	HI LUST, HI UST, HI Financial Assurance	Lower	2441, NW
E29	HAWAII NEWSPAPER AGE	605 KAPIOLANI BLVD	HI SHWS, HI LUST, HI UST, HI SPILLS, HI ENG...	Lower	2464, SW
30	HD&C, 725 KAPIOLANI	725 KAPIOLANI BLVD	HI SHWS, HI SPILLS, HI INST CONTROL	Lower	2716, SW
31	BMW OF HONOLULU	777 KAPIOLANI BLVD	HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST...	Lower	2781, SSW
F32	CHUEI SHOKOH, INC.	825 KAPIOLANI BLVD	HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST...	Lower	2876, SSW
F33	HECO SOIL CONTAMINAT	CHAPIN LN & KAPIOLAN	HI SHWS, HI ENG CONTROLS, HI INST CONTROL	Lower	2927, SSW
34	CAPITOL PLACE DEVELO	1212 QUEEN EMMA ST	HI SHWS	Lower	2952, WNW
35	SYMPHONY PARK	850 KAPIOLANI BLVD	HI SHWS, HI SPILLS	Lower	3117, SSW
36	SCHUMAN CARRIAGE MOT	1234 S BERETANIA ST	HI SHWS, HI LUST, HI UST, HI SPILLS, HI INST...	Lower	3210, SE
G37	836 KAWAIAHAO STREET	836 KAWAIAHAO ST	HI SHWS	Lower	3273, SSW
38	1012 PIIKOI STREET,	1012 PIIKOI ST	HI SHWS, HI SPILLS	Lower	3298, SE
G39	AMERICAN LINEN WAREH	837 KAWAIAHAO ST	HI SHWS, HI SPILLS	Lower	3305, SSW

MAPPED SITES SUMMARY

Target Property Address:
730 CAPTAIN COOKE AVE.
, HI 96813

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
40	QUEEN EMMALANI TOWER	600 QUEEN ST	CERC-NFRAP, RCRA NonGen / NLR, FINDS, HI SHWS, HI...	Lower	3349, WSW
41	K&Y AUTO SERVICE AND	902 KAWAIAHAO ST & 5	HI SHWS, HI SPILLS	Lower	3452, SSW
42	GRACE OTSUKA APARTME	1233 YOUNG ST	HI SHWS, HI ENG CONTROLS, HI INST CONTROL	Lower	3480, SE
43	PACIFICA CONDOMINIUM	1009 KAPIOLANI BLVD	HI SHWS, HI LUST	Lower	3613, South
44	RUBBER STAMP PLANTAT	746 ILANIWAI ST	HI SHWS	Lower	3666, SW
45	HAWAII OPERA THEATER	962 KAWAIAHAO ST	HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST...	Lower	3718, SSW
46	HAWAII INSTRUMENTATI	822 HALEKAUWILA ST	HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST...	Lower	3966, SW
47	JAS W GLOVER LTD	1046 WAIMAMU ST	RCRA NonGen / NLR, FINDS, HI SHWS, HI LUST, HI UST	Lower	4006, South
48	CARTWRIGHT NEIGHBORH	KEEAUMOKU ST & MATLO	HI SHWS	Lower	4226, ESE
49	COOKE STREET LEAD CO	501 COOKE ST	HI SHWS, HI ENG CONTROLS, HI INST CONTROL	Lower	4343, SW
50	SELF STORAGE 1	438 KAMAKEE ST	HI SHWS, HI SPILLS	Lower	4374, South
51	EVERSHINE X	1230 KAPIOLANI BLVD	HI SHWS, HI VCP	Lower	4422, SSE
52	RESERVE HOUSING TOWE	1141 WAIMANU ST	HI SHWS, HI SPILLS	Lower	4508, South
53	MEADOW GOLD DAIRIES	1418 YOUNG ST	HI SHWS, HI SPILLS	Lower	4595, SE
54	CENPAC PROPERTIES -	615 PIIKOI ST	HI SHWS, HI LUST, HI UST, HI SPILLS, HI Financial...	Lower	4617, SSE
55	HARBOR COURT	66 QUEEN ST	HI SHWS	Lower	4736, West
56	KOOLANI TOWER PROJEC	1189 WAIMANU ST	HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST...	Lower	4751, South
H57	HAKUYOSHA HAWAII, IN	730 SHERIDAN ST	HI SHWS, HI SPILLS, HI INST CONTROL, HI AIRS	Lower	4760, SSE
H58	MOTOR SUPPLY	726 SHERIDAN ST	HI SHWS, HI INST CONTROL	Lower	4760, SSE
59	DURANT PROPERTIES	1235 KONA ST	HI SHWS, HI INST CONTROL	Lower	4778, South
60	HAWAIIAN ELECTRIC -	170 ALA MOANA BOULEV	RCRA-TSDF, CERC-NFRAP, CORRACTS, RCRA-CESQG, HI...	Lower	4902, West
61	RICHARD'S CHEVRON	1909 NUUANU AVE	HI SHWS, HI SPILLS, HI INST CONTROL, HI Financial...	Lower	4955, North
62	HONOLULU SAKE BREWER	2150 BOOTH RD	HI SHWS, HI LUST, HI UST, HI SPILLS	Higher	5043, North
63	LIKE LIKE PLAZA PETR	745 KEEAUMOKU ST	HI SHWS	Lower	5061, SE
64	KEKAULIKE DIAMOND HE	163 N HOTEL ST	HI SHWS, HI SPILLS	Lower	5062, WNW
65	UNDERGROUND HOISTS	744 ALA MOANA BLVD	HI SHWS, HI SPILLS, HI INST CONTROL	Lower	5096, SW
66	YEE HOP BUILDING MAU	950 MAUNAKEA ST	HI SHWS	Lower	5102, WNW
67	TOWN INN	248-258 N BERETANIA	HI SHWS, HI INST CONTROL, HI VCP	Lower	5109, WNW
68	595 ALA MOANA BLACK	595 ALA MOANA BLVD	HI SHWS, HI SPILLS	Lower	5171, WSW
69	WRAF - HAWAIIAN TUNA	1011 ALA MOANA BLVD	HI SHWS, HI LUST, HI UST, HI ENG CONTROLS, HI...	Lower	5251, SSW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA CORRACTS facilities list

CORRACTS: A review of the CORRACTS list, as provided by EDR, and dated 12/09/2014 has revealed that there is 1 CORRACTS site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
HAWAIIAN ELECTRIC -	***170 ALA MOANA BOULEV***	***W 1/2 - 1 (0.928 mi.)***	***60***	***20***

Federal RCRA generators list

RCRA-SQG: A review of the RCRA-SQG list, as provided by EDR, and dated 12/09/2014 has revealed that there is 1 RCRA-SQG site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ACADEMY FASTBREAK SS	882 BERETANIA ST	S 1/8 - 1/4 (0.213 mi.)	B8	8

RCRA-CESQG: A review of the RCRA-CESQG list, as provided by EDR, and dated 12/09/2014 has revealed that there is 1 RCRA-CESQG site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
HONOLULU POLICE CRIM	***801 S BERETANIA ST***	***SSW 1/8 - 1/4 (0.206 mi.)***	***A7***	***8***

State- and tribal - equivalent CERCLIS

HI SHWS: A review of the HI SHWS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 48 HI SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HONOLULU SAKE BREWER	***2150 BOOTH RD***	***N 1/2 - 1 (0.955 mi.)***	***62***	***21***

Lower Elevation	Address	Direction / Distance	Map ID	Page
1510 FREAR STREET	***1510 FREAR ST***	***NW 1/8 - 1/4 (0.185 mi.)***	***3***	***7***
801 SOUTH HOTEL STRE	801 S HOTEL ST	SSW 1/4 - 1/2 (0.273 mi.)	12	9
THE QUEEN'S MEDICAL	***1301 PUNCHBOWL ST***	***WNW 1/4 - 1/2 (0.335 mi.)***	***15***	***10***
ONE ARCHER LANE	***801 S KING ST***	***SSW 1/4 - 1/2 (0.344 mi.)***	***C19***	***11***
1310 PENSACOLA STREE	1310 PENSACOLA ST	SE 1/4 - 1/2 (0.434 mi.)	23	12
AUXILIARY SERVICES -	***1039 S KING ST***	***SSE 1/4 - 1/2 (0.445 mi.)***	***24***	***12***
HECO PAD-MOUNTED #65	***650 KAPIOLANI BLVD***	***SW 1/4 - 1/2 (0.458 mi.)***	***E27***	***13***
HAWAII NEWSPAPER AGE	***605 KAPIOLANI BLVD***	***SW 1/4 - 1/2 (0.467 mi.)***	***E29***	***14***
HD&C, 725 KAPIOLANI	***725 KAPIOLANI BLVD***	***SW 1/2 - 1 (0.514 mi.)***	***30***	***14***
BMW OF HONOLULU	***777 KAPIOLANI BLVD***	***SSW 1/2 - 1 (0.527 mi.)***	***31***	***14***
CHUEI SHOKOH, INC.	***825 KAPIOLANI BLVD***	***SSW 1/2 - 1 (0.545 mi.)***	***F32***	***14***
HECO SOIL CONTAMINAT	***CHAPIN LN & KAPIOLAN***	***SSW 1/2 - 1 (0.554 mi.)***	***F33***	***15***
CAPITOL PLACE DEVELO	1212 QUEEN EMMA ST	WNW 1/2 - 1 (0.559 mi.)	34	15
SYMPHONY PARK	***850 KAPIOLANI BLVD***	***SSW 1/2 - 1 (0.590 mi.)***	***35***	***15***
SCHUMAN CARRIAGE MOT	***1234 S BERETANIA ST***	***SE 1/2 - 1 (0.608 mi.)***	***36***	***15***
836 KAWAIAHAO STREET	836 KAWAIAHAO ST	SSW 1/2 - 1 (0.620 mi.)	G37	15
1012 PIIKOI STREET,	***1012 PIIKOI ST***	***SE 1/2 - 1 (0.625 mi.)***	***38***	***16***
AMERICAN LINEN WAREH	***837 KAWAIAHAO ST***	***SSW 1/2 - 1 (0.626 mi.)***	***G39***	***16***
QUEEN EMMALANI TOWER	***600 QUEEN ST***	***WSW 1/2 - 1 (0.634 mi.)***	***40***	***16***
K&Y AUTO SERVICE AND	***902 KAWAIAHAO ST & 5***	***SSW 1/2 - 1 (0.654 mi.)***	***41***	***16***
GRACE OTSUKA APARTME	***1233 YOUNG ST***	***SE 1/2 - 1 (0.659 mi.)***	***42***	***16***
PACIFICA CONDOMINIUM	***1009 KAPIOLANI BLVD***	***S 1/2 - 1 (0.684 mi.)***	***43***	***17***
RUBBER STAMP PLANTAT	746 ILANIWAI ST	SW 1/2 - 1 (0.694 mi.)	44	17
HAWAII OPERA THEATER	***962 KAWAIAHAO ST***	***SSW 1/2 - 1 (0.704 mi.)***	***45***	***17***
HAWAII INSTRUMENTATI	***822 HALEKAUWILA ST***	***SW 1/2 - 1 (0.751 mi.)***	***46***	***17***
JAS W GLOVER LTD	***1046 WAIMAMU ST***	***S 1/2 - 1 (0.759 mi.)***	***47***	***17***
CARTWRIGHT NEIGHBORH	KEEAUMOKU ST & MATLO	ESE 1/2 - 1 (0.800 mi.)	48	18
COOKE STREET LEAD CO	***501 COOKE ST***	***SW 1/2 - 1 (0.823 mi.)***	***49***	***18***
SELF STORAGE 1	***438 KAMAKEE ST***	***S 1/2 - 1 (0.828 mi.)***	***50***	***18***
EVERSHINE X	***1230 KAPIOLANI BLVD***	***SSE 1/2 - 1 (0.837 mi.)***	***51***	***18***
RESERVE HOUSING TOWE	***1141 WAIMANU ST***	***S 1/2 - 1 (0.854 mi.)***	***52***	***18***
MEADOW GOLD DAIRIES	***1418 YOUNG ST***	***SE 1/2 - 1 (0.870 mi.)***	***53***	***19***
CENPAC PROPERTIES -	***615 PIIKOI ST***	***SSE 1/2 - 1 (0.874 mi.)***	***54***	***19***
HARBOR COURT	66 QUEEN ST	W 1/2 - 1 (0.897 mi.)	55	19
KOOLANI TOWER PROJEC	***1189 WAIMANU ST***	***S 1/2 - 1 (0.900 mi.)***	***56***	***19***
HAKUYOSHA HAWAII, IN	***730 SHERIDAN ST***	***SSE 1/2 - 1 (0.902 mi.)***	***H57***	***19***
MOTOR SUPPLY	***726 SHERIDAN ST***	***SSE 1/2 - 1 (0.902 mi.)***	***H58***	***20***
DURANT PROPERTIES	***1235 KONA ST***	***S 1/2 - 1 (0.905 mi.)***	***59***	***20***
HAWAIIAN ELECTRIC -	***170 ALA MOANA BOULEV***	***W 1/2 - 1 (0.928 mi.)***	***60***	***20***
RICHARD'S CHEVRON	***1909 NUUANU AVE***	***N 1/2 - 1 (0.938 mi.)***	***61***	***20***
LIKE LIKE PLAZA PETR	745 KEEAUMOKU ST	SE 1/2 - 1 (0.959 mi.)	63	21
KEKAULIKE DIAMOND HE	***163 N HOTEL ST***	***WNW 1/2 - 1 (0.959 mi.)***	***64***	***21***
UNDERGROUND HOISTS	***744 ALA MOANA BLVD***	***SW 1/2 - 1 (0.965 mi.)***	***65***	***21***
YEE HOP BUILDING MAU	950 MAUNAKEA ST	WNW 1/2 - 1 (0.966 mi.)	66	21
TOWN INN	***248-258 N BERETANIA***	***WNW 1/2 - 1 (0.968 mi.)***	***67***	***22***
595 ALA MOANA BLACK	***595 ALA MOANA BLVD***	***WSW 1/2 - 1 (0.979 mi.)***	***68***	***22***

Lower Elevation	Address	Direction / Distance	Map ID	Page
WRAF - HAWAIIAN TUNA	***1011 ALA MOANA BLVD***	***SSW 1/2 - 1 (0.995 mi.)***	***69***	***22***

State and tribal leaking storage tank lists

HI LUST: A review of the HI LUST list, as provided by EDR, and dated 12/16/2014 has revealed that there are 16 HI LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PUNCHBOWL MILITARY R	***2177 PUOWAINA DRIVE***	***NE 1/4 - 1/2 (0.449 mi.)***	***25***	***13***
Facility Status: Site Cleanup Completed (NFA)				

Lower Elevation	Address	Direction / Distance	Map ID	Page
HONOLULU POLICE DEPT	***801 S BERETANIA ST***	***SSW 1/8 - 1/4 (0.206 mi.)***	***A6***	***8***
Facility Status: Site Assessment Ongoing				
MID PAC PETROLEUM LL	***882 S BERETANIA ST***	***S 1/8 - 1/4 (0.213 mi.)***	***B9***	***8***
Facility Status: Site Cleanup Completed (NFA)				
C&CH BOARD OF WATER	***630 S BERETANIA ST***	***WSW 1/4 - 1/2 (0.270 mi.)***	***11***	***9***
Facility Status: Site Cleanup Completed (NFA)				
Facility Status: Site Cleanup Completed with EHMP				
STRAUB CLINIC & HOSP	***888 SOUTH KING STREE***	***SSW 1/4 - 1/2 (0.306 mi.)***	***13***	***9***
Facility Status: Site Cleanup Completed (NFA)				
SCAN LINE BUILDING	***788 S KING ST***	***SSW 1/4 - 1/2 (0.307 mi.)***	***14***	***10***
Facility Status: Site Cleanup Completed (NFA)				
THE QUEEN'S MEDICAL	***1301 PUNCHBOWL ST***	***WNW 1/4 - 1/2 (0.335 mi.)***	***15***	***10***
Facility Status: Site Cleanup Completed (NFA)				
MTL BUS FACILITY	***1133 ALAPAI ST***	***SW 1/4 - 1/2 (0.338 mi.)***	***16***	***10***
Facility Status: Site Cleanup Completed (NFA)				
RODS AUTO SERVICE	***1489 POUNCHBOWL STRE***	***NW 1/4 - 1/2 (0.340 mi.)***	***17***	***11***
Facility Status: Site Cleanup Completed (NFA)				
ONE ARCHER LANE (FOR	***809 S KING ST***	***SSW 1/4 - 1/2 (0.343 mi.)***	***C18***	***11***
Facility Status: Site Cleanup Completed (NFA)				
TESORO 2GO # 61024	***759 S KING ST***	***SSW 1/4 - 1/2 (0.372 mi.)***	***20***	***11***
Facility Status: Site Cleanup Completed (NFA)				
KALANIMOKU BLDG	***TMK 2-1-24:011151 PU***	***W 1/4 - 1/2 (0.380 mi.)***	***21***	***12***
Facility Status: Site Cleanup Completed (NFA)				
BMW OF HONOLULU LTD	***1075 S BERETANIA ST***	***SE 1/4 - 1/2 (0.422 mi.)***	***22***	***12***
Facility Status: Site Cleanup Completed (NFA)				
MIKE'S AUTOMOTIVE/SU	***225 S VINEYARD BLVD***	***NW 1/4 - 1/2 (0.453 mi.)***	***D26***	***13***
Facility Status: Site Cleanup Completed (NFA)				
IMM VINEYARD	***215 S VINEYARD BLVD***	***NW 1/4 - 1/2 (0.462 mi.)***	***D28***	***13***
Facility Status: Site Cleanup Completed (NFA)				
Facility Status: Monitored Natural Attenuation				
HAWAII NEWSPAPER AGE	***605 KAPIOLANI BLVD***	***SW 1/4 - 1/2 (0.467 mi.)***	***E29***	***14***
Facility Status: Site Cleanup Completed (NFA)				

State and tribal registered storage tank lists

HI UST: A review of the HI UST list, as provided by EDR, and dated 12/18/2014 has revealed that there are 3 HI UST sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
QUEEN'S PHYSICIANS'	*1329 LUSITANA ST*	*WSW 1/8 - 1/4 (0.146 mi.)*	*2*	*7*
HONOLULU POLICE DEPT	*801 S BERETANIA ST*	*SSW 1/8 - 1/4 (0.206 mi.)*	*A6*	*8*
MID PAC PETROLEUM LL	*882 S BERETANIA ST*	*S 1/8 - 1/4 (0.213 mi.)*	*B9*	*8*

State and tribal institutional control / engineering control registries

HI ENG CONTROLS: A review of the HI ENG CONTROLS list, as provided by EDR, and dated 12/02/2014 has revealed that there is 1 HI ENG CONTROLS site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
HAWAII NEWSPAPER AGE	*605 KAPIOLANI BLVD*	*SW 1/4 - 1/2 (0.467 mi.)*	*E29*	*14*

HI INST CONTROL: A review of the HI INST CONTROL list, as provided by EDR, and dated 12/02/2014 has revealed that there are 2 HI INST CONTROL sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
HECO PAD-MOUNTED #65	*650 KAPIOLANI BLVD*	*SW 1/4 - 1/2 (0.458 mi.)*	*E27*	*13*
HAWAII NEWSPAPER AGE	*605 KAPIOLANI BLVD*	*SW 1/4 - 1/2 (0.467 mi.)*	*E29*	*14*

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

RCRA NonGen / NLR: A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 12/09/2014 has revealed that there are 2 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ECO DREAM INC	1420 VICTORIA ST	ESE 1/8 - 1/4 (0.203 mi.)	4	7
CITY AND COUNTY OF H	801 S BERETANIA ST	SSW 1/8 - 1/4 (0.206 mi.)	A5	7

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Auto Stat: A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there is 1 EDR US Hist Auto Stat site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	882 S BERETANIA ST	S 1/8 - 1/4 (0.213 mi.)	B10	9

EDR US Hist Cleaners: A review of the EDR US Hist Cleaners list, as provided by EDR, has revealed that there is 1 EDR US Hist Cleaners site within approximately 0.25 miles of the target property.

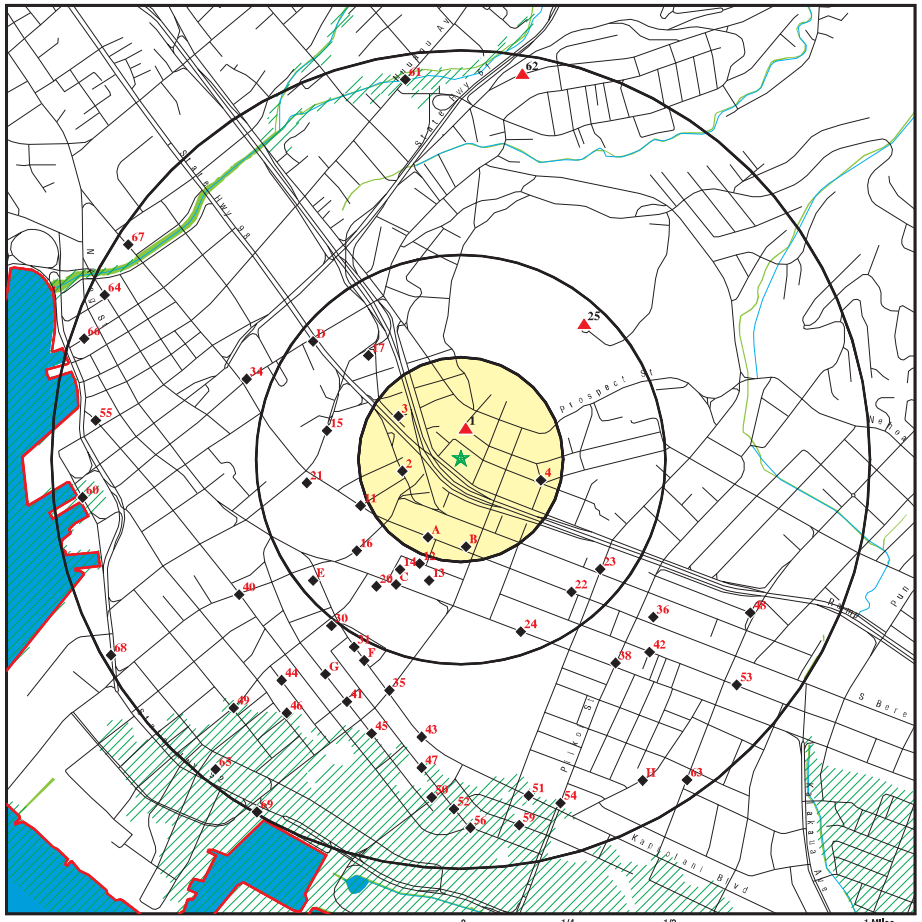
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	706 SPENCER ST	N 0 - 1/8 (0.078 mi.)	1	7

Count: 15 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
HONOLULU	S117391417	1339 SCHOOL STREET	1339, 1341, 1343 N SCHOOL ST		HI SHWS, HI ENG CONTROLS, HI INST CONTROL
HONOLULU	S108008546	KAKAAKO BROWNFIELD PROJECT - UNIT	AHUI ST	96814	HI SHWS, HI ENG CONTROLS, HI BROWNFIELDS
HONOLULU	S111704760	KAKAAKO MAKAI DISTRICT JOHN DOMINI	AHUI ST		HI SHWS, HI INST CONTROL
HONOLULU	S110061573	KAKAAKO BROWNFIELD PROJECT - UNIT	AHUI ST	96814	HI SHWS, HI ENG CONTROLS, HI BROWNFIELDS
HONOLULU	S111704669	ALA WAI HARBOR BOAT REPAIR YARD	ALA MOANA BLVD		HI SHWS
HONOLULU	1006820751	KAKAAKO MAKAI GATEWAY	COOKE ST & ILALO ST	96814	HI SHWS
HONOLULU	S106708609	CANNON CLUB	DIAMOND HEAD RD		HI SHWS, HI BROWNFIELDS
HONOLULU	S109096053	JCRA INVESTMENTS	1685 KAPIOLANI PROPERTY	96814	HI LUST
HONOLULU	S111704745	HONOLULU SEAWATER AIR CONDITIONING	KEAWE ST		HI SHWS, HI ENG CONTROLS, HI INST CONTROL
HONOLULU	S106818337	KEEAUMOKU SUPERBLOCK PROJECT	KEEAUMOKU ST		HI SHWS, HI SPILLS
HONOLULU	S108859943	KAKAAKO BROWNFIELD PROJECT - UNIT	KOULA ST	96814	HI SHWS, HI ENG CONTROLS, HI BROWNFIELDS
HONOLULU	S110061572	KAKAAKO BROWNFIELD PROJECT - UNIT	KOULA ST	96814	HI SHWS, HI ENG CONTROLS, HI BROWNFIELDS
HONOLULU	S111704706	FORMER KAPALAMA MILITARY RESERVATI	N NIMITZ HWY		HI SHWS
HONOLULU	S108008765	CITIZENS ENERGY SERVICES PIER 38	NIMITZ HWY		HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST CONTROL
HONOLULU	S106819311	NIMITZ HIGHWAY WATER IMPROVEMENT P	N NIMITZ HWY	96817	HI SHWS

OVERVIEW MAP - 4237094.54S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Punchbowl E ADDRESS: 730 Captain Cooke Ave. Honolulu HI 96813 LAT/LONG: 21.3072 / 157.8499	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.54s DATE: March 17, 2015 5:33 pm

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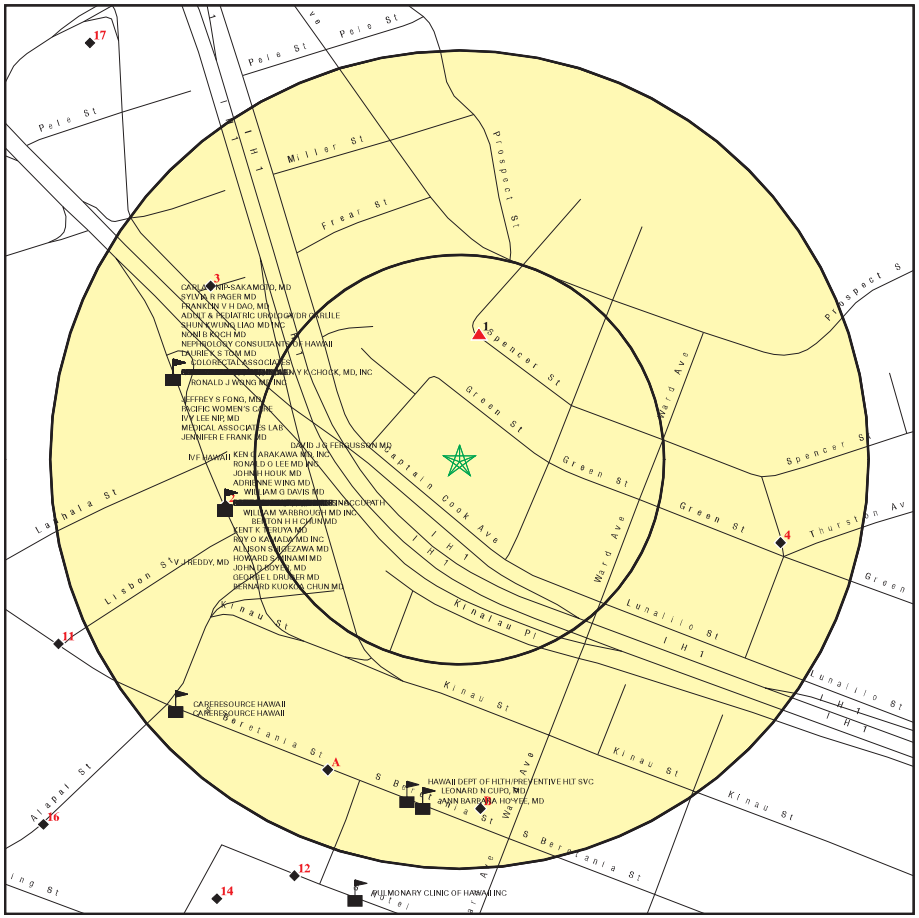
DETAIL MAP - 4237094.54S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	1	NR	1
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	1	NR	NR	NR	1
RCRA-CESQG	0.250		0	1	NR	NR	NR	1
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
HI SHWS	1.000		0	1	7	40	NR	48
State and tribal landfill and/or solid waste disposal site lists								
HI SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
HI LUST	0.500		0	2	14	NR	NR	16
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
HI UST	0.250		0	3	NR	NR	NR	3

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
HI ENG CONTROLS	0.500		0	0	1	NR	NR	1
HI INST CONTROL	0.500		0	0	2	NR	NR	2
State and tribal voluntary cleanup sites								
HI VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
HI BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
HI CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
HI SPILLS	TP		NR	NR	NR	NR	NR	0
HI SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	2	NR	NR	NR	2
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
HI UIC	TP		NR	NR	NR	NR	NR	0
HI DRYCLEANERS	0.250		0	0	NR	NR	NR	0
CA HAZNET	TP		NR	NR	NR	NR	NR	0
HI AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
HI Financial Assurance	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		0	1	NR	NR	NR	1
EDR US Hist Cleaners	0.250		1	0	NR	NR	NR	1
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
HI RGA LF	TP		NR	NR	NR	NR	NR	0
HI RGA LUST	TP		NR	NR	NR	NR	NR	0
HI RGA HWS	TP		NR	NR	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

1
North
< 1/8
0.078 mi.
411 ft.

Relative: Higher

706 SPENCER ST
HONOLULU, HI 96813

EDR US Hist Cleaners — **1015089431**, **N/A**

Click here for full text details

2
WSW
1/8-1/4
0.146 mi.
769 ft.

Relative: Lower

QUEEN'S PHYSICIANS' OFFICE BUILDING
1329 LUSITANA ST
HONOLULU, HI 96813

HI UST, **HI Financial Assurance** — **U001235983**, **N/A**

Click here for full text details

HI UST
Facility Id: 9-102622
Tank Status: Permanently out of Use

3
NW
1/8-1/4
0.185 mi.
978 ft.

Relative: Lower

1510 FREAR STREET
1510 FREAR ST
HONOLULU, HI 96813

HI SHWS, **HI SPILLS** — **S107024174**, **N/A**

Click here for full text details

4
ESE
1/8-1/4
0.203 mi.
1070 ft.

Relative: Lower

ECO DREAM INC
1420 VICTORIA ST
HONOLULU, HI 96822

RCRA NonGen / NLR — **1012178278**, **HIR000139477**

Click here for full text details

RCRA NonGen / NLR
EPA Id: HIR000139477

A5
SSW
1/8-1/4
0.206 mi.
1087 ft.

Relative: Lower

CITY AND COUNTY OF HONOLULU POLICE
801 S BERETANIA ST
HONOLULU, HI 96813

RCRA NonGen / NLR — **1010316425**, **HIP000067173**

Click here for full text details

RCRA NonGen / NLR
EPA Id: HIP000067173

A6
SSW
1/8-1/4
0.206 mi.
1087 ft.

Relative: Lower

HONOLULU POLICE DEPT
801 S BERETANIA ST
HONOLULU, HI 96813

HI LUST, **HI UST**, **HI Financial Assurance** — **U003221617**, **N/A**

Click here for full text details

HI LUST
Facility Id: 9-100815
Facility Status: Site Assessment Ongoing

HI UST
Facility Id: 9-100815
Tank Status: Permanently Out of Use
Tank Status: Temporarily out of Use
Tank Status: Currently in Use

A7
SSW
1/8-1/4
0.206 mi.
1087 ft.

Relative: Lower

HONOLULU POLICE CRIME LAB
801 S BERETANIA ST
HONOLULU, HI 96813

RCRA-CESQG, **FINDS** — **1004688735**, **HI0000184812**

Click here for full text details

RCRA-CESQG
EPA Id: HI0000184812

B8
South
1/8-1/4
0.213 mi.
1127 ft.

Relative: Lower

ACADEMY FASTBREAK SS NO 3941
882 BERETANIA ST
HONOLULU, HI 96813

RCRA-SQG — **1000823257**, **HID984468967**

Click here for full text details

RCRA-SQG
EPA Id: HID984468967

B9
South
1/8-1/4
0.213 mi.
1127 ft.

Relative: Lower

MID PAC PETROLEUM LLC 2705952
882 S BERETANIA ST
HONOLULU, HI 96813

HI LUST, **HI UST**, **HI Financial Assurance** — **U003402799**, **N/A**

Click here for full text details

HI LUST
Facility Id: 9-100040
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-100040
Tank Status: Permanently Out of Use
Tank Status: Currently in Use

B10
South
1/8-1/4
0.213 mi.
1127 ft.

Relative:
Lower

882 S BERETANIA ST
HONOLULU, HI 96813

EDR US Hist Auto Stat — **1015662485**, **N/A**

Click here for full text details

11
WSW
1/4-1/2
0.270 mi.
1423 ft.

Relative:
Lower

C&CH BOARD OF WATER SUPPLY BERETANIA STN.
630 S BERETANIA ST
HONOLULU, HI 96843

HI LUST, **HI UST**, **HI Financial Assurance** — **U003221567**, **N/A**

Click here for full text details

HI LUST
Facility Id: 9-100118
Facility Status: Site Cleanup Completed (NFA)
Facility Status: Site Cleanup Completed with EHMP

HI UST
Facility Id: 9-100118
Tank Status: Permanently Out of Use
Tank Status: Permanently out of Use
Tank Status: Currently in Use

12
SSW
1/4-1/2
0.273 mi.
1444 ft.

Relative:
Lower

801 SOUTH HOTEL STREET
801 S HOTEL ST
HONOLULU, HI 96813

HI SHWS — **S115488669**, **N/A**

Click here for full text details

13
SSW
1/4-1/2
0.306 mi.
1614 ft.

Relative:
Lower

STRAUB CLINIC & HOSPITAL
888 SOUTH KING STREET
HONOLULU, HI 96813

MLTS, **HI LUST**, **HI UST**, **HI Financial Assurance** — **1000490912**, **N/A**

Click here for full text details

HI LUST
Facility Id: 9-100814
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-100814
Tank Status: Permanently Out of Use

14
SSW
1/4-1/2
0.307 mi.
1619 ft.

Relative:
Lower

SCAN LINE BUILDING
788 S KING ST
HONOLULU, HI 96800

HI LUST, **HI UST** — **U003154619**, **N/A**

Click here for full text details

HI LUST
Facility Id: 9-102752
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-102752
Tank Status: Permanently Out of Use

15
WNW
1/4-1/2
0.335 mi.
1768 ft.

Relative:
Lower

THE QUEEN'S MEDICAL CENTER
1301 PUNCHBOWL ST
HONOLULU, HI 96813

HI SHWS, **HI LUST**, **HI UST**, **HI AIRS**, **HI Financial Assurance** — **1000490311**, **N/A**

Click here for full text details

HI LUST
Facility Id: 9-100901
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-100901
Tank Status: Currently In Use
Tank Status: Permanently Out of Use

HI AIRS
Facility Id: 0353-02-C

16
SW
1/4-1/2
0.338 mi.
1785 ft.

Relative:
Lower

MTL BUS FACILITY
1133 ALAPAI ST
HONOLULU, HI 96813

HI LUST, **HI UST** — **U001235067**, **N/A**

Click here for full text details

HI LUST
Facility Id: 9-100150
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-100150
Tank Status: Permanently Out of Use

17 NW 1/4-1/2 0.340 mi. 1796 ft. Relative: Lower

RODS AUTO SERVICE — RCRA NonGen / NLR, HI LUST, HI UST — 1000373884, HID981693260
1489 POUNCHBOWL STREET
HONOLULU, HI 96813

Click here for full text details

RCRA NonGen / NLR
EPA Id: HID981693260

HI LUST
Facility Id: 9-100889
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-100889
Tank Status: Permanently Out of Use

C18 SSW 1/4-1/2 0.343 mi. 1811 ft. Relative: Lower

ONE ARCHER LANE (FORMERLY KING STREET CARWASH) — HI LUST, HI UST — U003221738, N/A
809 S KING ST
HONOLULU, HI 96800

Click here for full text details

HI LUST
Facility Id: 9-102451
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-102451
Tank Status: Permanently Out of Use

C19 SSW 1/4-1/2 0.344 mi. 1815 ft. Relative: Lower

ONE ARCHER LANE — HI SHWS, HI SPILLS — 1006818981, N/A
801 S KING ST
HONOLULU, HI 96813

Click here for full text details

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20 SSW 1/4-1/2 0.372 mi. 1964 ft. Relative: Lower

TESORO 2GO # 61024 — HI LUST, HI UST, HI SPILLS, HI Financial Assurance — U001235754, N/A
759 S KING ST
HONOLULU, HI 96813

Click here for full text details

HI LUST
Facility Id: 9-102158
Facility Status: Site Cleanup Completed (NFA)

HI UST

TESORO 2GO # 61024 (Continued) — U001235754

Facility Id: 9-102158
Tank Status: Permanently Out of Use
Tank Status: Currently In Use

---

21 West 1/4-1/2 0.380 mi. 2009 ft. Relative: Lower

KALANIMOKU BLDG — HI LUST, HI UST — U001237400, N/A
TMK 2-1-24:011151 PUNCHBOWL ST
HONOLULU, HI 96800

Click here for full text details

HI LUST
Facility Id: 9-102691
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-102691
Tank Status: Permanently Out of Use

---

22 SE 1/4-1/2 0.422 mi. 2226 ft. Relative: Lower

BMW OF HONOLULU LTD — HI LUST, HI UST — U001235080, N/A
1075 S BERETANIA ST
HONOLULU, HI 96814

Click here for full text details

HI LUST
Facility Id: 9-100174
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-100174
Tank Status: Permanently Out of Use

---

23 SE 1/4-1/2 0.434 mi. 2291 ft. Relative: Lower

1310 PENSACOLA STREET — HI SHWS — S111704658, N/A
1310 PENSACOLA ST
HONOLULU, HI

Click here for full text details

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24 SSE 1/4-1/2 0.445 mi. 2351 ft. Relative: Lower

AUXILIARY SERVICES - DOE — HI SHWS, HI UST, HI Financial Assurance — U003154583, N/A
1039 S KING ST
HONOLULU, HI 96814

Click here for full text details

HI UST
Facility Id: 9-102337

AUXILIARY SERVICES - DOE (Continued) **U003154583**

Tank Status: Permanently Out of Use

---

25 NE 1/4-1/2 0.449 mi. 2369 ft. Relative: Higher

PUNCHBOWL MILITARY RESERVATION — **HI LUST** **U003221610**
2177 PUOWAINA DRIVE — **HI UST** **N/A**
HONOLULU, HI 96813

Click here for full text details

HI LUST
Facility Id: 9-100784
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-202489
Facility Id: 9-100784
Tank Status: Permanently Out of Use

D26 NW 1/4-1/2 0.453 mi. 2394 ft. Relative: Lower

MIKE'S AUTOMOTIVE/SUPPLY INC — **HI LUST** **U001235351**
225 S VINEYARD BLVD — **HI UST** **N/A**
HONOLULU, HI 96813 — **HI Financial Assurance**

Click here for full text details

HI LUST
Facility Id: 9-101034
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-101034
Tank Status: Permanently Out of Use

E27 SW 1/4-1/2 0.458 mi. 2418 ft. Relative: Lower

HECO PAD-MOUNTED #65844 TRANSFORMER RELEASE — **HI SHWS** **1006818926**
650 KAPIOLANI BLVD — **HI SPILLS** **N/A**
HONOLULU, HI 96813 — **HI INST CONTROL**

Click here for full text details

D28 NW 1/4-1/2 0.462 mi. 2441 ft. Relative: Lower

IMM VINEYARD — **HI LUST** **U001235169**
215 S VINEYARD BLVD — **HI UST** **N/A**
HONOLULU, HI 96813 — **HI Financial Assurance**

Click here for full text details

HI LUST
Facility Id: 9-100343
Facility Status: Site Cleanup Completed (NFA)

IMM VINEYARD (Continued) **U001235169**

Facility Status: Monitored Natural Attenuation

HI UST
Facility Id: 9-100343
Tank Status: Currently in Use

E29 SW 1/4-1/2 0.467 mi. 2464 ft. Relative: Lower

HAWAII NEWSPAPER AGENCY INC — **HI SHWS** **1000146678**
605 KAPIOLANI BLVD — **HI LUST** **N/A**
HONOLULU, HI 96813 — **HI UST**
HI SPILLS
HI ENG CONTROLS
HI INST CONTROL

Click here for full text details

HI LUST
Facility Id: 9-100938
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-100938
Tank Status: Permanently Out of Use

---

30 SW 1/2-1 0.514 mi. 2716 ft. Relative: Lower

HD&C, 725 KAPIOLANI BOULEVARD — **HI SHWS** **S106817426**
725 KAPIOLANI BLVD — **HI SPILLS** **N/A**
HONOLULU, HI — **HI INST CONTROL**

Click here for full text details

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31 SSW 1/2-1 0.527 mi. 2781 ft. Relative: Lower

BMW OF HONOLULU — **HI SHWS** **S106816569**
777 KAPIOLANI BLVD — **HI SPILLS** **N/A**
HONOLULU, HI — **HI ENG CONTROLS**
HI INST CONTROL

Click here for full text details

F32 SSW 1/2-1 0.545 mi. 2876 ft. Relative: Lower

CHUEI SHOKOH, INC. — **HI SHWS** **1006820040**
825 KAPIOLANI BLVD — **HI SPILLS** **N/A**
HONOLULU, HI 96813 — **HI ENG CONTROLS**
HI INST CONTROL
HI VCP

Click here for full text details

F33
SSW
1/2-1
0.554 mi.
2927 ft.
Relative: Lower

HECO SOIL CONTAMINATION CHAPIN LANE AND KAPIOLANI BOULEVARD
CHAPIN LN & KAPIOLANI BLVD
HONOLULU, HI

Click here for full text details

Database(s)	EDR ID Number / EPA ID Number
HI SHWS	S106817445
HI ENG CONTROLS	N/A
HI INST CONTROL	

34
WNW
1/2-1
0.559 mi.
2952 ft.
Relative: Lower

CAPITOL PLACE DEVELOPMENT PROJECT
1212 QUEEN EMMA ST
HONOLULU, HI 96813

Click here for full text details

Database(s)	EDR ID Number / EPA ID Number
HI SHWS	S108008488
	N/A

35
SSW
1/2-1
0.590 mi.
3117 ft.
Relative: Lower

SYMPHONY PARK
850 KAPIOLANI BLVD
HONOLULU, HI 96807

Click here for full text details

Database(s)	EDR ID Number / EPA ID Number
HI SHWS	S107022567
HI SPILLS	N/A

36
SE
1/2-1
0.608 mi.
3210 ft.
Relative: Lower

SCHUMAN CARRIAGE MOTORS, LTD.
1234 S BERETANIA ST
HONOLULU, HI 96814

Click here for full text details

Database(s)	EDR ID Number / EPA ID Number
HI SHWS	U003221663
HI LUST	N/A
HI UST	
HI SPILLS	
HI INST CONTROL	
HI Financial Assurance	

HI LUST
Facility Id: 9-101276
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-101276
Tank Status: Permanently Out of Use

G37
SSW
1/2-1
0.620 mi.
3273 ft.
Relative: Lower

836 KAWAIAHAO STREET
836 KAWAIAHAO ST
HONOLULU, HI

Click here for full text details

Database(s)	EDR ID Number / EPA ID Number
HI SHWS	S111704659
	N/A

38
SE
1/2-1
0.625 mi.
3298 ft.
Relative: Lower

1012 PIIKOI STREET, ANIN-PIIKOI BUILDING
1012 PIIKOI ST
HONOLULU, HI 96814

Click here for full text details

Database(s)	EDR ID Number / EPA ID Number
HI SHWS	S106815117
HI SPILLS	N/A

G39
SSW
1/2-1
0.626 mi.
3305 ft.
Relative: Lower

AMERICAN LINEN WAREHOUSE
837 KAWAIAHAO ST
HONOLULU, HI

Click here for full text details

Database(s)	EDR ID Number / EPA ID Number
HI SHWS	S106816215
HI SPILLS	N/A

40
WSW
1/2-1
0.634 mi.
3349 ft.
Relative: Lower

QUEEN EMMALANI TOWER
600 QUEEN ST
HONOLULU, HI 96813

Click here for full text details

Database(s)	EDR ID Number / EPA ID Number
CERC-NFRAP	1000688441
RCRA NonGen / NLR	HID982442394
FINDS	
HI SHWS	
HI SPILLS	
HI ENG CONTROLS	
HI INST CONTROL	

CERC-NFRAP
EPA Id: HID984466698

RCRA NonGen / NLR
EPA Id: HID982442394

41
SSW
1/2-1
0.654 mi.
3452 ft.
Relative: Lower

K&Y AUTO SERVICE AND WAYNE'S AUTO ELECTRIC
902 KAWAIAHAO ST & 539 KAMANI ST
HONOLULU, HI

Click here for full text details

Database(s)	EDR ID Number / EPA ID Number
HI SHWS	S111677440
HI SPILLS	N/A

42
SE
1/2-1
0.659 mi.
3480 ft.
Relative: Lower

GRACE OTSUKA APARTMENT COMPLEX
1233 YOUNG ST
HONOLULU, HI 96814

Click here for full text details

Database(s)	EDR ID Number / EPA ID Number
HI SHWS	S110061466
HI ENG CONTROLS	N/A
HI INST CONTROL	

43 **South** **1/2-1** **0.684 mi.** **3613 ft.** **Relative:** **Lower**	**PACIFICA CONDOMINIUM** **1009 KAPIOLANI BLVD** **HONOLULU, HI 96814** Click here for full text details **HI LUST** Facility Id: 9-103909 Facility Status: Site Cleanup Completed (NFA)	**HI SHWS** **HI LUST**	**S110765470** **N/A**
44 **SW** **1/2-1** **0.694 mi.** **3666 ft.** **Relative:** **Lower**	**RUBBER STAMP PLANTATION** **746 ILANIWAI ST** **HONOLULU, HI** Click here for full text details	**HI SHWS**	**S111704854** **N/A**
45 **SSW** **1/2-1** **0.704 mi.** **3718 ft.** **Relative:** **Lower**	**HAWAII OPERA THEATER SETS & PROPS WAREHOUSE** **962 KAWAIAHAO ST** **HONOLULU, HI** Click here for full text details	**HI SHWS** **HI SPILLS** **HI ENG CONTROLS** **HI INST CONTROL**	**S115488700** **N/A**
46 **SW** **1/2-1** **0.751 mi.** **3966 ft.** **Relative:** **Lower**	**HAWAII INSTRUMENTATION & CONTROLS, INC** **822 HALEKAUWILA ST** **HONOLULU, HI** Click here for full text details	**HI SHWS** **HI SPILLS** **HI ENG CONTROLS** **HI INST CONTROL**	**S106817350** **N/A**
47 **South** **1/2-1** **0.759 mi.** **4006 ft.** **Relative:** **Lower**	**JAS W GLOVER LTD** **1046 WAIMAMU ST** **HONOLULU, HI 96814** Click here for full text details **RCRA NonGen / NLR** EPA Id: HID981637861 **HI LUST** Facility Id: 9-100835 Facility Status: Site Cleanup Completed (NFA) **HI UST** Facility Id: 9-100835	**RCRA NonGen / NLR** **FINDS** **HI SHWS** **HI LUST** **HI UST**	**1000135795** **HID981637861**

	JAS W GLOVER LTD (Continued) Tank Status: Permanently Out of Use		**1000135795**
48 **ESE** **1/2-1** **0.800 mi.** **4226 ft.** **Relative:** **Lower**	**CARTWRIGHT NEIGHBORHOOD PARK** **KEEAUMOKU ST & MATLOCK AVE** **HONOLULU, HI 96814** Click here for full text details	**HI SHWS**	**1006820122** **N/A**
49 **SW** **1/2-1** **0.823 mi.** **4343 ft.** **Relative:** **Lower**	**COOKE STREET LEAD CONTAMINATION** **501 COOKE ST** **HONOLULU, HI 96813** Click here for full text details	**HI SHWS** **HI ENG CONTROLS** **HI INST CONTROL**	**1006820105** **N/A**
50 **South** **1/2-1** **0.828 mi.** **4374 ft.** **Relative:** **Lower**	**SELF STORAGE 1** **438 KAMAKEE ST** **HONOLULU, HI 96814** Click here for full text details	**HI SHWS** **HI SPILLS**	**1006819998** **N/A**
51 **SSE** **1/2-1** **0.837 mi.** **4422 ft.** **Relative:** **Lower**	**EVERSHINE X** **1230 KAPIOLANI BLVD** **HONOLULU, HI 96814** Click here for full text details	**HI SHWS** **HI VCP**	**S105262688** **N/A**
52 **South** **1/2-1** **0.854 mi.** **4508 ft.** **Relative:** **Lower**	**RESERVE HOUSING TOWER SOIL CONTAMINATION** **1141 WAIMANU ST** **HONOLULU, HI 96813** Click here for full text details	**HI SHWS** **HI SPILLS**	**1006819959** **N/A**

53 SE 1/2-1 0.870 mi. 4595 ft. Relative: Lower

MEADOW GOLD DAIRIES (ICE CREAM PLANT)
1418 YOUNG ST
HONOLULU, HI 96814

HI SHWS — S104657475
HI SPILLS — N/A

Click here for full text details

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54 SSE 1/2-1 0.874 mi. 4617 ft. Relative: Lower

CENPAC PROPERTIES - OFFICE BUILDING
615 PIIKOI ST
HONOLULU, HI 96814

HI SHWS — U003402842
HI LUST — N/A
HI UST
HI SPILLS
HI Financial Assurance

Click here for full text details

HI LUST
Facility Id: 9-103438
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-103438
Tank Status: Permanently Out of Use

---

55 West 1/2-1 0.897 mi. 4736 ft. Relative: Lower

HARBOR COURT
66 QUEEN ST
HONOLULU, HI 96813

HI SHWS — 1006820894
N/A

Click here for full text details

---

56 South 1/2-1 0.900 mi. 4751 ft. Relative: Lower

KOOLANI TOWER PROJECT
1189 WAIMANU ST
HONOLULU, HI 96814

HI SHWS — S106818609
HI SPILLS — N/A
HI ENG CONTROLS
HI INST CONTROL

Click here for full text details

H57 SSE 1/2-1 0.902 mi. 4760 ft. Relative: Lower

HAKUYOSHA HAWAII, INC
730 SHERIDAN ST
HONOLULU, HI 96814

HI SHWS — S106817254
HI SPILLS — N/A
HI INST CONTROL
HI AIRS

Click here for full text details

HI AIRS
Facility Id: 0462-01-N
Facility Id: 0564-01-C

H58 SSE 1/2-1 0.902 mi. 4760 ft. Relative: Lower

MOTOR SUPPLY
726 SHERIDAN ST
HONOLULU, HI 96814

HI SHWS — S108008592
HI INST CONTROL — N/A

Click here for full text details

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59 South 1/2-1 0.905 mi. 4778 ft. Relative: Lower

DURANT PROPERTIES
1235 KONA ST
HONOLULU, HI

HI SHWS — S109096045
HI INST CONTROL — N/A

Click here for full text details

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60 West 1/2-1 0.928 mi. 4902 ft. Relative: Lower

HAWAIIAN ELECTRIC - HONOLULU GENERATING STATION
170 ALA MOANA BOULEVARD
HONOLULU, HI 96813

RCRA-TSDF — 1000146691
CERC-NFRAP — HID000150680
CORRACTS
RCRA-CESQG
HI SHWS
HI SPILLS
CA HAZNET
HI AIRS
2020 COR ACTION

Click here for full text details

RCRA-TSDF
EPA Id: HID000150680

CERC-NFRAP
EPA Id: HID000150680

RCRA-CESQG
EPA Id: HID000150680

HI AIRS
Facility Id: 0238-01-C

---

61 North 1/2-1 0.938 mi. 4955 ft. Relative: Lower

RICHARD'S CHEVRON
1909 NUUANU AVE
HONOLULU, HI 96817

HI SHWS — 1000601437
HI SPILLS — N/A
HI INST CONTROL
HI Financial Assurance

Click here for full text details

62 North 1/2-1 0.955 mi. 5043 ft. Relative: Higher

HONOLULU SAKE BREWERY CO, LTD
2150 BOOTH RD
HONOLULU, HI 96813

HI SHWS — **U003221588**
HI LUST — **N/A**
HI UST
HI SPILLS

Click here for full text details

HI LUST
Facility Id: 9-100247
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-100247
Tank Status: Permanently Out of Use

---

63 SE 1/2-1 0.959 mi. 5061 ft. Relative: Lower

LIKE LIKE PLAZA PETROLEUM CONTAMINATION
745 KEEAUMOKU ST
HONOLULU, HI 96814

HI SHWS — **1006819347**
N/A

Click here for full text details

---

64 WNW 1/2-1 0.959 mi. 5062 ft. Relative: Lower

KEKAULIKE DIAMOND HEAD BLOCK REVITALIZATION
163 N HOTEL ST
HONOLULU, HI 96817

HI SHWS — **1006819184**
HI SPILLS — **N/A**

Click here for full text details

---

65 SW 1/2-1 0.965 mi. 5096 ft. Relative: Lower

UNDERGROUND HOISTS
744 ALA MOANA BLVD
HONOLULU, HI 96813

HI SHWS — **1006819562**
HI SPILLS — **N/A**
HI INST CONTROL

Click here for full text details

---

66 WNW 1/2-1 0.966 mi. 5102 ft. Relative: Lower

YEE HOP BUILDING MAUNAKEA STREET
950 MAUNAKEA ST
HONOLULU, HI

HI SHWS — **S106821168**
N/A

Click here for full text details

67 WNW 1/2-1 0.968 mi. 5109 ft. Relative: Lower

TOWN INN
248-258 N BERETANIA ST
HONOLULU, HI 96817

HI SHWS — **1006819555**
HI INST CONTROL — **N/A**
HI VCP

Click here for full text details

---

68 WSW 1/2-1 0.979 mi. 5171 ft. Relative: Lower

595 ALA MOANA BLACK OIL PIPELINE
595 ALA MOANA BLVD
HONOLULU, HI 96814

HI SHWS — **S108859626**
HI SPILLS — **N/A**

Click here for full text details

---

69 SSW 1/2-1 0.995 mi. 5251 ft. Relative: Lower

WRAF - HAWAIIAN TUNA PACKERS
1011 ALA MOANA BLVD
HONOLULU, HI 96814

HI SHWS — **U001236016**
HI LUST — **N/A**
HI UST
HI ENG CONTROLS
HI BROWNFIELDS
HI Financial Assurance

Click here for full text details

HI LUST
Facility Id: 9-102690
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-102690
Tank Status: Permanently Out of Use

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
HI	AIRS	List of Permitted Facilities	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	BROWNFIELDS	Brownfields Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	CDL	Clandestine Drug Lab Listing	Department of Health	08/04/2010	09/10/2010	10/22/2010
HI	DRYCLEANERS	Permitted Drycleaner Facility Listing	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	ENG CONTROLS	Engineering Control Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	Financial Assurance	Financial Assurance Information Listing	Department of Health	12/01/2014	12/19/2014	01/28/2015
HI	INST CONTROL	Sites with Institutional Controls	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	LUST	Leaking Underground Storage Tank Database	Department of Health	12/16/2014	12/19/2014	01/28/2015
HI	RGA HWS	Recovered Government Archive State Hazardous Waste Facilitie	Department of Health		07/01/2013	01/08/2014
HI	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Health		07/01/2013	01/17/2014
HI	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	Department of Health		07/01/2013	01/03/2014
HI	SHWS	Sites List	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	SPILLS	Release Notifications	Department of Health	12/02/2014	12/22/2014	01/28/2015
HI	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	03/10/2012	01/03/2013	02/11/2013
HI	SWF/LF	Permitted Landfills in the State of Hawaii	Department of Health	09/17/2012	04/03/2013	05/10/2013
HI	UIC	Underground Injection Wells Listing	Department of Health	02/07/2013	02/12/2013	04/09/2013
HI	UST	Underground Storage Tank Database	Department of Health	12/18/2014	12/19/2014	01/28/2015
HI	VCP	Voluntary Response Program Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	04/22/2013	03/03/2015	03/09/2015
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2011	02/26/2013	04/19/2013
US	CERCLIS	Comprehensive Environmental Response, Compensation, and Liab	EPA	10/25/2013	11/11/2013	02/13/2014
US	CERCLIS-NFRAP	CERCLIS No Further Remedial Action Planned	EPA	10/25/2013	11/11/2013	02/13/2014
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	07/01/2014	09/10/2014	10/20/2014
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	01/23/2015	02/13/2015	03/09/2015
US	CORRACTS	Corrective Action Report	EPA	12/09/2014	12/29/2014	01/29/2015
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DELISTED NPL	National Priority List Deletions	EPA	12/16/2014	01/08/2015	02/09/2015
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	07/31/2012	08/07/2012	09/18/2012
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EDR US Hist Auto Stat	EDR Exclusive Historic Gas Stations	EDR, Inc.			
US	EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	09/29/2014	09/30/2014	11/06/2014
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	07/21/2014	10/07/2014	10/20/2014
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
US	FEMA UST	Underground Storage Tank Listing	FEMA	01/01/2010	02/16/2010	04/12/2010
US	FINDS	Facility Index System/Facility Registry System	EPA	08/16/2014	09/10/2014	10/20/2014
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	06/06/2014	09/10/2014	09/18/2014
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	12/29/2014	12/30/2014	03/09/2015
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	01/23/2015	02/06/2015	03/09/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	02/01/2013	05/01/2013	11/01/2013

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	01/30/2015	02/05/2015	03/09/2015
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/10/2015	03/13/2015
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	01/28/2015	01/30/2015	03/13/2015
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	01/08/2015	01/08/2015	02/09/2015
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2005	12/08/2006	01/11/2007
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	02/01/2013	05/01/2013	01/27/2014
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	01/30/2015	02/05/2015	03/13/2015
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/13/2015	03/13/2015
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	01/29/2015	01/30/2015	03/13/2015
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	12/14/2014	02/13/2015	03/13/2015
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	09/29/2014	10/01/2014	11/06/2014
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	11/25/2014	11/26/2014	01/29/2015
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	02/18/2014	03/18/2014	04/24/2014
US	LUCIS	Land Use Control Information System	Department of the Navy	12/03/2014	12/12/2014	01/29/2015
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	12/29/2014	01/08/2015	01/29/2015
US	NPL	National Priority List	EPA	12/16/2014	01/08/2015	02/09/2015
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	07/01/2014	10/15/2014	11/17/2014
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	02/01/2011	10/19/2011	01/10/2012
US	PRP	Potentially Responsible Parties	EPA	10/25/2013	10/17/2014	10/20/2014
US	Proposed NPL	Proposed National Priority List Sites	EPA	12/16/2014	01/08/2015	02/09/2015
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	10/07/2014	10/08/2014	10/20/2014
US	RCRA NonGen / NLR	RCRA - Non Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RMP	Risk Management Plans	Environmental Protection Agency	08/01/2014	08/12/2014	11/06/2014
US	ROD	Records Of Decision	EPA	11/25/2013	12/12/2013	02/24/2014
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	03/07/2011	03/09/2011	05/02/2011
US	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2011	07/31/2013	09/13/2013
US	TSCA	Toxic Substances Control Act	EPA	12/31/2012	01/15/2015	01/29/2015
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	09/14/2010	10/07/2011	03/01/2012
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/16/2014	10/31/2014	11/17/2014
US	US AIRS MINOR	Air Facility System Data	EPA	10/16/2014	10/31/2014	11/17/2014

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	12/22/2014	12/22/2014	01/29/2015
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	11/19/2014	11/21/2014	01/29/2015
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	12/30/2014	12/31/2014	01/29/2015
US	Oil/Gas Pipelines	GeoData Digital Line Graphs from 1:100,000-Scale Maps	USGS			
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
US	USGS 7.5' Topographic Map	Scanned Digital USGS 7.5' Topographic Map (DRG)	USGS			

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

PUNCHBOWL E
730 CAPTAIN COOKE AVE.
HONOLULU, HI 96813

TARGET PROPERTY COORDINATES

Latitude (North):	21.3072 - 21˚ 18' 25.92''
Longitude (West):	157.8499 - 157˚ 50' 59.64''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	619290.1
UTM Y (Meters):	2356443.2
Elevation:	101 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	21157-C7 HONOLULU, HI
Most Recent Revision:	Not reported

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

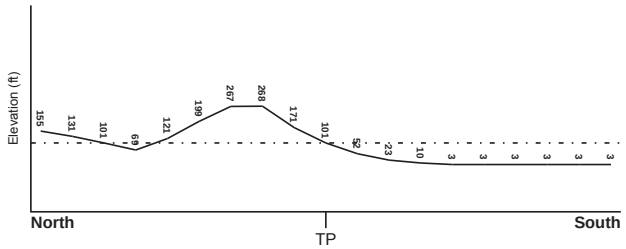
TOPOGRAPHIC INFORMATION

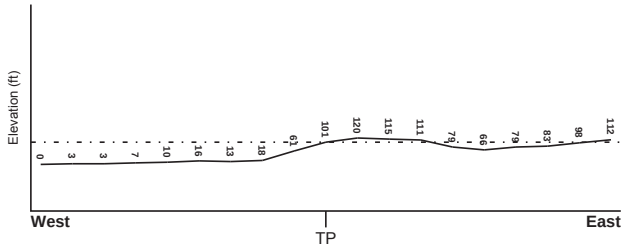
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SSW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 101 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
HONOLULU, HI	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 15003C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
HONOLULU	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

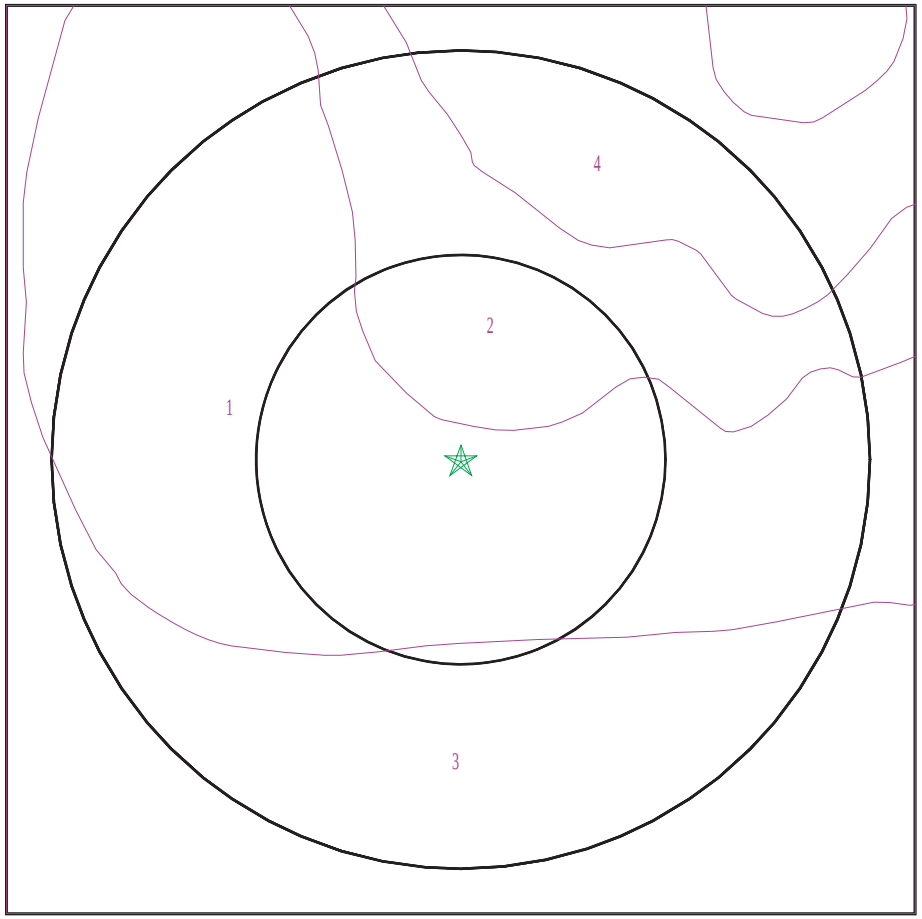
Era: -
System: -
Series: -
Code: N/A *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: -

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4237094.54s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME: Punchbowl E ADDRESS: 730 Captain Cooke Ave. Honolulu HI 96813 LAT/LONG: 21.3072 / 157.8499	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.54s DATE: March 17, 2015 5:33 pm

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DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Tantalus

Soil Surface Texture: silty clay loam

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	18 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	MH-A (proposed)	Max: 141.14 Min: 14.11	Max: 7.3 Min: 6.1
2	18 inches	29 inches	gravelly very fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	MH-A (proposed)	Max: 141.14 Min: 14.11	Max: 7.3 Min: 6.1
3	29 inches	59 inches	gravel	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Clean gravels, Poorly Graded Gravel.	Max: 705 Min: 141.14	Max: 7.3 Min: 6.1

Soil Map ID: 2

Soil Component Name: Tantalus

Soil Surface Texture: silty clay loam

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	18 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Gravels, Clean gravels, Poorly Graded Gravel.	Max: 141.14 Min: 14.11	Max: 7.3 Min: 6.1
2	18 inches	29 inches	gravelly very fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Gravels, Clean gravels, Poorly Graded Gravel.	Max: 141.14 Min: 14.11	Max: 7.3 Min: 6.1
3	29 inches	59 inches	gravel	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Clean gravels, Poorly Graded Gravel.	Max: 705 Min: 141.14	Max: 7.3 Min: 6.1

Soil Map ID: 3

Soil Component Name: Makiki

Soil Surface Texture: clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	20 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Gravels, Clean gravels, Poorly Graded Gravel.	Max: 42 Min: 4.23	Max: 5.5 Min: 5.1
2	20 inches	29 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Gravels, Clean gravels, Poorly Graded Gravel.	Max: 14.11 Min: 4.23	Max: 6 Min: 5.6
3	29 inches	59 inches	paragravelly clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.14 Min: 14.11	Max: 6 Min: 5.6

Soil Map ID: 4

Soil Component Name: Rock land

Soil Surface Texture: silty clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	3 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6
2	3 inches	7 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6
3	7 inches	20 inches	bedrock	Not reported	Not reported	Max: 0.42 Min: 0.02	Max: Min:

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A12	USGS40000269644	1/8 - 1/4 Mile SSE
B13	USGS40000269661	1/8 - 1/4 Mile WSW
B14	USGS40000269660	1/8 - 1/4 Mile WSW
B15	USGS40000269663	1/8 - 1/4 Mile WSW
B16	USGS40000269662	1/8 - 1/4 Mile WSW
B17	USGS40000269656	1/8 - 1/4 Mile WSW
B18	USGS40000269655	1/8 - 1/4 Mile WSW
B19	USGS40000269654	1/8 - 1/4 Mile WSW
B20	USGS40000269659	1/8 - 1/4 Mile WSW

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
B21	USGS40000269658	1/8 - 1/4 Mile WSW
B22	USGS40000269657	1/8 - 1/4 Mile WSW
B27	USGS40000269670	1/8 - 1/4 Mile WSW
B28	USGS40000269671	1/8 - 1/4 Mile WSW
B29	USGS40000269664	1/8 - 1/4 Mile WSW
C30	USGS40000269687	1/8 - 1/4 Mile West
B31	USGS40000269678	1/8 - 1/4 Mile WSW
B35	USGS40000269672	1/4 - 1/2 Mile WSW
A36	USGS40000269637	1/4 - 1/2 Mile South
B37	USGS40000269645	1/4 - 1/2 Mile SW
40	USGS40000269710	1/4 - 1/2 Mile WNW
D41	USGS40000269638	1/4 - 1/2 Mile SSW
D43	USGS40000269639	1/4 - 1/2 Mile SW
E45	USGS40000269622	1/4 - 1/2 Mile South
F49	USGS40000269633	1/4 - 1/2 Mile SW
H50	USGS40000269721	1/4 - 1/2 Mile NW
G51	USGS40000269620	1/4 - 1/2 Mile SSE
E53	USGS40000269616	1/4 - 1/2 Mile South
G56	USGS40000269619	1/4 - 1/2 Mile SSE
F57	USGS40000269623	1/4 - 1/2 Mile SSW
I59	USGS40000269673	1/4 - 1/2 Mile West
J62	USGS40000269604	1/4 - 1/2 Mile South
J63	USGS40000269605	1/4 - 1/2 Mile South
K64	USGS40000269627	1/4 - 1/2 Mile SW
L66	USGS40000269608	1/4 - 1/2 Mile SSW
M68	USGS40000269615	1/4 - 1/2 Mile SE
N71	USGS40000269703	1/4 - 1/2 Mile West
O74	USGS40000269681	1/2 - 1 Mile West
N77	USGS40000269699	1/2 - 1 Mile West
P80	USGS40000269609	1/2 - 1 Mile SW
O82	USGS40000269695	1/2 - 1 Mile West
Q85	USGS40000269646	1/2 - 1 Mile WSW
S86	USGS40000269733	1/2 - 1 Mile NW
T87	USGS40000269715	1/2 - 1 Mile WNW
T88	USGS40000269716	1/2 - 1 Mile WNW
Q94	USGS40000269649	1/2 - 1 Mile WSW
T96	USGS40000269712	1/2 - 1 Mile WNW
V99	USGS40000269636	1/2 - 1 Mile WSW
R100	USGS40000269585	1/2 - 1 Mile SSE
U101	USGS40000269621	1/2 - 1 Mile SW
T103	USGS40000269717	1/2 - 1 Mile WNW
V105	USGS40000269634	1/2 - 1 Mile WSW
W107	USGS40000269642	1/2 - 1 Mile ESE
109	USGS40000269635	1/2 - 1 Mile WSW
X110	USGS40000269719	1/2 - 1 Mile WNW
Y112	USGS40000269632	1/2 - 1 Mile ESE
X113	USGS40000269728	1/2 - 1 Mile WNW
Z117	USGS40000269704	1/2 - 1 Mile West
AA122	USGS40000269682	1/2 - 1 Mile West
AA123	USGS40000269683	1/2 - 1 Mile West
AC125	USGS40000269784	1/2 - 1 Mile NNW
AB126	USGS40000269584	1/2 - 1 Mile SE

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
AA128	USGS40000269688	1/2 - 1 Mile West
AA129	USGS40000269689	1/2 - 1 Mile West
AD131	USGS40000269729	1/2 - 1 Mile WNW
Z135	USGS40000269705	1/2 - 1 Mile West
AA137	USGS40000269679	1/2 - 1 Mile West
AE138	USGS40000269706	1/2 - 1 Mile West
AE139	USGS40000269707	1/2 - 1 Mile West
AE142	USGS40000269713	1/2 - 1 Mile West
AF143	USGS40000269720	1/2 - 1 Mile ENE
AH146	USGS40000269785	1/2 - 1 Mile NW
AG147	USGS40000269666	1/2 - 1 Mile West
AG148	USGS40000269667	1/2 - 1 Mile West
AE153	USGS40000269718	1/2 - 1 Mile WNW
AI154	USGS40000269603	1/2 - 1 Mile SE
AE156	USGS40000269697	1/2 - 1 Mile West
AJ157	USGS40000269569	1/2 - 1 Mile SE
AK158	USGS40000269702	1/2 - 1 Mile East
AI160	USGS40000269592	1/2 - 1 Mile SE
AE161	USGS40000269708	1/2 - 1 Mile West
163	USGS40000269742	1/2 - 1 Mile WNW
AL167	USGS40000269690	1/2 - 1 Mile West
AL168	USGS40000269691	1/2 - 1 Mile West
AL169	USGS40000269692	1/2 - 1 Mile West
AM173	USGS40000269617	1/2 - 1 Mile WSW
AN174	USGS40000269647	1/2 - 1 Mile West
AL177	USGS40000269700	1/2 - 1 Mile West
AL178	USGS40000269701	1/2 - 1 Mile West
180	USGS40000269674	1/2 - 1 Mile West
AO182	USGS40000269711	1/2 - 1 Mile West
AP184	USGS40000269572	1/2 - 1 Mile SE
AQ186	USGS40000269618	1/2 - 1 Mile WSW
AR187	USGS40000269561	1/2 - 1 Mile SE
AS189	USGS40000269614	1/2 - 1 Mile ESE
190	USGS40000269807	1/2 - 1 Mile NNE
AT192	USGS40000269731	1/2 - 1 Mile WNW

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
B23	HI0000331	1/8 - 1/4 Mile WSW

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	HI8000000002224	1/8 - 1/4 Mile SSE
B2	HI8000000002241	1/8 - 1/4 Mile WSW

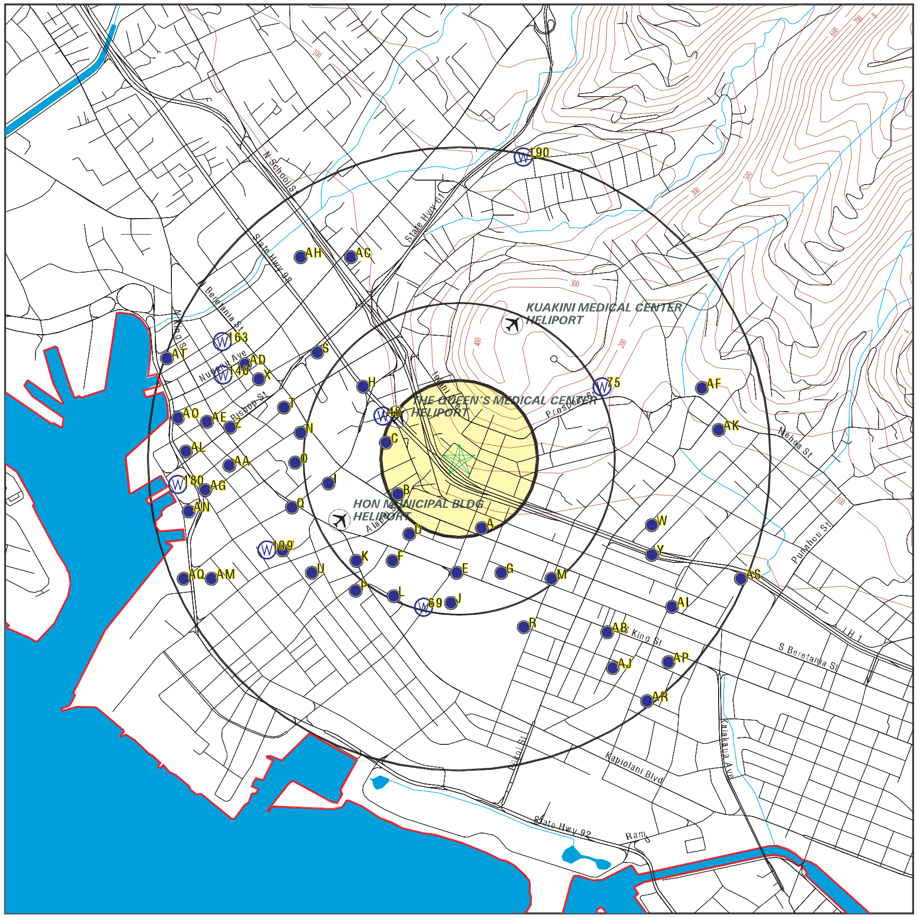
STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
B3	HI8000000002240	1/8 - 1/4 Mile WSW
B4	HI8000000002244	1/8 - 1/4 Mile WSW
B5	HI8000000002243	1/8 - 1/4 Mile WSW
B6	HI8000000002242	1/8 - 1/4 Mile WSW
B7	HI8000000002239	1/8 - 1/4 Mile WSW
B8	HI8000000002238	1/8 - 1/4 Mile WSW
B9	HI8000000002234	1/8 - 1/4 Mile WSW
B10	HI8000000002235	1/8 - 1/4 Mile WSW
B11	HI8000000002236	1/8 - 1/4 Mile WSW
C24	HI8000000002272	1/8 - 1/4 Mile West
B25	HI8000000002237	1/8 - 1/4 Mile WSW
B26	HI8000000002248	1/8 - 1/4 Mile WSW
B32	HI8000000002247	1/4 - 1/2 Mile WSW
A33	HI8000000002219	1/4 - 1/2 Mile South
B34	HI8000000002228	1/4 - 1/2 Mile SW
C38	HI8000000002289	1/4 - 1/2 Mile WNW
D39	HI8000000002220	1/4 - 1/2 Mile SSW
D42	HI8000000002221	1/4 - 1/2 Mile SW
E44	HI8000000002196	1/4 - 1/2 Mile South
F46	HI8000000002208	1/4 - 1/2 Mile SW
G47	HI8000000002191	1/4 - 1/2 Mile SSE
E48	HI8000000002186	1/4 - 1/2 Mile South
H52	HI8000000002300	1/4 - 1/2 Mile NW
G54	HI8000000002192	1/4 - 1/2 Mile SSE
F55	HI8000000002195	1/4 - 1/2 Mile SSW
I58	HI8000000002250	1/4 - 1/2 Mile West
J60	HI8000000002169	1/4 - 1/2 Mile South
K61	HI8000000002205	1/4 - 1/2 Mile SW
L65	HI8000000002178	1/4 - 1/2 Mile SSW
M67	HI8000000002188	1/4 - 1/2 Mile SE
69	HI8000000002166	1/4 - 1/2 Mile SSW
N70	HI8000000002284	1/4 - 1/2 Mile West
O72	HI8000000002257	1/2 - 1 Mile West
L73	HI8000000002164	1/2 - 1 Mile SSW
75	HI8000000002299	1/2 - 1 Mile ENE
N76	HI8000000002282	1/2 - 1 Mile West
P78	HI8000000002177	1/2 - 1 Mile SW
Q79	HI8000000002225	1/2 - 1 Mile WSW
O81	HI8000000002271	1/2 - 1 Mile West
Q83	HI8000000002229	1/2 - 1 Mile WSW
R84	HI8000000002155	1/2 - 1 Mile SSE
S89	HI8000000002308	1/2 - 1 Mile NW
T90	HI8000000002297	1/2 - 1 Mile WNW
T91	HI8000000002296	1/2 - 1 Mile WNW
Q92	HI8000000002230	1/2 - 1 Mile WSW
R93	HI8000000002153	1/2 - 1 Mile SSE
T95	HI8000000002293	1/2 - 1 Mile WNW
R97	HI8000000002147	1/2 - 1 Mile SSE
U98	HI8000000002190	1/2 - 1 Mile SW
T102	HI8000000002295	1/2 - 1 Mile WNW
V104	HI8000000002207	1/2 - 1 Mile WSW
W106	HI8000000002222	1/2 - 1 Mile ESE

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
V108	HI8000000002214	1/2 - 1 Mile WSW
Y111	HI8000000002209	1/2 - 1 Mile ESE
X114	HI8000000002303	1/2 - 1 Mile WNW
Z115	HI8000000002288	1/2 - 1 Mile West
X116	HI8000000002301	1/2 - 1 Mile WNW
AA118	HI8000000002269	1/2 - 1 Mile West
AA119	HI8000000002268	1/2 - 1 Mile West
AA120	HI8000000002260	1/2 - 1 Mile West
AA121	HI8000000002261	1/2 - 1 Mile West
AB124	HI8000000002148	1/2 - 1 Mile SE
AC127	HI8000000002349	1/2 - 1 Mile NNW
AD130	HI8000000002307	1/2 - 1 Mile WNW
Z132	HI8000000002280	1/2 - 1 Mile West
Z133	HI8000000002281	1/2 - 1 Mile West
Z134	HI8000000002287	1/2 - 1 Mile West
AA136	HI8000000002254	1/2 - 1 Mile West
140	HI8000000002302	1/2 - 1 Mile WNW
AE141	HI8000000002292	1/2 - 1 Mile West
AF144	HI8000000002298	1/2 - 1 Mile ENE
AG145	HI8000000002245	1/2 - 1 Mile West
AH149	HI8000000002348	1/2 - 1 Mile NW
AI150	HI8000000002170	1/2 - 1 Mile ESE
AE151	HI8000000002294	1/2 - 1 Mile WNW
AJ152	HI8000000002133	1/2 - 1 Mile SE
AE155	HI8000000002277	1/2 - 1 Mile West
AE159	HI8000000002286	1/2 - 1 Mile West
AK162	HI8000000002285	1/2 - 1 Mile East
AL164	HI8000000002266	1/2 - 1 Mile West
AL165	HI8000000002265	1/2 - 1 Mile West
AL166	HI8000000002267	1/2 - 1 Mile West
AM170	HI8000000002185	1/2 - 1 Mile WSW
AN171	HI8000000002227	1/2 - 1 Mile West
AL172	HI8000000002276	1/2 - 1 Mile West
AL175	HI8000000002279	1/2 - 1 Mile West
AL176	HI8000000002278	1/2 - 1 Mile West
AL179	HI8000000002246	1/2 - 1 Mile West
AO181	HI8000000002290	1/2 - 1 Mile West
AP183	HI8000000002136	1/2 - 1 Mile SE
AQ185	HI8000000002184	1/2 - 1 Mile WSW
AS188	HI8000000002187	1/2 - 1 Mile ESE
AR191	HI8000000002120	1/2 - 1 Mile SE
AT193	HI8000000002306	1/2 - 1 Mile WNW

PHYSICAL SETTING SOURCE MAP - 4237094.54s



County Boundary
Major Roads
Contour Lines
Airports
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons

0 1/4 1/2 1 Miles

Groundwater Flow Direction
(G I) Indeterminate Groundwater Flow at Location
(G V) Groundwater Flow Varies at Location

SITE NAME:	Punchbowl E	CLIENT:	Helber , Hastert, and Fee Planners
ADDRESS:	730 Captain Cooke Ave.	CONTACT:	Aaron Mann
	Honolulu HI 96813	INQUIRY #:	4237094.54s
LAT/LONG:	21.3072 / 157.8499	DATE:	March 17, 2015 5:33 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID / Direction / Distance / Elevation		Database	EDR ID Number
A1 **SSE** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002224**
B2 **WSW** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002241**
B3 **WSW** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002240**
B4 **WSW** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002244**
B5 **WSW** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002243**
B6 **WSW** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002242**
B7 **WSW** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002239**
B8 **WSW** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002238**
B9 **WSW** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002234**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
B10 **WSW** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002235**
B11 **WSW** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002236**
A12 **SSE** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269644**
B13 **WSW** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269661**
B14 **WSW** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269660**
B15 **WSW** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269663**
B16 **WSW** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269662**
B17 **WSW** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269656**
B18 **WSW** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269655**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
B19 **WSW** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269654**
B20 **WSW** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269659**
B21 **WSW** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269658**
B22 **WSW** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269657**
B23 **WSW** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**FRDS PWS**	**HI0000331**
C24 **West** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002272**
B25 **WSW** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002237**
B26 **WSW** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002248**
B27 **WSW** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269670**

Map ID Direction Distance Elevation		Database	EDR ID Number
B28 **WSW** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269671**
B29 **WSW** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269664**
C30 **West** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269687**
B31 **WSW** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269678**
B32 **WSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002247**
A33 **South** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002219**
B34 **SW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002228**
B35 **WSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269672**
A36 **South** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269637**

Map ID Direction Distance Elevation		Database	EDR ID Number
B37 **SW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269645**
C38 **WNW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002289**
D39 **SSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002220**
40 **WNW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269710**
D41 **SSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269638**
D42 **SW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002221**
D43 **SW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269639**
E44 **South** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002196**
E45 **South** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269622**

Map ID Direction Distance Elevation		Database	EDR ID Number
F46 **SW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002208**
G47 **SSE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002191**
E48 **South** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002186**
F49 **SW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269633**
H50 **NW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269721**
G51 **SSE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269620**
H52 **NW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002300**
E53 **South** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269616**
G54 **SSE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002192**

Map ID Direction Distance Elevation		Database	EDR ID Number
F55 **SSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002195**
G56 **SSE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269619**
F57 **SSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269623**
I58 **West** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002250**
I59 **West** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269673**
J60 **South** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002169**
K61 **SW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002205**
J62 **South** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269604**
J63 **South** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269605**

Map ID Direction Distance Elevation		Database	EDR ID Number
K64 **SW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269627**
L65 **SSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002178**
L66 **SSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269608**
M67 **SE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002188**
M68 **SE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269615**
69 **SSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002166**
N70 **West** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002284**
N71 **West** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269703**
O72 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002257**

Map ID Direction Distance Elevation		Database	EDR ID Number
L73 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002164**
O74 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269681**
75 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002299**
N76 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002282**
N77 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269699**
P78 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002177**
Q79 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002225**
P80 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269609**
O81 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002271**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
O82 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269695**
Q83 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002229**
R84 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002155**
Q85 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269646**
S86 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269733**
T87 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269715**
T88 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269716**
S89 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002308**
T90 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002297**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
T91 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002296**
Q92 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002230**
R93 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002153**
Q94 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269649**
T95 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002293**
T96 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269712**
R97 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002147**
U98 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002190**
V99 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269636**

Map ID Direction Distance Elevation		Database	EDR ID Number
R100 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269585**
U101 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269621**
T102 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002295**
T103 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269717**
V104 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002207**
V105 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269634**
W106 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002222**
W107 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269642**
V108 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002214**

Map ID Direction Distance Elevation		Database	EDR ID Number
109 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269635**
X110 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269719**
Y111 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002209**
Y112 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269632**
X113 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269728**
X114 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002303**
Z115 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002288**
X116 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002301**
Z117 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269704**

Map ID Direction Distance Elevation		Database	EDR ID Number
AA118 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002269**
AA119 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002268**
AA120 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002260**
AA121 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002261**
AA122 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269682**
AA123 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269683**
AB124 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002148**
AC125 **NNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269784**
AB126 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269584**

Map ID Direction Distance Elevation		Database	EDR ID Number
AC127 **NNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002349**
AA128 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269688**
AA129 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269689**
AD130 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002307**
AD131 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269729**
Z132 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002280**
Z133 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002281**
Z134 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002287**
Z135 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269705**

Map ID Direction Distance Elevation		Database	EDR ID Number
AA136 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002254**
AA137 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269679**
AE138 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269706**
AE139 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269707**
140 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002302**
AE141 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002292**
AE142 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269713**
AF143 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269720**
AF144 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002298**

Map ID Direction Distance Elevation		Database	EDR ID Number
AG145 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002245**
AH146 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269785**
AG147 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269666**
AG148 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269667**
AH149 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002348**
AI150 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002170**
AE151 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002294**
AJ152 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002133**
AE153 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269718**

Map ID Direction Distance Elevation		Database	EDR ID Number
AI154 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269603**
AE155 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002277**
AE156 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269697**
AJ157 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269569**
AK158 **East** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269702**
AE159 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002286**
AI160 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269592**
AE161 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269708**
AK162 **East** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002285**

Map ID Direction Distance Elevation		Database	EDR ID Number
163 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269742**
AL164 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002266**
AL165 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002265**
AL166 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002267**
AL167 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269690**
AL168 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269691**
AL169 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269692**
AM170 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002185**
AN171 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002227**

Map ID Direction Distance Elevation		Database	EDR ID Number
AL172 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002276**
AM173 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269617**
AN174 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269647**
AL175 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002279**
AL176 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002278**
AL177 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269700**
AL178 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269701**
AL179 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002246**
180 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269674**

Map ID Direction Distance Elevation		Database	EDR ID Number
AO181 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002290**
AO182 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269711**
AP183 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002136**
AP184 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269572**
AQ185 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002184**
AQ186 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269618**
AR187 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269561**
AS188 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002187**
AS189 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269614**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
190 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269807**
AR191 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002120**
AT192 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269731**
AT193 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002306**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for HONOLULU County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 96813

Number of sites tested: 3

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.067 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	0.350 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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EXHIBIT C

Section 106 Consultation &

Architectural Inventory Survey Information

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GOVERNOR OF HAWAII

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LAND
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STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
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December 2, 2015

IN REPLY REFER TO:
LOG: 2015.02939, 2015.03576
DOC NO: 1511JLP43
Architecture, Archaeology
History and Culture

Hakim Ouansafi
Executive Director
Department of Human Services
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P.O. Box 17907
Honolulu, HI 96817

SUBJECT: **Chapter 6E-8 and National Historic Preservation Act Section (NHPA) Section 106 Consultation – Department of Housing and Urban Development (HUD) Repair and Rehabilitation Project Department of Human Services, Hawai‘i Public Housing Authority (HPHA) Punchbowl Homes Rehabilitation Project – 730 Captain Cook Avenue Honolulu Ahupua‘a, Kona District, Island of O‘ahu TMK: (1) 2-1-039:012**

Thank you for your initial submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services (DHS), Hawaii Public Housing Authority (HPHA) consultation with SHPD in accordance with 36 CFR 800.3 and Hawaii Revised Statutes (HRS), Chapter 6E. We received your supplemental submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience.

The submittals indicate that the HPHA is requesting the State Historic Preservation Officer’s (SHPO) concurrence with a determination of “no effect” for the proposed HUD repair and rehabilitation improvement projects involving 43 existing public housing developments located throughout the State over the next fivd5 (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 consultation on their behalf.

This letter addresses Punchbowl Homes Rehabilitation Project, 730 Captain Cook Avenue. The DHS/HPHA has identified the area of potential effects (APE) as the 2.94 acre area parcel owned by the State (HPHA) which is identified as TMK: (1) 2-1-039:012. DHS/HPHA have indicated at this stage of the planning process, they are unclear whether the subject 2.94-acre project area will require any ground disturbances.

Our records indicate that no archaeological inventory survey has been conducted within the subject parcel and that no historic properties have been identified. However, based on nearby studies potential exists to encounter subsurface traditional Hawaiian and/or historic properties within the subject parcel.

The SHPD has reviewed the undertaking at 730 Captain Cook Avenue, and the SHPO’s determination is **no adverse effect** pursuant to NHPA Section 106 and **no historic properties affected** pursuant to HRS §6E-8 within the APE **provided the following conditions are met:**

- If ground disturbing activity is anticipated, DHS must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation;
- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;
- Submit information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;

- Submit a TMK map showing the full extent of the project area within the affected parcel(s);
- Submit description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Submit summary of land use history, such as previous intensive cultivation, grubbing or grading; and
- Submit copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions regarding archaeological resources or concerns please contact Susan Lebo at (808) 692-8019 or at Susan.A.Lebo@hawaii.gov. For any history and cultural concerns please contact Kaʻāhiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov. Please contact Jessica Puff at Jessica.L.Puff@hawaii.gov or (808) 692-8023 for any questions regarding architectural concerns or this letter.

Sincerely,

Alan S. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

4. Punchbowl Homes

a. Historic Context

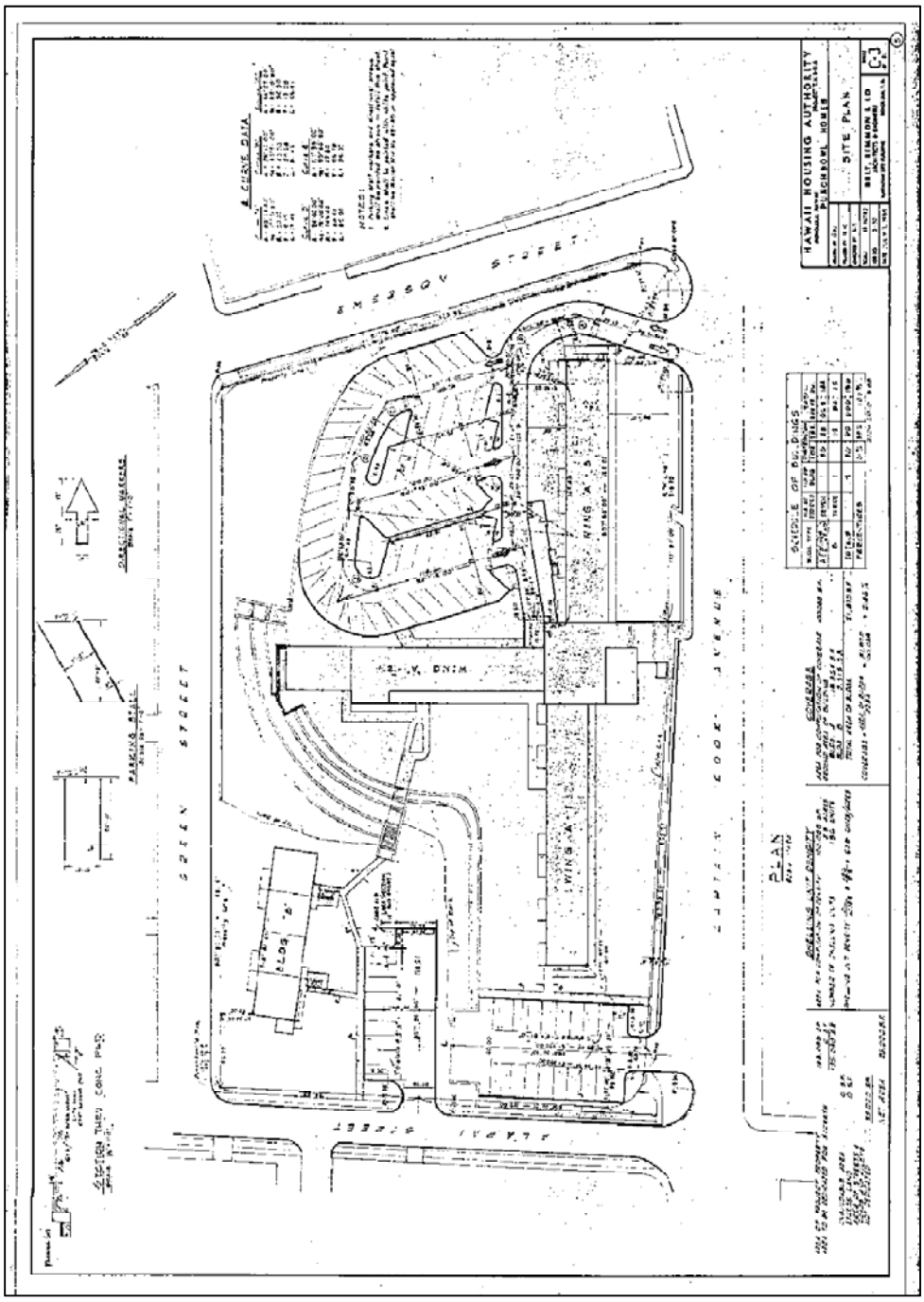
Architects Belt, Lemmon and Lo prepared construction drawings for Punchbowl Homes in 1959. As originally planned in 1957, the project was to have included four buildings, totaling 624 units, on a seventeen-acre site in Kalihi Kai. The project had to be scaled down to 156 units in two buildings when the original parcel of land could not be rezoned due to protest by the residents of the planned location. The new site was the former Robert Louis Stephenson middle school, located on a terraced plot on the makai slope of Punchbowl crater. The building was the first attempt by the HHA to address the needs of lower-income elderly and disabled residents, and the first public housing in the state for specifically designed for such populations. This project was planned with 96 units for the elderly and sixty units for other low-income renters. The HHA's reasoning for combining the two was that the rent received from the elderly would not be enough to provide for the needs of the building, and that the rents received from other low-income renters would be greater, to make up for the shortfall.

The initial move-in day was December 27, 1960 (HHA, 1960). This project was one of a number of other projects undertaken during the late 1950s to alleviate the continuing housing shortage on O'ahu, but was the only one to address the shortage of affordable housing for the island's growing elderly population.

b. Description

The main building at Punchbowl Homes is seven stories and the footprint has three arms, forming a "T" shape. An additional building at the mauka/'Ewa corner of the site is a simple three-story structure with rectangular plan, except for the projecting lanai in the rear and stairs in the front. Both buildings are constructed of concrete and have flat roofs. The main building has balcony walkways/exterior hallways with concrete barrier railings at each floor at the front side, facing Captain Cook Street, giving this facade a strong sense of horizontality. At the rear vertical bands of ornamental masonry grille work screen private service lanai for each apartment. The smaller three-story building also has the ornamental masonry grille work at all the rear lanai; however, the front presents a different image, with stairways leading to entry doors, and no exterior balcony or walkway.

The exterior and interior doors are mostly flush wood types, with two-panel doors at the rear which have a sliding top panel over a screen section. In the seven-story building, the front entry is from the balcony walkways, while the kitchen/rear doors open to the decorative-block enclosed lanai laundry areas. The windows are primarily double-hung one-over-one aluminum-frame with clear glass. The bathroom windows use obscured glass. At the interior, the apartments retain their original layout (open-plan in the living/dining/kitchen areas), with original asphalt tile remaining in many apartments, painted concrete ceilings, and original fixtures throughout. The kitchens have integrated sink and countertop, with original cabinetry, including pull-out cutting boards. The bathrooms and bedrooms of the units for the elderly have wide doors, to allow wheelchair access; in addition, the bathrooms are outfitted with grab bars, and showers have low enclosures for easy entry and exit. The bedrooms retain emergency call-switch mechanisms.



Punchbowl Homes site plan showing building locations and streets.

See the following page for the one-page historic assessment and photographs.

c. Historic Assessment: Punchbowl Homes (1960)

Clockwise from top left: rear of building showing ornamental masonry grills and entry walkways, typical kitchen, front of three-story building showing exterior entry stairs, typical exterior hallway of main building.

Project	Punchbowl Homes, 730 Captain Cooke Ave.
Date	1960
Integrity	Retain integrity of location, setting, and feeling design, materials, workmanship, and association.
Character Defining Features	Full length exterior hallway at entry side, original windows and doors, lanai with ornamental masonry grille work, main entry and lobby.
Alterations	Only minor alterations noted
Significance	Punchbowl Homes is associated with public housing and with the social history of Hawaii. The project represents the first housing planned by the Territory and the State for the elderly and disabled.
National Register Eligibility	**Eligible**

HAWAII PUBLIC HOUSING AUTHORITY

ENVIRONMENTAL REVIEW

KALANIHUIA

Honolulu, O`ahu

AMP 35
HPHA No. 1024

Prepared for:

State of Hawaii
Hawaii Public Housing Authority

Prepared by:

HHF PLANNERS
places for people

U.S. Department of Housing and Urban Development
451 Seventh Street, SW
Washington, DC 20410
www.hud.gov

espanol.hud.gov

Environmental Review for Activity/Project that is Categorically Excluded Subject to Section 58.5

Pursuant to 24 CFR 58.35(a)

Project Information

Project Name: Kalanihuia (AMP 35)

Responsible Entity: Hawaii Public Housing Authority
1002 North School Street
Honolulu, HI 96817

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

State/Local Identifier: State of Hawaiʻi

Preparer: Mr. Scott Ezer, Vice President
HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaiʻi 96813

Certifying Officer Name and Title: Mr. David Y. Ige
Governor, State of Hawaiʻi

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

Consultant (if applicable): HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaiʻi 96813

Direct Comments to: Mr. Hakim Ouansafi, Executive Director
Hawaii Public Housing Authority
1002 North School Street
Honolulu, Hawaiʻi 96817

Project Location: 1220 Aʻala Street
Honolulu, Hawaiʻi 96817

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]**:**

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a "major construction activity" and would involve one or a combination of several HUD designated categories of actions.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent;
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons;
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland;
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation;
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls);
7. Interior and exterior renovations and rehabilitation;
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site;
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Level of Environmental Review Determination:

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.5. Compliance with and completion of conformance determinations for other statute, executive order, or regulation has been completed and support the Categorical Exclusion.

Funding Information

Grant Number	HUD Program	Funding Amount
To be determined	Capital Fund	To be determined
To be determined	Economic Development Initiative Special Project Grant	To be determined
To be determined	Other Grants	To be determined

Estimated Total HUD Funded Amount:

To be determined by HUD using a formula and based upon federal budget.

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]**:**

Depends upon funds available.

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	*The project is not within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.*
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☒	*The State of Hawai'i does not have any designated coastal barrier resource units. (http://www.fws.gov/CBRA/Maps/Mapper.html)*
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes ☐ No ☒	*As indicated in the Flood Insurance Rate Panel Number 15003C0354G, Effective: January 19, 2011, Index Date: November 05, 2014, this housing project is located within Flood Hazard Zone X (areas determined to be outside the 0.2% annual chance floodplain). A field inspection and information obtained from the site manager confirmed no major flooding issues within the site. Based on its description, this project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.*

STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5		
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes ☐ No ☒	*The State of Hawai'i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. EPA's Green Book for currently designated "nonattainment areas" as of June 2015. Planned repair and rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.*
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes ☐ No ☒	*Documentation from the Office of Planning determined that projects receiving federal funds do not require review for consistency with Hawai'i's Coastal Zone Management (CZM) program.*
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☐ No ☒	*There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.*
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes ☒ No ☐	*The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services in their letter dated September 28, 2015 which is included in the Appendices, while project-specific mitigation measures are identified in the following section.*
Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes ☐ No ☒	*There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.*

Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes ☐ No ☒	*The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.*
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes ☐ No ☒	*This housing project is located in Zone X, an area of minimal flooding (i.e., 0.2% annual chance flood), and is located outside the 500-year flood zone. A field inspection and information obtained from AMP Manager confirmed no major flooding issues within the project site.*
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes ☒ No ☐	*The subject housing project was first occupied in 1969 and is 46 years old. A 2015 Architectural Inventory Survey (AIS) conducted by Fung Associates determined that this project is eligible for the National Register of Historic Places. In a letter dated December 2, 2015, the State Historic Preservation Officer concurred with the HPHA's determination that repair and rehabilitation improvements for this housing project would have "no adverse effect" on historic properties pursuant to NHPA Section 106 and subject to certain mitigative measures*
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes ☐ No ☒	*The project site is not situated along a highway that has a high volume of vehicular traffic. The HUD noise calculator estimated noise levels at the project site to be 57.6 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.*
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes ☐ No ☒	*The housing project is located within the O'ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation.*

Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☐ No ☒	*There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.* *(http://www.fws.gov/wetlands/data/mapper.HTML)*
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes ☐ No ☒	*There are no Wild and Scenic Rivers in Hawai'i, which excludes this project from mitigation or formal consultation requirements (http://www.rivers.gov/map.php)*
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes ☐ No ☒	*Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, these improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects on minority populations and low-income populations. Improvements should benefit low-income and minority populations living within this housing project.*

Field Inspection (Date and completed by)**:** May 29, 2015
Joseph Tamburello, Planner
HHF Planners

Summary of Findings and Conclusions:

Repair and rehabilitation improvements implemented for this existing housing project by HPHA should not result in significant environmental impacts based upon research data collected, a field inspection, consultation with the site manager and maintenance staff, consultation with pertinent resource agencies, and prior HPHA experience implementing repair and rehabilitation improvements. Therefore, repair and rehabilitation improvements would comply and be consistent with the statutes, executive orders, and regulations addressed. Furthermore, HPHA would evaluate improvements planned to ensure the work is consistent with the designated categories of actions described under the project description section. Compliance with these factors evaluated are further addressed in the attached Source Documentation Statutory Worksheet along with relevant technical reports/assessments.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Law, Authority, or Factor	Mitigation Measure
Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	*Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.* *Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.* *Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.* *Newell's shearwater and Hawaiian petrel: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.* *Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.* *Blackburn's sphinx moth: If any tree removal or brush clearing activities are anticipated in the known range of the Blackburn's Sphinx Moth (BSM), a qualified biologist will survey the project area for the presence of larval host plants. If host plants are discovered in the area affected by the activity, host plants will not be cut or removed, and the soil within 33*

	feet of the host plants will not be disturbed. If the trimming or removal of any host plants are required, the FWS must first be consulted. *<u>Hawaiian Waterbirds</u>: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo‘i, impoundments or other vegetated water bodies.* *1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS’s recommended Hawaiian Waterbird Survey Protocols.* *2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.* *3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.* *In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.* *<u>Additional Measures:</u> The following additional measures would be implemented:* *1. No vegetation or soil disturbance shall be conducted outside a project’s previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.*
National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	*1.When considering rehabilitation improvements or building modifications: 1) the buildings’ character-defining features shall be retained to the extent practicable; and 2) the renovations shall adhere to the Secretary of the Interior’s (SOI) Standards for Rehabilitation.* *2. If rehabilitation improvements or building modifications cannot retain the character-defining features or adhere to the SOI’s Standards, a Historic American Buildings Survey (HABS) will be conducted subject to the following conditions:* *a. Level II HABS documentation will be conducted in accordance with the National Park Service standards; and*

	b. A representative sample of multiple building types would be selected for HABS documentation due to the multiple types of buildings constructed for housing projects. *3. If ground disturbing activity is anticipated, HPHA must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation.* *a. Submit detailed plans, specifications and a detailed scope of work once the plans have been developed.* *b. Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation.* *c. Submit a TMK map showing the full extent of the project area within the affected parcel/s.* *d. Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area.* *e. Summary of land use history, such as previous intensive cultivation, grubbing or grading.* *f. Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.* *In addition to these mitigation measures, the HPHA would enter into a Programmatic Agreement with the SHPO to address the implementation of future repair and rehabilitation improvements to State housing projects after the current Section 106 review process is completed and prior to the next environmental review process in approximately five years. Furthermore, should subsurface human remains or other traces of human activity greater than 50 years old be encountered during construction, all work in the vicinity of the find would immediately stop and the SHPD would be promptly notified. The treatment of any human remains that are encountered would be conducted in accordance with applicable requirements of Chapter 6E, Hawai'i Revised Statutes (Historic Preservation) and Chapter 13-300, Hawai'i Administrative Rules (Rules of Practice and Procedure Relating to Burial Sites and Human Remains).*

Determination:

☒ This categorically excluded activity/project converts to **EXEMPT** per Section 58.34(a)(12), because it does not require any mitigation for compliance with any listed statutes or authorities, nor requires any formal permit or license; **Funds may be committed and drawn down after certification of this part** for this (now) EXEMPT project; OR

☐ This categorically excluded activity/project cannot convert to Exempt status because one or more statutes or authorities listed at Section 58.5 requires formal consultation or mitigation. Complete consultation/mitigation protocol requirements, **publish NOI/RROF and obtain "Authority to Use Grant Funds"** (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR

☐ This project is not categorically excluded OR, if originally categorically excluded, is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

Preparer Signature: Scott Ezer Date: 12-17-15

Name/Title/Organization: Mr. Scott Ezer, Vice President
HHF Planners

Responsible Entity Agency Official Signature:

David Y Ige Date: APR 28 2016

Name/Title: Mr. David Y. Ige, Governor

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

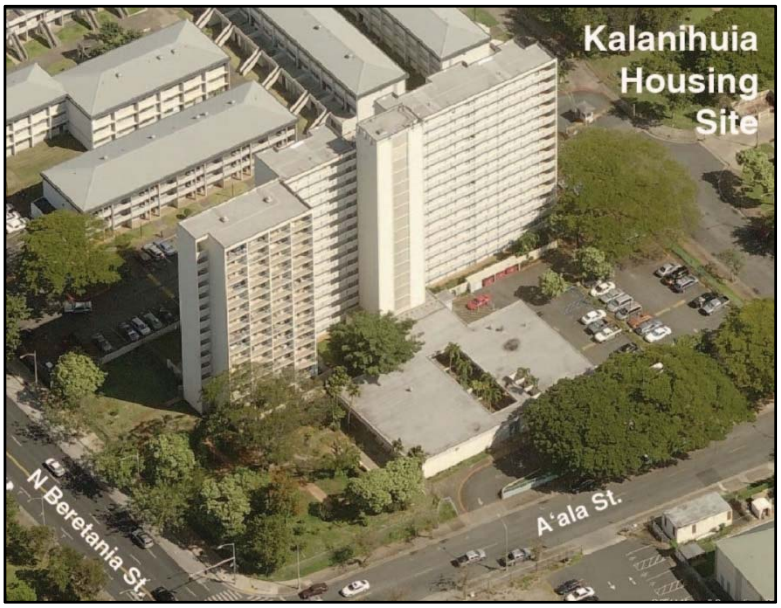
Kalanihuia (HA # 1024)

TMK: (1) 1-7-026:006

Hawai‘i Public Housing Authority (HPHA) Environmental Review

SOURCE DOCUMENTATION (SD) STATUTORY WORKSHEET

Site Visit Date: May 29, 2015
Prepared By: Joseph Tamburello



The Kalanihuia project is located in the Liliha community of the Honolulu district on the island of O‘ahu. This higher density mixed-use community is located just outside (north of) Honolulu’s central business district, and mauka of the industrial Iwilei area.

The housing project site is situated along North Beretania Street at the intersection with ‘A‘ala Street. The City’s ‘A‘ala Park is located across from this project site. This housing project is within HPHA’s Asset Management Project (AMP) 35 which includes four other housing projects located within a few miles.

Kalanihuia was first occupied in 1969 and has a street address of 1220 A‘ala Street. This property consists of 1.88 acres, and it is identified as Tax Map Key (TMK) No. (1) 1-7-026:006. The housing project is comprised of a single 15-story high-rise apartment building complex with 90 studio units, 60 one-bedroom units, and 1 three-bedroom unit for live-in maintenance staff. Connected to this complex is a single-story common area wing of the building that includes a community hall, laundry area, kitchen, maintenance, storage, and staff offices. The State’s land use designation for the property is the “Urban District,” and the City’s zoning for the site is A-2 Medium-Density Apartment.

The project site is located across the street from the tsunami evacuation zone boundary, but the entire site is located in Flood Zone X based upon the Flood Insurance Rate Map (Community Panel Number 15003C0354G, Revised January 19, 2011). Zone X is defined as areas determined to be outside the 0.2 percent annual (500-year) chance floodplain.

The following figures in Exhibit A provide supporting information on this housing project:

Figure 1: Location Map
Figure 2: TMK Map
Figure 3: Site Map
Figure 4: Flood Map

COMPLIANCE FACTORS

I. AIRPORT CLEAR ZONES AND ACCIDENT POTENTIAL ZONES (24 CFR PART 51D)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The housing project does not lie within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: 24 CFR 51 (D).

Honolulu International Airport Master Plan - 2010 (August 1994), State Department of Transportation, Airports Division;

*Hawai`i Airports and Flying Safety Guide (2012-13, Fifth Edition, Revision 1)* Hawai`i Department of Transportation, Airports Division; and

http://hidot.hawaii.gov/airports/files/2013/01/Airport-Safety-Guide-2012-2013-5rev1.pdf

II. COASTAL BARRIER RESOURCES (COASTAL BARRIER IMPROVEMENT ACT OF 1990 [16 USC 3501])

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i does not have any designated coastal barrier resource units.

SUPPORTING DOCUMENTATION:

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/cbra/maps/mapper.html (Date accessed: 6/30/15).

III. FLOOD INSURANCE (FLOOD DISASTER PROTECTION ACT OF 1973 AND NATIONAL FLOOD INSURANCE REFORM ACT OF 1994 [42 USC 4001-4128 AND 42 USC 5154a])

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program.

As indicated in the Flood Insurance Rate Panel Number 15003C0354G, Effective: January 19, 2011, Index Date: November 05, 2014, this housing project is located within Flood Hazard Zone X (areas determined to be outside the 0.2% annual chance floodplain). A field inspection and information obtained from the site manager confirmed no major flooding issues within the site. Based on its description, this project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal signs of flooding problems. An interview with the AMP Manager also determined that major ponding or flooding issues are currently not an issue for the project site.

Printed: Flood Insurance Rate Map, Community Panel Number 15003C0354G, Effective: January 19, 2011, Index Date: November 05, 2014.

Hawai`i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 7/27/15)

IV. CLEAN AIR ACT (40 CFR PARTS 6, 51, 93)

SUPPORTING DOCUMENTS	
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. Environmental Protection Agency's Green Book for currently designated "nonattainment areas" as of June 2015. Planned rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.

SUPPORTING DOCUMENTATION:

Printed: *State of Hawai‘i Annual Summary 2013 Air Quality Data*. State of Hawai'i, Department of Health, July 2014.

U.S. Environmental Protection Agency website at: http://epa.gov/airquality/greenbk/

V. COASTAL ZONE MANAGEMENT ACT (16 USC 1451, SECTIONS 307 (C), (D)

CONTACT:

Mr. John Nakagawa
Office of Planning
Department of Business, Economic Development & Tourism
State of Hawai‘i
P.O. Box 2359
Honolulu, Hawai'i, 96804-2359

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

Documentation from the Office of Planning determined that projects receiving federal funds do not require review for consistency with Hawai‘i's Coastal Zone Management (CZM) program.

SUPPORTING DOCUMENTATION:

Contact: In an email to the Office of Planning (OP) dated July 27, 2015, the HPHA determined that the use of HUD funds for the implementation of repair and rehabilitation improvements does not require review for consistency with Hawai‘i's CZM program. The OP confirmed this determination in an email dated July 28, 2015 and it is included in the Appendices.

Experience: Previous reviews conducted by OP in 2003, 2005, and 2010 determined that projects receiving federal funds from HUD do not require CZM federal consistency review. OP's current determination confirms this condition is still applicable. Copies of these prior documentations are included in the Appendices.

VI. CONTAMINATION AND TOXIC SUBSTANCES (24 CFR PART 50.3 & 58.5(I)(2))

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Project Not Affected.

There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.

SUPPORTING DOCUMENTATION:

Field: A site inspection and interview with the Asset Management Project (AMP) Manager revealed no presence of any toxic or radioactive materials on the project site that warrant concern. Small quantities of gasoline and solvents for routine maintenance and lawn equipment are stored in a secured area within the main building.

Study: Environmental Data Resources, Inc. (EDR), conducted a search of available environmental records and prepared a Radius Map Report (Inquiry Number 4237094.42s, March 17, 2015). EDR reviewed more than 25 federal and statewide regulatory databases for information regarding the treatment, storage, disposal and release of toxic chemicals at the project site and within specific radii (generally 1 mile) of the site. A Detail Map within the EDR report documents those sites identified within a 0.25 mile radius of the project site. The EDR report in Exhibit B includes the results of their research findings.

The EDR report notes the following activities within a 0.125 mile radius of the project site: the subject housing site: Typehouse Hawaiʻi (420 feet away) is classified as a Non-Generator (Handler), no violations found. Town Inn (428 feet away), Nature of Contamination: Found: TPH-D, BTEX, PAHs, and free product in soil and ground water; Hazard Managed with Controls. Honolulu Community Action Program, one LUST, status: Site Cleanup Completed (NFA), four UST, status: Permanently Out of Use. Iwilei Project Site (649 feet away), Nature of Contamination: Found: PAHs, VOCs, lead and other metals in soils; Use Restrictions: Controls Required to Manage Contamination.

This project site was not identified as a Formerly Used Defense Site (FUDS) by the U.S. Army Corps of Engineers and is not subject to any cleanup actions for Department of Defense-generated contamination.

VII. ENDANGERED SPECIES (50 CFR PART 402)

CONTACT:
Mr. Loyal Mehrhoff, Field Supervisor
Pacific Islands Administrator
Fish and Wildlife Services
U.S. Department of the Interior
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawai'i 96813
Tel. #: 792-9400

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Adverse Effect Subject to Mitigation

The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received by the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices.

SUPPORTING DOCUMENTATION:

Contact: A letter from the HPHA dated July 24, 2015 was submitted to the Pacific Island Administrator for the FWS determining that repair and rehabilitation improvements that may be implemented using HUD funds for this housing project would have no likelihood of effect on any listed species or proposed species, or existing or proposed designated critical habitat subject to certain measures. Concurrence with this determination along with proposed minimization and avoidance measures was received from the FWS in a letter dated September 28, 2015 which is included in the Appendices. This housing project is subject to the following minimization and avoidance measures.

Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.

Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.

Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.

Newell's shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If

nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.

Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.

Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo‘i, impoundments or other vegetated water bodies.

1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS’s recommended Hawaiian Waterbird Survey Protocols.
2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.
3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.

In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.

Additional Measures: The following additional measures would be implemented:

1. No vegetation or soil disturbance shall be conducted outside a project’s previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.

Experience: The FWS was previously consulted as part of environmental reviews that were completed in 2005 (39 housing projects) and 2010 (70 housing projects) which supported the determination that repair and rehabilitation improvements would either: 1) have no likelihood of effect for certain housing projects; or 2) not likely adversely affect federally listed species or critical habitat for certain housing projects subject to mitigative measures. A summary of these consultation efforts follows.

2005 Consultation: In a letter dated July 15, 2005, the Housing and Community Development Corporation of Hawai‘i (predecessor to the HPHA), determined that the implementation of minor repair and rehabilitation improvements for 39 housing projects

would not have an adverse effect on federally-listed species or critical habitat. In a letter dated August 11, 2005, the FWS concurred with the HCDCH determination.

2010 Consultation: In a letter dated May 17, 2010, the HPHA informed the FWS that HUD funds would be used to immediately implement repair and rehabilitation improvements for six housing projects on O'ahu and the island of Hawai`i. In a subsequent letter dated May 21, 2010, the FWS was informed that HPHA would be using HUD funds to implement minor repair and rehabilitation improvements for 64 projects throughout the State. In both letters, the HPHA determined that the repair and rehabilitation improvements were not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat. Based on further consultation and a meeting with FWS staff on June 24, 2010, the HPHA determined that repair and rehabilitation improvements for most of their housing projects would not likely adversely affect any listed or proposed species, or existing or proposed designated habitat, subject to various mitigative measures for certain housing projects.

VIII. EXPLOSIVE AND FLAMMABLE OPERATIONS (24 CFR PART 51C)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

SUPPORTING DOCUMENTATION:

Field: Field inspection was limited to the exterior of residential buildings and associated structures for this housing project. No above-ground explosive or flammable material storage containers in excess of 100 gallons were observed at the site.

Printed: 24 CFR Part 51, Subpart C addresses acceptable separation distance from above-ground explosive or flammable fuels or chemical containers. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

IX. FARMLANDS PROTECTION (7 CFR PART 658)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. Since the property consists of an existing housing development within an urbanized area, no farmlands would be impacted by the implementation of repair and rehabilitation improvements.

Printed: The property is designated for "Urban" use by the State Land Use Commission and the County's zoning for the parcel is RD-3.75 Double-Family Residential District.

Hawai`i Office of Planning website at: http://planning.hawaii.gov/gis/
(Date accessed: 6/30/2015)

X. FLOODPLAIN MANAGEMENT (EXECUTIVE ORDER 11988, 24 CFR PART 55)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program

This housing project is located in Zone X, an area of minimal flooding (i.e., 0.2% annual chance flood), and is located outside the 500-year flood zone. A field inspection and information obtained from AMP Manager confirmed no major flooding issues within the project site.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal signs of previous flooding problems. An interview with the AMP Manager also determined that no major ponding or flooding issues occur on the project site.

Printed: Flood Insurance Rate Map, Community Panel Number 15003C0354G, Effective: January 19, 2011, Index Date: November 05, 2014

Hawai`i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/ (Date accessed 7/21/15)

XI. HISTORIC PRESERVATION (NATIONAL HISTORIC PRESERVATION ACT OF 1966; SECTIONS 106 AND 110; 36 CFR, PART 800)

CONTACT:	SUPPORTING DOCUMENTS	
Ms. Suzanne Case, Chairperson	X	Field
Department of Land and Natural Resources (DLNR)	X	Contact
State of Hawai'i	X	Printed
1151 Punchbowl Street		Experience
Honolulu, Hawai'i 96813	X	Study
Tel. #: 587-0400		

DETERMINATION:

Status Category: No Adverse Effect on Historic Properties with Mitigation

The subject housing project was initially occupied in 1969 and is 46 years old. A 2015 Architectural Inventory Survey (AIS) conducted by Fung Associates determined that this project is eligible for the National Register of Historic Places (NRHP). In a letter to the State Historic Preservation Officer (SHPO) dated August 20, 2015, the HPHA determined that repair and rehabilitation improvements for this housing project would have "no adverse effect" on historic properties subject to certain mitigative measures. In a letter dated December 2, 2015, the SHPO concurred with the HPHA's determination and provided additional conditions for ground-disturbing activities. In responding to this letter, the HPHA concurred with the conditions set forth by the SHPO.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the subject housing site did not locate any existing or potential archaeological sites (e.g., heiau) or cultural features on the property. An interview with the property manager and maintenance supervisor indicates that no known sites or features are present on the property.

Contact: Based on the findings and recommendations of the 2015 AIS, the HPHA submitted a letter to the State Historic Preservation Officer dated August 20, 2015 regarding 28 housing projects, which is included in the Appendix. Of this total, 15 housing projects did not meet National Register eligibility criteria, therefore, a "no historic properties affected" determination was proposed for these repair and rehabilitation improvements. Repair and rehabilitation improvements for the other 13 housing projects (including Kalanihuia) were determined to meet National Register eligibility criteria and were proposed to have "no adverse effect" on historic properties subject to certain mitigative measures.

In a letter dated December 2, 2015, the SHPO concurred with the HPHA's determination that repair and rehabilitation improvements for this housing project would have "no adverse effect" on historic properties pursuant to NHPA Section 106 and subject to the following mitigative measures. . In response to this letter, the HPHA concurred with the conditions set forth by the SHPO. A copy of these letters are included in Exhibit C.

1. When considering rehabilitation improvements or building modifications: 1) the buildings' character-defining features shall be retained to the extent practicable; and 2) the renovations shall adhere to the Secretary of the Interior's (SOI) Standards for Rehabilitation.

2. If rehabilitation improvements or building modifications cannot retain the character-defining features or adhere to the SOI's Standards, a Historic American Buildings Survey (HABS) will be conducted subject to the following conditions:

    a. Level II HABS documentation will be conducted in accordance with the National Park Service standards; and

    b. A representative sample of multiple building types would be selected for HABS documentation due to the multiple types of buildings constructed for housing projects.

3. If ground disturbing activity is anticipated, HPHA must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation.

    a. Submit detailed plans, specifications and a detailed scope of work once the plans have been developed.

    b. Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation.

    c. Submit a TMK map showing the full extent of the project area within the affected parcel/s.

    d. Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area.

    e. Summary of land use history, such as previous intensive cultivation, grubbing or grading.

    f. Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

In addition to these mitigation measures, the HPHA would enter into a Programmatic Agreement with the SHPO to address the implementation of future repair and rehabilitation improvements to State housing projects after the current Section 106 review process is completed and prior to the next environmental review process in approximately five years. Furthermore, should subsurface human remains or other traces of human activity greater than 50 years old be encountered during construction, all work in the vicinity of the find would immediately stop and the SHPD would be promptly notified. The treatment of any cultural artifacts and human remains that are encountered would be conducted in

accordance with applicable requirements of Chapter 6E, Hawai'i Revised Statutes (Historic Preservation) and Chapter 13-300, Hawai'i Administrative Rules **(**Rules of Practice and Procedure Relating to Burial Sites and Human Remains).

Printed: A review of the U.S. National Parks Service website for the National Register of Historic Places did not identify any historic properties within the limits of this housing project. A similar review of the State DLNR website for the State Register of Historic Places revealed that there are no historic properties within the project site.

National Register: U.S. National Park Service website at: http://www.nps.gov/nr/research/ (Date accessed: 7/2/15).

State Register: Hawai`i Department of Land and Natural Resources website at: http://dlnr.hawaii.gov/shpd/state-register/ (Date accessed: 7/2/15).

Experience: In letter to the State Historic Preservation Officer (SHPO) dated April 19, 2011, the HPHA determined that minor repair and rehabilitation improvement at 57 public housing projects throughout Hawai'i (including this housing site) would have "no effect" on historic properties. The SHPO had no comments or objections on the "no effect" determination.

Study: A 2015 Architectural Inventory Survey (AIS) conducted by Fung Associates determined that this project (built in 1969) is eligible for the National Register of Historic Places (NRHP). This project is significant because of its association with the development of public housing for senior citizens in Hawaii and architecturally significant which is typical of high rise buildings of the period in Honolulu. Character defining features include its design as a modern style high rise with a central courtyard, use of decorative concrete blocks, intact bathrooms and kitchen, aluminum jalousie windows with original locking lever handles, and stainless steel curtain rod at studio units.

XII. NOISE ABATEMENT CONTROL (24 CFR PART 51B)

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Within HUD Noise Standards

The project site is not situated along a highway that has a high volume of vehicular traffic. The HUD noise calculator estimated noise levels at the project site to be 57.6 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

SUPPORTING DOCUMENTATION:

Field: No significant noise generating sources were identified within the project site during the site inspection. The subject housing site is located within an urban mixed use neighborhood. Existing landscaping, such as mature trees on site, help buffer the project

from adjacent street noise. An interview with the AMP Manager did not identify any loud noise producing sources in the area. As a result, notable noise sources are predominantly associated with vehicular traffic along adjacent streets. Traffic noise did not appear significant during the site visit.

Study: The HUD day/night noise level calculator was used to estimate approximate traffic noise. Traffic counts were based on 2013 Hawai'i State Department of Transportation data taken along Beretania Street (a principal artery County road). Using the HUD calculator, the estimated noise level at the project site is 57.6 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

XIII. SOLE SOURCE AQUIFER (40 CFR PART 149)

	SUPPORTING DOCUMENTS
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact on Sole Source Aquifer

The housing project is located within the O'ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation. However, if exceptional circumstances require compliance steps with any of these authorities, such compliance must be established and documented prior to approving the site-specific loan or grant.

SUPPORTING DOCUMENTATION:

Printed: This determination was based upon review of the Sole Source Aquifer Memorandum of 4/30/90 (Sections II.B.1 and II.B.2) and consideration of the type of rehabilitation related improvements that would be conducted for this project.

XIV. WETLANDS PROTECTION (EXECUTIVE ORDER 11990)

	SUPPORTING DOCUMENTS
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the property did not identify the presence of any wetlands.

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/wetlands/data/mapper.html (Date accessed 7/23/2015).

XV. WILD AND SCENIC RIVERS ACT (16 USC 1271, SECTION 7 (B), (C))

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no Wild and Scenic Rivers in Hawaiʻi, which excludes this project from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: National Wild and Scenic Rivers System website at: http://www.rivers.gov/index.php (Date accessed: 6/30/2015).

XVI. ENVIRONMENTAL JUSTICE (EXECUTIVE ORDER NO. 12898)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Conflict with Requirements

Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, repair and rehabilitation improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations. Repair and rehabilitation improvements should benefit low-income and minority populations living within this housing project.

SUPPORTING DOCUMENTATION:

Printed: Executive Order 12898.

U.S. Department of Housing and Urban Development website at:
https://www.hudexchange.info/environmental-review/environmental-justice/

EXHIBIT A

Location Map, TMK Map, Site Map, Flood Map, and Site Photos

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

HONOLULU RAIL TRANSIT

Transit Corridor

Transit Station

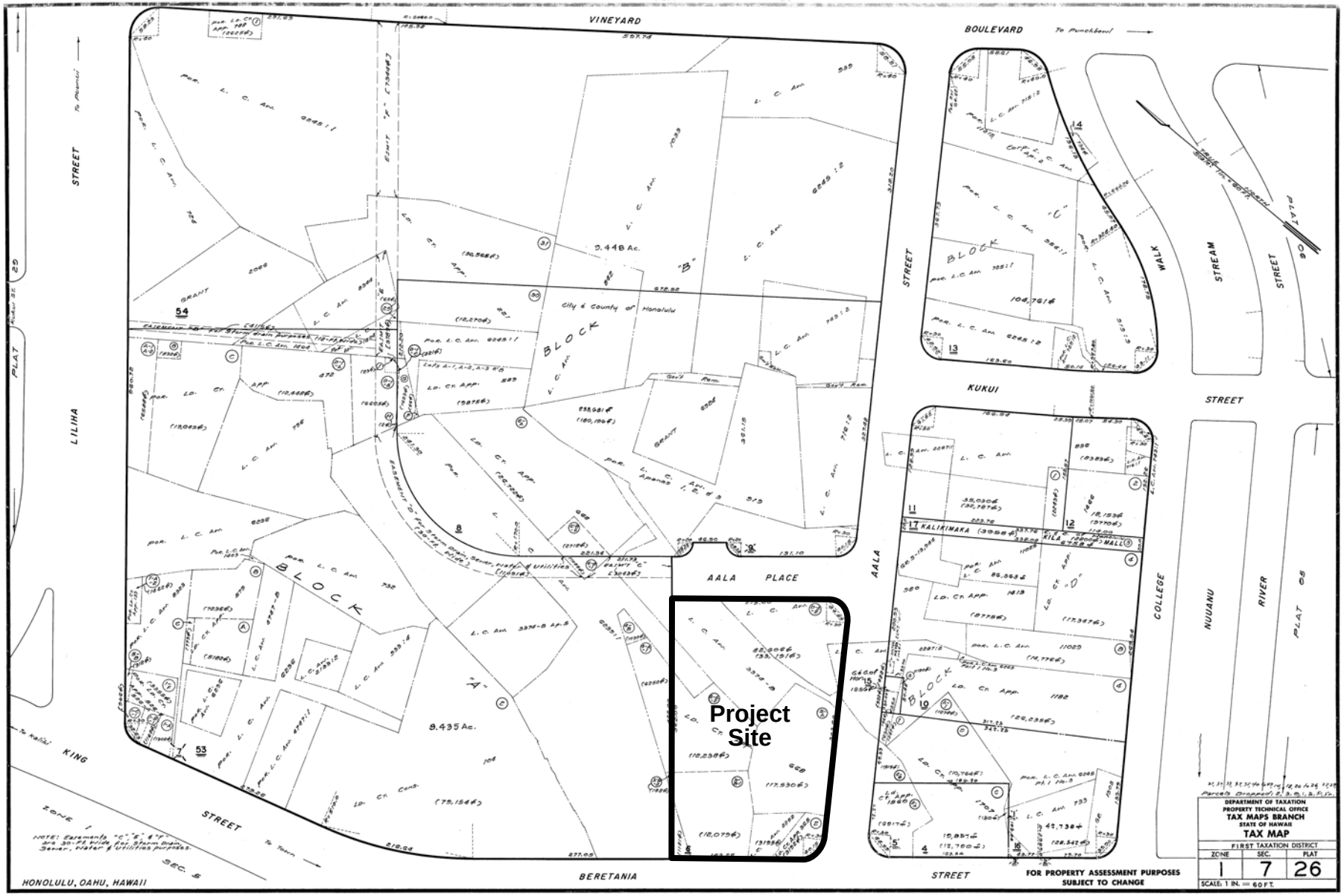
HPHA No. 1024 - Kalanihuia Homes (AMP 35)

Figure 1 - Project Location Map

Honolulu, O'ahu

1,000 FT

HHF PLANNERS
places for people



HPHA No. 1024 - Kalanihuia Homes (AMP 35)

Figure 2 - TMK Map

Honolulu, O'ahu

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1024 - Kalanihuia Homes (AMP 35)

Figure 3 - Site Map

Honolulu, O'ahu

40 FEET

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013
Community Panel No. 15003C0354G, Revised January 19, 2011

LEGEND

Zone X - Outside the 0.2% Annual Chance of Flood

HPHA No. 1024 - Kalanihuia Homes (AMP 35)

Figure 4 - Flood Map

Honolulu, O'ahu

40 FEET

HHF PLANNERS
places for people

KALANIHUIA HOMES
SITE PHOTOS

Project frontage along Aala Street, looking southwest

Street frontage along Aala Street, looking northeast

Landscape area, corner of Aala and Beretania Street

Project site facing Beretnaia Street, adjacent to corner landscape area

Northwestern boundary, side yard

At northwestern corner of project site, looking northwest

KALANIHUIA HOMES
SITE PHOTOS

Drain inlet in project parking lot

Homeless encampments along this housing site's Beretania Street frontage, looking northwest

Homeless encampments along this housing site's Beretania Street frontage, looking northwest

Storage Area

Bulky items awaiting removal stored along Beretania Street

Backup generator

EXHIBIT B

EDR Radius Map Report

Kalanihuia E
1220 Aala St.
Honolulu, HI 96817

Inquiry Number: 4237094.42s
March 17, 2015

EDR Summary Radius Map Report

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

FORM-NULL-PVC

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

1220 AALA ST.
HONOLULU County, HI 96817

COORDINATES

Latitude (North):	21.3160000 - 21˚ 18' 57.60''
Longitude (West):	157.8627000 - 157˚ 51' 45.72''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	617955.2
UTM Y (Meters):	2357407.8
Elevation:	3 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	USGS 7.5 min quad index

Target Property:	W
Source:	USGS 7.5 min quad index

MAPPED SITES SUMMARY

Target Property Address:
1220 AALA ST.
, HI 96817

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
Reg	SAND ISLAND MILITARY		DOD	Same	1782, WSW
A1	TYPEHOUSE HAWAII	250 N BERETANIA ST	RCRA NonGen / NLR, FINDS	Higher	420, South
A2	TOWN INN	248-258 N BERETANIA	HI SHWS, HI INST CONTROL, HI VCP	Higher	428, South
3	LILIHA CIVIC CENTER	337 N KING ST	HI SHWS	Higher	550, WSW
4	HONOLULU COMMUNITY A	337 & 357 N KING ST	HI LUST, HI UST	Higher	601, West
5	IWILEI PROJECT SITE	IWILEI RD & N KING S	HI SHWS	Higher	649, SW
6	215 NORTH KING STREE	215 N KING ST	HI SHWS	Higher	787, SW
7	IWILEI FRUIT AND VEG	920 IWILEI ROAD	HI SHWS, HI LUST, HI UST	Higher	813, WSW
8	TENNEY'S BISHOP UNIO	169 SOUTH BERETANIA	RCRA-CESQG, FINDS	Higher	832, SSE
9	SENIOR RESIDENCES AT	888 IWILEI RD	HI SHWS, HI INST CONTROL	Higher	947, WSW
10	KUKUI GARDENS MAKAI	1103 LILIHA ST	RCRA-CESQG	Higher	1047, NNW
B11	CHINATOWN MANOR	175 NORTH HOTEL ST	RCRA-CESQG	Higher	1052, SSW
C12	ALOHA FENDER INC	915 KAAAHI PL	RCRA-CESQG, FINDS	Higher	1059, WNW
C13		915 KAAAHI PL	EDR US Hist Auto Stat	Higher	1059, WNW
C14	MAUNAWILI PRODUCE, I	914 KAAAHI PL	HI LUST, HI UST	Higher	1066, WNW
C15	MAUNAWILI PRODUCE, I	914 KAAAHI PL	RCRA NonGen / NLR, FINDS	Higher	1066, WNW
C16		914 KAAAHI PL	EDR US Hist Auto Stat	Higher	1066, WNW
C17	R & G TRUCKING	906 KAAAHI PLACE	RCRA NonGen / NLR, FINDS	Higher	1074, WNW
C18	MAUNAWILI PRODUCE	906 KAAAHI PL	HI LUST, HI UST	Higher	1074, WNW
19		100 N BERETANIA ST	EDR US Hist Cleaners	Higher	1095, SSE
B20	KEKAULIKE DIAMOND HE	163 N HOTEL ST	HI SHWS, HI SPILLS	Higher	1100, SSW
D21	AWA WASTEWATER PUMP	190 N NIMITZ HWY	HI SHWS, HI SPILLS	Lower	1178, SW
D22	AWA STREET WASTEWATE	190 NIMITZ HWY	HI UST, HI Financial Assurance	Lower	1178, SW
E23	KINGSGATE PLAZA	516 DILLINGHAM BLVD	HI LUST, HI UST	Higher	1198, NW
E24		555 N KING ST	EDR US Hist Auto Stat	Higher	1201, NW
F25	STEELTECH INC	373 N NIMITZ HWY	HI LUST, HI UST	Higher	1215, West
F26	373 NORTH NIMITZ HIG	373 N NIMITZ HWY	HI SHWS, HI SPILLS	Higher	1215, West
G27	NAKAOKA PAINTING INC	922 KAAMAHU PL	HI UST	Higher	1281, WNW
G28		922 KAAMAHU PL	EDR US Hist Auto Stat	Higher	1281, WNW
29	ISLAND MOVERS, INC.	414 KUWILI STHONOLUL	HI LUST, HI UST, HI Financial Assurance	Higher	1321, West
G30	VON HAMM TEXTILES	546 KAAAHI ST	HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST...	Higher	1361, WNW
G31	NUUANU AUTO COMPANY	545 KAAAHI ST	HI SHWS	Higher	1365, WNW
H32	YICK LUNG CO., INC.	580 DILLINGHAM BLVD	HI LUST, HI UST	Higher	1451, NW
H33	YICK LUNG CO., INC.	602 DILLINGHAM BLVD	HI LUST, HI UST	Higher	1549, NW
34	YEE HOP BUILDING MAU	950 MAUNAKEA ST	HI SHWS	Higher	1710, SSW
35	DOWNTOWN CHEVRON	17 S BERETANIA ST	HI LUST	Higher	1741, SSE
36	HAWAIIAN GAS PRODUCT	516-520 KUWILI ST	EDR MGP	Higher	1771, WNW
I37	420 N. NIMITS HWY DE	420 N. NIMITZ HWY	HI LUST, HI UST	Higher	1777, WSW
I38	420-470 NORTH NIMITZ	420-470 N NIMITZ HWY	HI SHWS, HI ENG CONTROLS	Higher	1777, WSW

MAPPED SITES SUMMARY

Target Property Address:
1220 AALA ST.
, HI 96817

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
39	KING SHELL FOODMART	666 N KING ST	HI LUST, HI UST, HI Financial Assurance	Higher	1795, NW
40	HALL MARK DRY CLEANE	1470 LILIHA ST	HI SHWS	Higher	1817, NNE
41	C&CH WATERFRONT FIRE	111 N NIMITZ HWY	HI LUST, HI UST	Higher	1922, SSW
42	TRAVEL PLAZA TRANSPO	818 PINE ST	HI SHWS, HI LUST, HI UST, HI Financial Assurance	Higher	1923, WNW
43	SASAMOTO UNION SERVI	33 S VINEYARD BLVD	HI LUST, HI UST	Higher	1960, ESE
44	CUTTER DODGE AUTO SE	735 DILLINGHAM BLVD	HI LUST, HI UST	Higher	2060, WNW
45	RICHARD TOM	963 ROBELLO LN	HI LUST, HI UST, HI Financial Assurance	Higher	2133, NW
46	MID PAC PETROLEUM LL	540 N NIMITZ HWY	HI SHWS, HI LUST, HI UST, HI Financial Assurance	Higher	2170, WSW
47	LANCE GOYA CHEVRON	504 N SCHOOL ST	HI SHWS, HI LUST, HI UST, HI ENG CONTROLS, HI INST...	Higher	2258, NNE
48	ALOHA TOWER DEVELOPM	PIERS 8-14, NIMITZ H	CERCLIS	Higher	2307, SW
49	IWILEI BUSINESS CENT	501 SUMNER ST	HI SHWS, HI SPILLS, HI INST CONTROL	Higher	2369, WNW
50	7-ELEVEN NUUANU PALI	1602 NUUANU AVE	HI LUST, HI UST, HI Financial Assurance	Higher	2371, East
J51	DOLE PACKAGED FOODS	801 DILLINGHAM BLVD.	CERC-NFRAP, RCRA NonGen / NLR	Higher	2387, WNW
J52	DOLE IWILEI	801 DILLINGHAM BLVD	HI SHWS, HI SPILLS, HI INST CONTROL	Higher	2387, WNW
J53	DOLE IWILEI CANNERY	801 DILLINGHAM BLVD	HI LUST, HI UST	Higher	2387, WNW
54	HARBOR COURT PROJECT	CORNER OF QUEEN AND	HI LUST, HI UST	Higher	2434, South
K55	580 NORTH NIMITZ HIG	580 N NIMITZ HWY	HI SHWS, HI ENG CONTROLS	Higher	2464, WSW
K56	HARRY & JEANETTE WEI	580 N NIMITZ HWY	HI LUST, HI UST	Higher	2464, WSW
K57	CITY MILL	660 N NIMITZ HWY	HI SHWS, HI LUST, HI UST, HI INST CONTROL	Higher	2556, WSW
L58	TENNEY'S BISHOP UNIO	169 S BERETANIA ST	HI LUST, HI UST	Higher	2599, SE
59	ZIPPY'S 634 N NIMITZ	634 N NIMITZ HWY	HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST...	Higher	2652, WSW
L60	CAPITOL PLACE DEVELO	1212 QUEEN EMMA ST	HI SHWS	Higher	2681, SE
61	HARBOR COURT	66 QUEEN ST	HI SHWS	Higher	2713, South
M62	HAWAIIAN GRAIN CORPO	701 N NIMITZ HWY	HI SHWS, HI LUST, HI UST	Higher	2894, WSW
63	SAUSE BROTHERS	ALAKEA ST	HI SHWS, HI SPILLS	Higher	2943, WSW
N64	PIER 51 HONOLULU HAR	925 DILLINGHAM BLVD	FINDS, HI SHWS, HI ENG CONTROLS, HI INST CONTROL,...	Higher	2963, WNW
M65	HAWAIIAN FLOUR MILL	703 N NIMITZ HWY	HI SHWS	Higher	3009, WSW
N66	THEO DAVIES CATERPIL	935 DILLINGHAM BLVD	HI SHWS, HI ENG CONTROLS, HI INST CONTROL	Higher	3009, WNW
M67	MOANA PAA KAI	705 N NIMITZ HWY	RCRA-CESQG, HI SHWS, HI SPILLS	Higher	3030, WSW
O68	POLYNESIAN HOSPITALI	330 PACIFIC ST	RCRA-CESQG, FINDS, HI SHWS, HI LUST, HI UST, HI...	Higher	3037, West
O69	BREWER ENVIRONMENTAL	311 PACIFIC ST	HI SHWS, HI SPILLS, HI VCP	Higher	3059, West
O70	356 PACIFIC STREET B	356 PACIFIC ST	HI SHWS, HI SPILLS	Higher	3073, West
N71	HONOLULU COMMUNITY C	874 DILLINGHAM BLVD	HI SHWS	Higher	3089, WNW
72	BHP GASCO BENZENE SI	616 IWILEI RD	HI SHWS, HI SPILLS, HI INST CONTROL, HI AIRS	Higher	3138, West
73	KUAKINI MEDICAL DEVE	347 N KUAKINI ST	RCRA-SQG, FINDS, HI SHWS, HI LUST, HI UST, HI...	Higher	3145, NE
P74	UNOCAL 76 HONOLULU L	411 PACIFIC ST	RCRA NonGen / NLR, FINDS, HI SHWS, HI UST, HI...	Higher	3150, West
P75	BHP GASCO	432 PACIFIC STREET	EDR MGP	Higher	3184, West
76	700 N NIMITZ IDPP RE	700 N NIMITZ HWY	HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST...	Higher	3194, WSW
Q77	BHP PIER 29	739 N NIMITZ HWY	HI SHWS	Higher	3281, WSW

MAPPED SITES SUMMARY

Target Property Address:
1220 AALA ST.
, HI 96817

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
R78	COSTCO WAREHOUSE	525 ALAKAWA ST	HI SHWS, HI ENG CONTROLS, HI INST CONTROL, HI VCP	Higher	3372, WNW
Q79	755 N NIMITZ HWY	755 N NIMITZ HWY	HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST...	Higher	3410, WSW
R80	COSTCO GAS STATION	520 ALAKAWA ST	HI SHWS, HI ENG CONTROLS, HI INST CONTROL, HI VCP	Higher	3414, WNW
S81	775 NORTH NIMITZ HIG	775 N NIMITZ HWY	HI SHWS, HI ENG CONTROLS, HI INST CONTROL	Higher	3594, WSW
S82	EQUILON ENTERPRISES	789 N NIMITZ HWY	HI SHWS	Higher	3696, WSW
83	HOME DEPOT	421 ALAKAWA ST	HI SHWS, HI ENG CONTROLS, HI INST CONTROL	Higher	3719, WNW
84	HAWAIIAN ELECTRIC -	170 ALA MOANA BOULEV	RCRA-TSDF, CERC-NFRAP, CORRACTS, RCRA-CESQG, HI...	Higher	3720, South
85	PAULEY PETROLEUM	795 N NIMITZ HWY	HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST...	Higher	3728, WSW
86	JBL HAWAII, LTD	905 KOKEA ST	HI SHWS, HI ENG CONTROLS, HI INST CONTROL	Higher	3766, NW
87	PIER 30 TUG BOAT FUE	777 N NIMITZ HWY	HI SHWS, HI SPILLS	Higher	3805, WSW
88	THE QUEEN'S MEDICAL	1301 PUNCHBOWL ST	HI SHWS, HI LUST, HI UST, HI AIRS, HI Financial...	Higher	3857, SE
T89	WEYERHAEUSER	900 N NIMITZ HWY	HI SHWS, HI SPILLS	Higher	3956, West
T90	HAWAIIAN ELECTRIC CO	855 N NIMITZ HWY	HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST...	Higher	3969, West
T91	861-869 NORTH NIMITZ	861-869 N NIMITZ HWY	HI SHWS, HI ENG CONTROLS, HI INST CONTROL	Higher	3987, West
92	RICHARD'S CHEVRON	1909 NUUANU AVE	HI SHWS, HI SPILLS, HI INST CONTROL, HI Financial...	Higher	4021, ENE
93	BEST BUY	ALAKAWA ST & NIMITZ	HI SHWS, HI SPILLS	Higher	4027, WNW
U94	CHEVRON HONOLULU TRA	933 N NIMITZ HWY	HI SHWS, HI ENG CONTROLS, HI Financial Assurance	Higher	4118, West
95	GTE-HAWAIIAN TEL EMP	1138 N KING ST	HI SHWS, HI ENG CONTROLS, HI INST CONTROL	Higher	4124, NNW
U96	HAWAII STEVEDORES	965 N NIMITZ HWY	HI SHWS, HI SPILLS, HI ENG CONTROLS	Higher	4188, West
97	GTE HAWAIIAN TEL - C	ALAKAWA ST & NIMITZ	HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST...	Higher	4309, West
98	CLASSIC BOWL	1190 DILLINGHAM BLVD	HI SHWS	Higher	4310, WNW
99	1510 FREAR STREET	1510 FREAR ST	HI SHWS, HI SPILLS	Higher	4425, SE
100	HART STREET WWPS	1031 N NIMITZ HWY	HI SHWS, HI UIC	Higher	4448, West
V101	MCCABE, HAMILTON, &	1130 N NIMITZ HWY	HI SHWS, HI SPILLS	Higher	4524, WNW
V102	CHEVRON KAPALAMA TER	1105 N NIMITZ HWY	HI SHWS, HI SPILLS, HI INST CONTROL	Higher	4625, West
103	TAKAMIYA PROPERTY	850 MOOWAA ST	HI SHWS, HI SPILLS	Higher	4672, NW
104	ROSS TRUSTS	819 MOOWAA ST	HI SHWS, HI VCP	Higher	4690, NW
105	DOMESTIC COMMERCIAL	1133 N NIMITZ HWY	HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST...	Higher	4780, WNW
106	KAMEHAMEHA SCHOOLS -	1336 DILLINGHAM BLVD	HI SHWS, HI SPILLS	Higher	4854, WNW
107	QUEEN EMMALANI TOWER	600 QUEEN ST	CERC-NFRAP, RCRA NonGen / NLR, FINDS, HI SHWS, HI...	Higher	5161, SSE
108	1385 COLBURN STREET	1385 COLBURN ST	HI SHWS, HI SPILLS	Higher	5235, WNW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal CERCLIS list

CERCLIS: A review of the CERCLIS list, as provided by EDR, and dated 10/25/2013 has revealed that there is 1 CERCLIS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ALOHA TOWER DEVELOPM	PIERS 8-14, NIMITZ H	SW 1/4 - 1/2 (0.437 mi.)	48	17

Federal CERCLIS NFRAP site List

CERC-NFRAP: A review of the CERC-NFRAP list, as provided by EDR, and dated 10/25/2013 has revealed that there is 1 CERC-NFRAP site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DOLE PACKAGED FOODS	***801 DILLINGHAM BLVD.***	***WNW 1/4 - 1/2 (0.452 mi.)***	***J51***	***18***

Federal RCRA CORRACTS facilities list

CORRACTS: A review of the CORRACTS list, as provided by EDR, and dated 12/09/2014 has revealed that there is 1 CORRACTS site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HAWAIIAN ELECTRIC -	***170 ALA MOANA BOULEV***	***S 1/2 - 1 (0.705 mi.)***	***84***	***25***

EXECUTIVE SUMMARY

Federal RCRA generators list

RCRA-CESQG: A review of the RCRA-CESQG list, as provided by EDR, and dated 12/09/2014 has revealed that there are 4 RCRA-CESQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
TENNEY'S BISHOP UNIO	***169 SOUTH BERETANIA***	***SSE 1/8 - 1/4 (0.158 mi.)***	***8***	***8***
KUKUI GARDENS MAKAI	1103 LILIHA ST	NNW 1/8 - 1/4 (0.198 mi.)	10	9
CHINATOWN MANOR	175 NORTH HOTEL ST	SSW 1/8 - 1/4 (0.199 mi.)	B11	9
ALOHA FENDER INC	***915 KAAAHI PL***	***WNW 1/8 - 1/4 (0.201 mi.)***	***C12***	***9***

State- and tribal - equivalent CERCLIS

HI SHWS: A review of the HI SHWS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 70 HI SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
TOWN INN	***248-258 N BERETANIA***	***S 0 - 1/8 (0.081 mi.)***	***A2***	***7***
LILIHA CIVIC CENTER	337 N KING ST	WSW 0 - 1/8 (0.104 mi.)	3	7
IWILEI PROJECT SITE	IWILEI RD & N KING S	SW 0 - 1/8 (0.123 mi.)	5	8
215 NORTH KING STREE	215 N KING ST	SW 1/8 - 1/4 (0.149 mi.)	6	8
IWILEI FRUIT AND VEG	***920 IWILEI ROAD***	***WSW 1/8 - 1/4 (0.154 mi.)***	***7***	***8***
SENIOR RESIDENCES AT	***888 IWILEI RD***	***WSW 1/8 - 1/4 (0.179 mi.)***	***9***	***8***
KEKAULIKE DIAMOND HE	***163 N HOTEL ST***	***SSW 1/8 - 1/4 (0.208 mi.)***	***B20***	***11***
373 NORTH NIMITZ HIG	***373 N NIMITZ HWY***	***W 1/8 - 1/4 (0.230 mi.)***	***F26***	***12***
VON HAMM TEXTILES	***546 KAAAHI ST***	***WNW 1/4 - 1/2 (0.258 mi.)***	***G30***	***13***
NUUANU AUTO COMPANY	545 KAAAHI ST	WNW 1/4 - 1/2 (0.259 mi.)	G31	13
YEE HOP BUILDING MAU	950 MAUNAKEA ST	SSW 1/4 - 1/2 (0.324 mi.)	34	14
420-470 NORTH NIMITZ	***420-470 N NIMITZ HWY***	***WSW 1/4 - 1/2 (0.337 mi.)***	***I38***	***14***
HALL MARK DRY CLEANE	1470 LILIHA ST	NNE 1/4 - 1/2 (0.344 mi.)	40	15
TRAVEL PLAZA TRANSPO	***818 PINE ST***	***WNW 1/4 - 1/2 (0.364 mi.)***	***42***	***15***
MID PAC PETROLEUM LL	***540 N NIMITZ HWY***	***WSW 1/4 - 1/2 (0.411 mi.)***	***46***	***16***
LANCE GOYA CHEVRON	***504 N SCHOOL ST***	***NNE 1/4 - 1/2 (0.428 mi.)***	***47***	***17***
IWILEI BUSINESS CENT	***501 SUMNER ST***	***WNW 1/4 - 1/2 (0.449 mi.)***	***49***	***17***
DOLE IWILEI	***801 DILLINGHAM BLVD***	***WNW 1/4 - 1/2 (0.452 mi.)***	***J52***	***18***
580 NORTH NIMITZ HIG	***580 N NIMITZ HWY***	***WSW 1/4 - 1/2 (0.467 mi.)***	***K55***	***19***
CITY MILL	***660 N NIMITZ HWY***	***WSW 1/4 - 1/2 (0.484 mi.)***	***K57***	***19***
ZIPPY'S 634 N NIMITZ	***634 N NIMITZ HWY***	***WSW 1/2 - 1 (0.502 mi.)***	***59***	***20***
CAPITOL PLACE DEVELO	1212 QUEEN EMMA ST	SE 1/2 - 1 (0.508 mi.)	L60	20
HARBOR COURT	66 QUEEN ST	S 1/2 - 1 (0.514 mi.)	61	20
HAWAIIAN GRAIN CORPO	***701 N NIMITZ HWY***	***WSW 1/2 - 1 (0.548 mi.)***	***M62***	***20***
SAUSE BROTHERS	***ALAKEA ST***	***WSW 1/2 - 1 (0.557 mi.)***	***63***	***21***
PIER 51 HONOLULU HAR	***925 DILLINGHAM BLVD***	***WNW 1/2 - 1 (0.561 mi.)***	***N64***	***21***
HAWAIIAN FLOUR MILL	703 N NIMITZ HWY	WSW 1/2 - 1 (0.570 mi.)	M65	21
THEO DAVIES CATERPIL	***935 DILLINGHAM BLVD***	***WNW 1/2 - 1 (0.570 mi.)***	***N66***	***21***
MOANA PAA KAI	***705 N NIMITZ HWY***	***WSW 1/2 - 1 (0.574 mi.)***	***M67***	***21***
POLYNESIAN HOSPITALI	***330 PACIFIC ST***	***W 1/2 - 1 (0.575 mi.)***	***O68***	***22***
BREWER ENVIRONMENTAL	***311 PACIFIC ST***	***W 1/2 - 1 (0.579 mi.)***	***O69***	***22***
356 PACIFIC STREET B	***356 PACIFIC ST***	***W 1/2 - 1 (0.582 mi.)***	***O70***	***22***
HONOLULU COMMUNITY C	874 DILLINGHAM BLVD	WNW 1/2 - 1 (0.585 mi.)	N71	22
BHP GASCO BENZENE SI	***616 IWILEI RD***	***W 1/2 - 1 (0.594 mi.)***	***72***	***23***
KUAKINI MEDICAL DEVE	***347 N KUAKINI ST***	***NE 1/2 - 1 (0.596 mi.)***	***73***	***23***

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
UNOCAL 76 HONOLULU L	411 PACIFIC ST	W 1/2 - 1 (0.597 mi.)	P74	23
700 N NIMITZ IDPP RE	700 N NIMITZ HWY	WSW 1/2 - 1 (0.605 mi.)	76	24
BHP PIER 29	739 N NIMITZ HWY	WSW 1/2 - 1 (0.621 mi.)	Q77	24
COSTCO WAREHOUSE	525 ALAKAWA ST	WNW 1/2 - 1 (0.639 mi.)	R78	24
755 N NIMITZ HWY	755 N NIMITZ HWY	WSW 1/2 - 1 (0.646 mi.)	Q79	24
COSTCO GAS STATION	520 ALAKAWA ST	WNW 1/2 - 1 (0.647 mi.)	R80	24
775 NORTH NIMITZ HIG	775 N NIMITZ HWY	WSW 1/2 - 1 (0.681 mi.)	S81	25
EQUILON ENTERPRISES	789 N NIMITZ HWY	WSW 1/2 - 1 (0.700 mi.)	S82	25
HOME DEPOT	421 ALAKAWA ST	WNW 1/2 - 1 (0.704 mi.)	83	25
HAWAIIAN ELECTRIC -	170 ALA MOANA BOULEV	S 1/2 - 1 (0.705 mi.)	84	25
PAULEY PETROLEUM	795 N NIMITZ HWY	WSW 1/2 - 1 (0.706 mi.)	85	26
JBL HAWAII, LTD	905 KOKEA ST	NW 1/2 - 1 (0.713 mi.)	86	26
PIER 30 TUG BOAT FUE	777 N NIMITZ HWY	WSW 1/2 - 1 (0.721 mi.)	87	26
THE QUEEN'S MEDICAL	1301 PUNCHBOWL ST	SE 1/2 - 1 (0.730 mi.)	88	26
WEYERHAEUSER	900 N NIMITZ HWY	W 1/2 - 1 (0.749 mi.)	T89	27
HAWAIIAN ELECTRIC CO	855 N NIMITZ HWY	W 1/2 - 1 (0.752 mi.)	T90	27
861-869 NORTH NIMITZ	861-869 N NIMITZ HWY	W 1/2 - 1 (0.755 mi.)	T91	27
RICHARD'S CHEVRON	1909 NUUANU AVE	ENE 1/2 - 1 (0.762 mi.)	92	27
BEST BUY	ALAKAWA ST & NIMITZ	WNW 1/2 - 1 (0.763 mi.)	93	27
CHEVRON HONOLULU TRA	933 N NIMITZ HWY	W 1/2 - 1 (0.780 mi.)	U94	27
GTE-HAWAIIAN TEL EMP	1138 N KING ST	NNW 1/2 - 1 (0.781 mi.)	95	28
HAWAII STEVEDORES	965 N NIMITZ HWY	W 1/2 - 1 (0.793 mi.)	U96	28
GTE HAWAIIAN TEL - C	ALAKAWA ST & NIMITZ	W 1/2 - 1 (0.816 mi.)	97	28
CLASSIC BOWL	1190 DILLINGHAM BLVD	WNW 1/2 - 1 (0.816 mi.)	98	28
1510 FREAR STREET	1510 FREAR ST	SE 1/2 - 1 (0.838 mi.)	99	28
HART STREET WWPS	1031 N NIMITZ HWY	W 1/2 - 1 (0.842 mi.)	100	28
MCCABE, HAMILTON, &	1130 N NIMITZ HWY	WNW 1/2 - 1 (0.857 mi.)	V101	29
CHEVRON KAPALAMA TER	1105 N NIMITZ HWY	W 1/2 - 1 (0.876 mi.)	V102	29
TAKAMIYA PROPERTY	850 MOOWAA ST	NW 1/2 - 1 (0.885 mi.)	103	29
ROSS TRUSTS	819 MOOWAA ST	NW 1/2 - 1 (0.888 mi.)	104	29
DOMESTIC COMMERCIAL	1133 N NIMITZ HWY	WNW 1/2 - 1 (0.905 mi.)	105	29
KAMEHAMEHA SCHOOLS -	1336 DILLINGHAM BLVD	WNW 1/2 - 1 (0.919 mi.)	106	29
QUEEN EMMALANI TOWER	600 QUEEN ST	SSE 1/2 - 1 (0.977 mi.)	107	30
1385 COLBURN STREET	1385 COLBURN ST	WNW 1/2 - 1 (0.991 mi.)	108	30

Lower Elevation	Address	Direction / Distance	Map ID	Page
AWA WASTEWATER PUMP	190 N NIMITZ HWY	SW 1/8 - 1/4 (0.223 mi.)	D21	11

State and tribal leaking storage tank lists

HI LUST: A review of the HI LUST list, as provided by EDR, and dated 12/16/2014 has revealed that there are 25 HI LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HONOLULU COMMUNITY A Facility Status: Site Cleanup Completed (NFA)	337 & 357 N KING ST	W 0 - 1/8 (0.114 mi.)	4	7
IWILEI FRUIT AND VEG Facility Status: Site Cleanup Completed (NFA)	920 IWILEI ROAD	WSW 1/8 - 1/4 (0.154 mi.)	7	8
MAUNAWILI PRODUCE, I Facility Status: Site Cleanup Completed (NFA)	914 KAAAHI PL	WNW 1/8 - 1/4 (0.202 mi.)	C14	9

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MAUNAWILI PRODUCE Facility Status: Site Cleanup Completed (NFA)	906 KAAAHI PL	WNW 1/8 - 1/4 (0.203 mi.)	C18	10
KINGSGATE PLAZA Facility Status: Site Cleanup Completed (NFA)	516 DILLINGHAM BLVD	NW 1/8 - 1/4 (0.227 mi.)	E23	11
STEELTECH INC Facility Status: Site Cleanup Completed (NFA)	373 N NIMITZ HWY	W 1/8 - 1/4 (0.230 mi.)	F25	12
ISLAND MOVERS, INC. Facility Status: Site Cleanup Completed (NFA)	414 KUWILI STHONOLUL	W 1/4 - 1/2 (0.250 mi.)	29	12
YICK LUNG CO., INC. Facility Status: Site Cleanup Completed (NFA)	580 DILLINGHAM BLVD	NW 1/4 - 1/2 (0.275 mi.)	H32	13
YICK LUNG CO., INC. Facility Status: Site Cleanup Completed (NFA)	602 DILLINGHAM BLVD	NW 1/4 - 1/2 (0.293 mi.)	H33	13
DOWNTOWN CHEVRON Facility Status: Site Cleanup Completed (NFA)	17 S BERETANIA ST	SSE 1/4 - 1/2 (0.330 mi.)	35	14
420 N. NIMITS HWY DE Facility Status: Site Cleanup Completed (NFA)	420 N. NIMITZ HWY	WSW 1/4 - 1/2 (0.337 mi.)	I37	14
KING SHELL FOODMART Facility Status: Site Cleanup Completed (NFA)	666 N KING ST	NW 1/4 - 1/2 (0.340 mi.)	39	15
C&CH WATERFRONT FIRE Facility Status: Site Cleanup Completed (NFA)	111 N NIMITZ HWY	SSW 1/4 - 1/2 (0.364 mi.)	41	15
TRAVEL PLAZA TRANSPO Facility Status: Site Cleanup Completed (NFA)	818 PINE ST	WNW 1/4 - 1/2 (0.364 mi.)	42	15
SASAMOTO UNION SERVI Facility Status: Site Cleanup Completed (NFA)	33 S VINEYARD BLVD	ESE 1/4 - 1/2 (0.371 mi.)	43	16
CUTTER DODGE AUTO SE Facility Status: Site Cleanup Completed (NFA)	735 DILLINGHAM BLVD	WNW 1/4 - 1/2 (0.390 mi.)	44	16
RICHARD TOM Facility Status: Site Cleanup Completed (NFA)	963 ROBELLO LN	NW 1/4 - 1/2 (0.404 mi.)	45	16
MID PAC PETROLEUM LL Facility Status: Site Cleanup Completed (NFA)	540 N NIMITZ HWY	WSW 1/4 - 1/2 (0.411 mi.)	46	16
LANCE GOYA CHEVRON Facility Status: Site Cleanup Completed with EHMP Facility Status: Site Cleanup Completed (NFA)	504 N SCHOOL ST	NNE 1/4 - 1/2 (0.428 mi.)	47	17
7-ELEVEN NUUANU PALI Facility Status: Site Cleanup Completed (NFA)	1602 NUUANU AVE	E 1/4 - 1/2 (0.449 mi.)	50	17
DOLE IWILEI CANNERY Facility Status: Site Cleanup Completed (NFA)	801 DILLINGHAM BLVD	WNW 1/4 - 1/2 (0.452 mi.)	J53	18
HARBOR COURT PROJECT Facility Status: Site Cleanup Completed (NFA)	CORNER OF QUEEN AND	S 1/4 - 1/2 (0.461 mi.)	54	19
HARRY & JEANETTE WEI Facility Status: Case Transferred to HEER (regulated)	580 N NIMITZ HWY	WSW 1/4 - 1/2 (0.467 mi.)	K56	19
CITY MILL Facility Status: Site Cleanup Completed (NFA)	660 N NIMITZ HWY	WSW 1/4 - 1/2 (0.484 mi.)	K57	19
TENNEY'S BISHOP UNIO Facility Status: Site Cleanup Completed (NFA)	169 S BERETANIA ST	SE 1/4 - 1/2 (0.492 mi.)	L58	20

State and tribal registered storage tank lists

HI UST: A review of the HI UST list, as provided by EDR, and dated 12/18/2014 has revealed that there are 8 HI UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HONOLULU COMMUNITY A	***337 & 357 N KING ST***	***W 0 - 1/8 (0.114 mi.)***	***4***	***7***
IWILEI FRUIT AND VEG	***920 IWILEI ROAD***	***WSW 1/8 - 1/4 (0.154 mi.)***	***7***	***8***
MAUNAWILI PRODUCE, I	***914 KAAAHI PL***	***WNW 1/8 - 1/4 (0.202 mi.)***	***C14***	***9***
MAUNAWILI PRODUCE	***906 KAAAHI PL***	***WNW 1/8 - 1/4 (0.203 mi.)***	***C18***	***10***
KINGSGATE PLAZA	***516 DILLINGHAM BLVD***	***NW 1/8 - 1/4 (0.227 mi.)***	***E23***	***11***
STEELTECH INC	***373 N NIMITZ HWY***	***W 1/8 - 1/4 (0.230 mi.)***	***F25***	***12***
NAKAOKA PAINTING INC	922 KAAMAHU PL	WNW 1/8 - 1/4 (0.243 mi.)	G27	12

Lower Elevation	Address	Direction / Distance	Map ID	Page
AWA STREET WASTEWATE	***190 NIMITZ HWY***	***SW 1/8 - 1/4 (0.223 mi.)***	***D22***	***11***

State and tribal institutional control / engineering control registries

HI ENG CONTROLS: A review of the HI ENG CONTROLS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 4 HI ENG CONTROLS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
VON HAMM TEXTILES	***546 KAAAHI ST***	***WNW 1/4 - 1/2 (0.258 mi.)***	***G30***	***13***
420-470 NORTH NIMITZ	***420-470 N NIMITZ HWY***	***WSW 1/4 - 1/2 (0.337 mi.)***	***I38***	***14***
LANCE GOYA CHEVRON	***504 N SCHOOL ST***	***NNE 1/4 - 1/2 (0.428 mi.)***	***47***	***17***
580 NORTH NIMITZ HIG	***580 N NIMITZ HWY***	***WSW 1/4 - 1/2 (0.467 mi.)***	***K55***	***19***

HI INST CONTROL: A review of the HI INST CONTROL list, as provided by EDR, and dated 12/02/2014 has revealed that there are 7 HI INST CONTROL sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
TOWN INN	***248-258 N BERETANIA***	***S 0 - 1/8 (0.081 mi.)***	***A2***	***7***
SENIOR RESIDENCES AT	***888 IWILEI RD***	***WSW 1/8 - 1/4 (0.179 mi.)***	***9***	***8***
VON HAMM TEXTILES	***546 KAAAHI ST***	***WNW 1/4 - 1/2 (0.258 mi.)***	***G30***	***13***
LANCE GOYA CHEVRON	***504 N SCHOOL ST***	***NNE 1/4 - 1/2 (0.428 mi.)***	***47***	***17***
IWILEI BUSINESS CENT	***501 SUMNER ST***	***WNW 1/4 - 1/2 (0.449 mi.)***	***49***	***17***
DOLE IWILEI	***801 DILLINGHAM BLVD***	***WNW 1/4 - 1/2 (0.452 mi.)***	***J52***	***18***
CITY MILL	***660 N NIMITZ HWY***	***WSW 1/4 - 1/2 (0.484 mi.)***	***K57***	***19***

State and tribal voluntary cleanup sites

HI VCP: A review of the HI VCP list, as provided by EDR, and dated 12/02/2014 has revealed that there is 1 HI VCP site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
TOWN INN	***248-258 N BERETANIA***	***S 0 - 1/8 (0.081 mi.)***	***A2***	***7***

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

RCRA NonGen / NLR: A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 12/09/2014 has revealed that there are 3 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
TYPEHOUSE HAWAII	***250 N BERETANIA ST***	***S 0 - 1/8 (0.080 mi.)***	***A1***	***7***
MAUNAWILI PRODUCE, I	***914 KAAAHI PL***	***WNW 1/8 - 1/4 (0.202 mi.)***	***C15***	***10***
R & G TRUCKING	***906 KAAAHI PLACE***	***WNW 1/8 - 1/4 (0.203 mi.)***	***C17***	***10***

DOD: A review of the DOD list, as provided by EDR, and dated 12/31/2005 has revealed that there is 1 DOD site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAND ISLAND MILITARY		WSW 1/4 - 1/2 (0.338 mi.)	0	7

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: A review of the EDR MGP list, as provided by EDR, has revealed that there are 2 EDR MGP sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HAWAIIAN GAS PRODUCT	516-520 KUWILI ST	WNW 1/4 - 1/2 (0.335 mi.)	36	14
BHP GASCO	432 PACIFIC STREET	W 1/2 - 1 (0.603 mi.)	P75	24

EXECUTIVE SUMMARY

EDR US Hist Auto Stat: A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there are 4 EDR US Hist Auto Stat sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	915 KAAAHI PL	WNW 1/8 - 1/4 (0.201 mi.)	C13	9
Not reported	914 KAAAHI PL	WNW 1/8 - 1/4 (0.202 mi.)	C16	10
Not reported	555 N KING ST	NW 1/8 - 1/4 (0.227 mi.)	E24	11
Not reported	922 KAAMAHU PL	WNW 1/8 - 1/4 (0.243 mi.)	G28	12

EDR US Hist Cleaners: A review of the EDR US Hist Cleaners list, as provided by EDR, has revealed that there is 1 EDR US Hist Cleaners site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	100 N BERETANIA ST	SSE 1/8 - 1/4 (0.207 mi.)	19	10

Count: 9 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
HONOLULU	S117391417	1339 SCHOOL STREET	1339, 1341, 1343 N SCHOOL ST		HI SHWS, HI ENG CONTROLS, HI INST CONTROL
HONOLULU	S111704669	ALA WAI HARBOR BOAT REPAIR YARD	ALA MOANA BLVD		HI SHWS
HONOLULU	S106708609	CANNON CLUB	DIAMOND HEAD RD		HI SHWS, HI BROWNFIELDS
HONOLULU	S108008549	KALANI, HART, MOKUAEA STREET, HONO	HART ST & KALANI ST & MOKUAEA		HI SHWS
HONOLULU	1003879469	PACIFIC RESOURCES, INCORPORATED (G	IWILEI RD	96817	CERC-NFRAP
HONOLULU	1006820337	ABC DISPOSAL COMPANY	2760 KAMEHAMEHA HWY	96819	HI SHWS
HONOLULU	S111704706	FORMER KAPALAMA MILITARY RESERVATI	N NIMITZ HWY		HI SHWS
HONOLULU	S108008765	CITIZENS ENERGY SERVICES PIER 38	NIMITZ HWY		HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST CONTROL
HONOLULU	S106819311	NIMITZ HIGHWAY WATER IMPROVEMENT P	N NIMITZ HWY	96817	HI SHWS

OVERVIEW MAP - 4237094.42S

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Kalanihuia E ADDRESS: 1220 Aala St. Honolulu HI 96817 LAT/LONG: 21.316 / 157.8627	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.42s DATE: March 17, 2015 5:37 pm

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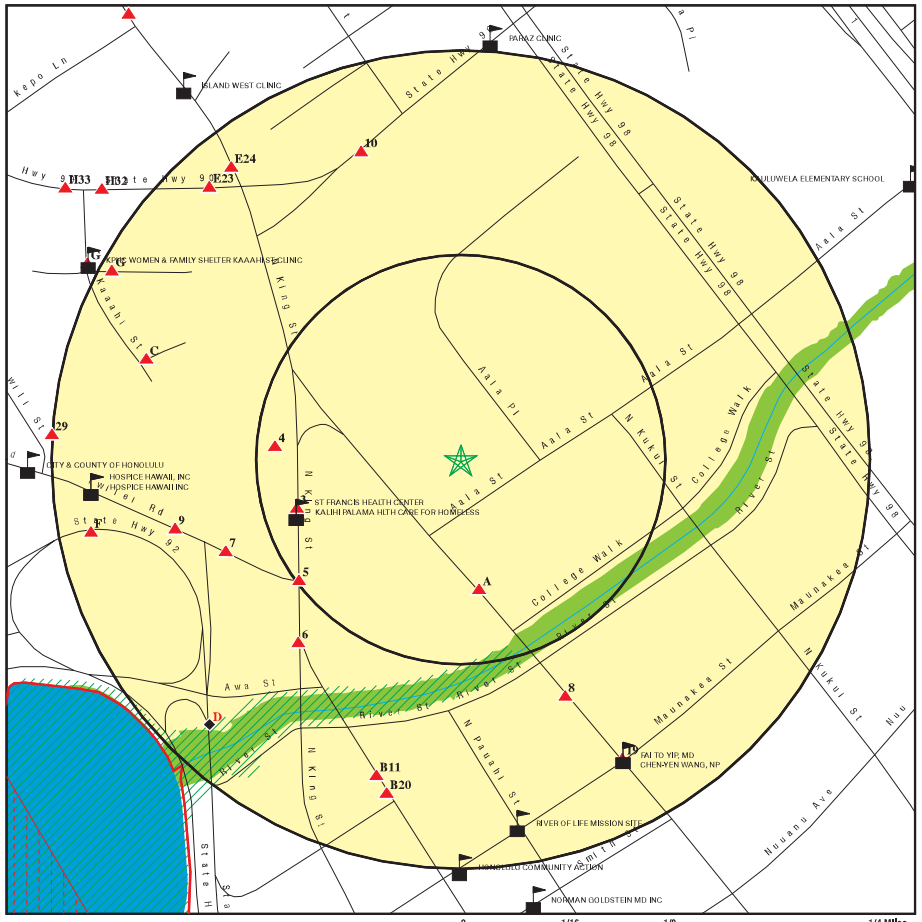
DETAIL MAP - 4237094.42S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Oil & Gas pipelines from USGS
- 100-year flood zone
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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	1	NR	NR	1
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	1	NR	NR	1
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	1	NR	1
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	4	NR	NR	NR	4
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
HI SHWS	1.000		3	6	12	49	NR	70
State and tribal landfill and/or solid waste disposal site lists								
HI SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
HI LUST	0.500		1	5	19	NR	NR	25
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
HI UST	0.250		1	7	NR	NR	NR	8

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
HI ENG CONTROLS	0.500		0	0	4	NR	NR	4
HI INST CONTROL	0.500		1	1	5	NR	NR	7
State and tribal voluntary cleanup sites								
HI VCP	0.500		1	0	0	NR	NR	1
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
HI BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
HI CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
HI SPILLS	TP		NR	NR	NR	NR	NR	0
HI SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		1	2	NR	NR	NR	3
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	1	0	NR	1
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
HI UIC	TP		NR	NR	NR	NR	NR	0
HI DRYCLEANERS	0.250		0	0	NR	NR	NR	0
CA HAZNET	TP		NR	NR	NR	NR	NR	0
HI AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
HI Financial Assurance	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	1	1	NR	2
EDR US Hist Auto Stat	0.250		0	4	NR	NR	NR	4
EDR US Hist Cleaners	0.250		0	1	NR	NR	NR	1
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
HI RGA LF	TP		NR	NR	NR	NR	NR	0
HI RGA LUST	TP		NR	NR	NR	NR	NR	0
HI RGA HWS	TP		NR	NR	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
DOD **Region** **WSW** **1/4-1/2** **1782 ft.**	**SAND ISLAND MILITARY RESERVATION** **SAND ISLAND MILITARY RESE (County), HI** Click here for full text details	**DOD**	**CUSA147757** **N/A**
A1 **South** **< 1/8** **0.080 mi.** **420 ft.** **Relative:** **Higher**	**TYPEHOUSE HAWAII** **250 N BERETANIA ST** **HONOLULU, HI 96817** Click here for full text details **RCRA NonGen / NLR** EPA Id: HID981162647	**RCRA NonGen / NLR** **FINDS**	**1000202883** **HID981162647**
A2 **South** **< 1/8** **0.081 mi.** **428 ft.** **Relative:** **Higher**	**TOWN INN** **248-258 N BERETANIA ST** **HONOLULU, HI 96817** Click here for full text details	**HI SHWS** **HI INST CONTROL** **HI VCP**	**1006819555** **N/A**
3 **WSW** **< 1/8** **0.104 mi.** **550 ft.** **Relative:** **Higher**	**LILIHA CIVIC CENTER** **337 N KING ST** **HONOLULU, HI 96817** Click here for full text details	**HI SHWS**	**1006819345** **N/A**
4 **West** **< 1/8** **0.114 mi.** **601 ft.** **Relative:** **Higher**	**HONOLULU COMMUNITY ACTION PROGRAM** **337 & 357 N KING ST** **HONOLULU, HI 96817** Click here for full text details **HI LUST** Facility Id: 9-101814 Facility Status: Site Cleanup Completed (NFA) **HI UST** Facility Id: 9-101814 Tank Status: Permanently Out of Use	**HI LUST** **HI UST**	**U001235598** **N/A**

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
5 **SW** **< 1/8** **0.123 mi.** **649 ft.** **Relative: Higher**	**IWILEI PROJECT SITE (IWILEI BROWNFIELDS)** **IWILEI RD & N KING ST** **HONOLULU, HI 96817** Click here for full text details	**HI SHWS**	**S107022564** **N/A**
6 **SW** **1/8-1/4** **0.149 mi.** **787 ft.** **Relative: Higher**	**215 NORTH KING STREET CONSTRUCTION SITE, TANKS 1 & 2** **215 N KING ST** **HONOLULU, HI 96814** Click here for full text details	**HI SHWS**	**S106815334** **N/A**
7 **WSW** **1/8-1/4** **0.154 mi.** **813 ft.** **Relative: Higher**	**IWILEI FRUIT AND VEGETABLE WAREHOUSE** **920 IWILEI ROAD** **HONOLULU, HI 96813** Click here for full text details **HI LUST** Facility Id: 9-103747 Facility Status: Site Cleanup Completed (NFA) **HI UST** Facility Id: 9-103747 Tank Status: Permanently Out of Use	**HI SHWS** **HI LUST** **HI UST**	**U003858603** **N/A**
8 **SSE** **1/8-1/4** **0.158 mi.** **832 ft.** **Relative: Higher**	**TENNEY'S BISHOP UNION** **169 SOUTH BERETANIA STREET** **HONOLULU, HI** Click here for full text details **RCRA-CESQG** EPA Id: HID984468751	**RCRA-CESQG** **FINDS**	**1004688900** **HID984468751**
9 **WSW** **1/8-1/4** **0.179 mi.** **947 ft.** **Relative: Higher**	**SENIOR RESIDENCES AT IWILEI** **888 IWILEI RD** **HONOLULU, HI 96813** Click here for full text details	**HI SHWS** **HI INST CONTROL**	**S111704855** **N/A**

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
10 **NNW** **1/8-1/4** **0.198 mi.** **1047 ft.** **Relative: Higher**	**KUKUI GARDENS MAKAI** **1103 LILIHA ST** **HONOLULU, HI 96817** Click here for full text details **RCRA-CESQG** EPA Id: HIR000139048	**RCRA-CESQG**	**1012178249** **HIR000139048**
B11 **SSW** **1/8-1/4** **0.199 mi.** **1052 ft.** **Relative: Higher**	**CHINATOWN MANOR** **175 NORTH HOTEL ST** **HONOLULU, HI 96817** Click here for full text details **RCRA-CESQG** EPA Id: HIR000139063	**RCRA-CESQG**	**1012178251** **HIR000139063**
C12 **WNW** **1/8-1/4** **0.201 mi.** **1059 ft.** **Relative: Higher**	**ALOHA FENDER INC** **915 KAAAHI PL** **HONOLULU, HI 96817** Click here for full text details **RCRA-CESQG** EPA Id: HID984469817	**RCRA-CESQG** **FINDS**	**1000823317** **HID984469817**
C13 **WNW** **1/8-1/4** **0.201 mi.** **1059 ft.** **Relative: Higher**	**915 KAAAHI PL** **HONOLULU, HI 96817** Click here for full text details	**EDR US Hist Auto Stat**	**1015673481** **N/A**
C14 **WNW** **1/8-1/4** **0.202 mi.** **1066 ft.** **Relative: Higher**	**MAUNAWILI PRODUCE, INC.** **914 KAAAHI PL** **HONOLULU, HI 96817** Click here for full text details **HI LUST** Facility Id: 9-100272 Facility Status: Site Cleanup Completed (NFA) **HI UST** Facility Id: 9-100272 Tank Status: Permanently Out of Use	**HI LUST** **HI UST**	**U001235127** **N/A**

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
C15 **WNW** **1/8-1/4** **0.202 mi.** **1066 ft.** **Relative: Higher**	**MAUNAWILI PRODUCE, INC.** **914 KAAAHI PL** **HONOLULU, HI 96817** Click here for full text details **RCRA NonGen / NLR** EPA Id: HID984469627	**RCRA NonGen / NLR** **FINDS**	**1000823298** **HID984469627**
C16 **WNW** **1/8-1/4** **0.202 mi.** **1066 ft.** **Relative: Higher**	**914 KAAAHI PL** **HONOLULU, HI 96817** Click here for full text details	**EDR US Hist Auto Stat**	**1015673162** **N/A**
C17 **WNW** **1/8-1/4** **0.203 mi.** **1074 ft.** **Relative: Higher**	**R & G TRUCKING** **906 KAAAHI PLACE** **HONOLULU, HI 96817** Click here for full text details **RCRA NonGen / NLR** EPA Id: HID069804755	**RCRA NonGen / NLR** **FINDS**	**1000114936** **HID069804755**
C18 **WNW** **1/8-1/4** **0.203 mi.** **1074 ft.** **Relative: Higher**	**MAUNAWILI PRODUCE** **906 KAAAHI PL** **HONOLULU, HI 96817** Click here for full text details **HI LUST** Facility Id: 9-101518 Facility Status: Site Cleanup Completed (NFA) **HI UST** Facility Id: 9-101518 Tank Status: Permanently Out of Use	**HI LUST** **HI UST**	**U001235527** **N/A**
19 **SSE** **1/8-1/4** **0.207 mi.** **1095 ft.** **Relative: Higher**	**100 N BERETANIA ST** **HONOLULU, HI 96817** Click here for full text details	**EDR US Hist Cleaners**	**1014966387** **N/A**

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
B20 **SSW** **1/8-1/4** **0.208 mi.** **1100 ft.** **Relative: Higher**	**KEKAULIKE DIAMOND HEAD BLOCK REVITALIZATION** **163 N HOTEL ST** **HONOLULU, HI 96817** Click here for full text details	**HI SHWS** **HI SPILLS**	**1006819184** **N/A**
D21 **SW** **1/8-1/4** **0.223 mi.** **1178 ft.** **Relative: Lower**	**AWA WASTEWATER PUMP STATION** **190 N NIMITZ HWY** **HONOLULU, HI 96817** Click here for full text details	**HI SHWS** **HI SPILLS**	**S105262868** **N/A**
D22 **SW** **1/8-1/4** **0.223 mi.** **1178 ft.** **Relative: Lower**	**AWA STREET WASTEWATER PUMP STATION** **190 NIMITZ HWY** **HONOLULU, HI 96817** Click here for full text details **HI UST** Facility Id: 9-103664 Tank Status: Currently In Use	**HI UST** **HI Financial Assurance**	**U004221611** **N/A**
E23 **NW** **1/8-1/4** **0.227 mi.** **1198 ft.** **Relative: Higher**	**KINGSGATE PLAZA** **516 DILLINGHAM BLVD** **HONOLULU, HI 96817** Click here for full text details **HI LUST** Facility Id: 9-102172 Facility Status: Site Cleanup Completed (NFA) **HI UST** Facility Id: 9-102172 Tank Status: Permanently Out of Use	**HI LUST** **HI UST**	**U001235760** **N/A**
E24 **NW** **1/8-1/4** **0.227 mi.** **1201 ft.** **Relative: Higher**	**555 N KING ST** **HONOLULU, HI 96817** Click here for full text details	**EDR US Hist Auto Stat**	**1015552125** **N/A**

F25
West
1/8-1/4
0.230 mi.
1215 ft.

Relative: Higher

STEELTECH INC — **HI LUST** — **U003154735**
373 N NIMITZ HWY — **HI UST** — **N/A**
HONOLULU, HI 96817

Click here for full text details

HI LUST
Facility Id: 9-102947
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-102947
Tank Status: Permanently Out of Use

F26
West
1/8-1/4
0.230 mi.
1215 ft.

Relative: Higher

373 NORTH NIMITZ HIGHWAY — **HI SHWS** — **S106815507**
373 N NIMITZ HWY — **HI SPILLS** — **N/A**
HONOLULU, HI 96817

Click here for full text details

G27
WNW
1/8-1/4
0.243 mi.
1281 ft.

Relative: Higher

NAKAOKA PAINTING INC — **HI UST** — **U001235134**
922 KAAMAHU PL — **N/A**
HONOLULU, HI 96817

Click here for full text details

HI UST
Facility Id: 9-100280
Tank Status: Permanently Out of Use

G28
WNW
1/8-1/4
0.243 mi.
1281 ft.

Relative: Higher

EDR US Hist Auto Stat — **1015676017**
922 KAAMAHU PL — **N/A**
HONOLULU, HI 96817

Click here for full text details

29
West
1/4-1/2
0.250 mi.
1321 ft.

Relative: Higher

ISLAND MOVERS, INC. — **HI LUST** — **U003221626**
414 KUWILI STHONOLULU HARBOR PIER 42 — **HI UST** — **N/A**
HONOLULU, HI 96817 — **HI Financial Assurance**

Click here for full text details

HI LUST
Facility Id: 9-100936
Facility Status: Site Cleanup Completed (NFA)

HI UST

ISLAND MOVERS, INC. (Continued) — **U003221626**

Facility Id: 9-100936
Tank Status: Permanently Out of Use

G30
WNW
1/4-1/2
0.258 mi.
1361 ft.

Relative: Higher

VON HAMM TEXTILES — **HI SHWS** — **S106820929**
546 KAAAHI ST — **HI SPILLS** — **N/A**
HONOLULU, HI 96817 — **HI ENG CONTROLS**
HI INST CONTROL

Click here for full text details

G31
WNW
1/4-1/2
0.259 mi.
1365 ft.

Relative: Higher

NUUANU AUTO COMPANY LTD — **HI SHWS** — **S111704825**
545 KAAAHI ST — **N/A**
HONOLULU, HI 96817

Click here for full text details

H32
NW
1/4-1/2
0.275 mi.
1451 ft.

Relative: Higher

YICK LUNG CO., INC. — **HI LUST** — **U001235520**
580 DILLINGHAM BLVD — **HI UST** — **N/A**
HONOLULU, HI 96817

Click here for full text details

HI LUST
Facility Id: 9-101500
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-101500
Tank Status: Permanently Out of Use

H33
NW
1/4-1/2
0.293 mi.
1549 ft.

Relative: Higher

YICK LUNG CO., INC. — **HI LUST** — **U001235519**
602 DILLINGHAM BLVD — **HI UST** — **N/A**
HONOLULU, HI 96817

Click here for full text details

HI LUST
Facility Id: 9-101499
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-101499
Tank Status: Permanently Out of Use

34 SSW 1/4-1/2 0.324 mi. 1710 ft. Relative: Higher

YEE HOP BUILDING MAUNAKEA STREET — **HI SHWS** — **S106821168** / **N/A**
950 MAUNAKEA ST
HONOLULU, HI

Click here for full text details

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35 SSE 1/4-1/2 0.330 mi. 1741 ft. Relative: Higher

DOWNTOWN CHEVRON — **HI LUST** — **U003221646** / **N/A**
17 S BERETANIA ST
HONOLULU, HI 96813

Click here for full text details

HI LUST
Facility Id: 9-101100
Facility Status: Site Cleanup Completed (NFA)

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36 WNW 1/4-1/2 0.335 mi. 1771 ft. Relative: Higher

HAWAIIAN GAS PRODUCTS LTD — **EDR MGP** — **1008409006** / **N/A**
516-520 KUWILI ST
HONOLULU, HI 96817

Click here for full text details

I37 WSW 1/4-1/2 0.337 mi. 1777 ft. Relative: Higher

420 N. NIMITS HWY DEMOLOTION PROJECT — **HI LUST, HI UST** — **U004155570** / **N/A**
420 N. NIMITZ HWY
HONOLULU, HI 96819

Click here for full text details

HI LUST
Facility Id: 9-103898
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-103898
Tank Status: Permanently out of Use

I38 WSW 1/4-1/2 0.337 mi. 1777 ft. Relative: Higher

420-470 NORTH NIMITZ HIGHWAY — **HI SHWS, HI ENG CONTROLS** — **S106815536** / **N/A**
420-470 N NIMITZ HWY
HONOLULU, HI 96817

Click here for full text details

39 NW 1/4-1/2 0.340 mi. 1795 ft. Relative: Higher

KING SHELL FOODMART — **HI LUST, HI UST, HI Financial Assurance** — **U001235340** / **N/A**
666 N KING ST
HONOLULU, HI 96817

Click here for full text details

HI LUST
Facility Id: 9-101026
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-101026
Tank Status: Currently In Use

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40 NNE 1/4-1/2 0.344 mi. 1817 ft. Relative: Higher

HALL MARK DRY CLEANERS — **HI SHWS** — **S104534167** / **N/A**
1470 LILIHA ST
HONOLULU, HI 96814

Click here for full text details

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41 SSW 1/4-1/2 0.364 mi. 1922 ft. Relative: Higher

C&CH WATERFRONT FIRE STATION — **HI LUST, HI UST** — **U001235045** / **N/A**
111 N NIMITZ HWY
HONOLULU, HI 96817

Click here for full text details

HI LUST
Facility Id: 9-100097
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-100097
Tank Status: Permanently Out of Use

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42 WNW 1/4-1/2 0.364 mi. 1923 ft. Relative: Higher

TRAVEL PLAZA TRANSPORTATION, LLC — **HI SHWS, HI LUST, HI UST, HI Financial Assurance** — **U003154753** / **N/A**
818 PINE ST
HONOLULU, HI 96817

Click here for full text details

HI LUST
Facility Id: 9-102991
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-102991
Tank Status: Currently In Use
Tank Status: Permanently Out of Use

43 ESE 1/4-1/2 0.371 mi. 1960 ft.
Relative: Higher

SASAMOTO UNION SERVICE L-5005 — HI LUST, HI UST — U003221548, N/A
33 S VINEYARD BLVD
HONOLULU, HI 96813

Click here for full text details

HI LUST
Facility Id: 9-100022
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-100022
Tank Status: Permanently Out of Use

---

44 WNW 1/4-1/2 0.390 mi. 2060 ft.
Relative: Higher

CUTTER DODGE AUTO SERVICE CENTER — HI LUST, HI UST — U001235565, N/A
735 DILLINGHAM BLVD
HONOLULU, HI 96817

Click here for full text details

HI LUST
Facility Id: 9-101718
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-101718
Tank Status: Permanently Out of Use

---

45 NW 1/4-1/2 0.404 mi. 2133 ft.
Relative: Higher

RICHARD TOM — HI LUST, HI UST, HI Financial Assurance — U003221678, N/A
963 ROBELLO LN
HONOLULU, HI 96817

Click here for full text details

HI LUST
Facility Id: 9-101574
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-101574
Tank Status: Permanently Out of Use

---

46 WSW 1/4-1/2 0.411 mi. 2170 ft.
Relative: Higher

MID PAC PETROLEUM LLC 2705958 — HI SHWS, HI LUST, HI UST, HI Financial Assurance — U001235004, N/A
540 N NIMITZ HWY
HONOLULU, HI 96817

Click here for full text details

HI LUST
Facility Id: 9-100017

MID PAC PETROLEUM LLC 2705958 (Continued) — U001235004

Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-100017
Tank Status: Permanently out of Use
Tank Status: Permanently Out of Use

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47 NNE 1/4-1/2 0.428 mi. 2258 ft.
Relative: Higher

LANCE GOYA CHEVRON — HI SHWS, HI LUST, HI UST, HI ENG CONTROLS, HI INST CONTROL, HI Financial Assurance — U003402822, N/A
504 N SCHOOL ST
HONOLULU, HI 96817

Click here for full text details

HI LUST
Facility Id: 9-101259
Facility Status: Site Cleanup Completed with EHMP
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-101259
Tank Status: Permanently Out of Use

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48 SW 1/4-1/2 0.437 mi. 2307 ft.
Relative: Higher

ALOHA TOWER DEVELOPMENT — CERCLIS — 1000483138, HID984466706
PIERS 8-14, NIMITZ HWY.
HONOLULU, HI 96818

Click here for full text details

CERCLIS
EPA Id: HID984466706

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49 WNW 1/4-1/2 0.449 mi. 2369 ft.
Relative: Higher

IWILEI BUSINESS CENTER — HI SHWS, HI SPILLS, HI INST CONTROL — S106817968, N/A
501 SUMNER ST
HONOLULU, HI 96814

Click here for full text details

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50 East 1/4-1/2 0.449 mi. 2371 ft.
Relative: Higher

7-ELEVEN NUUANU PALI — HI LUST, HI UST, HI Financial Assurance — U001235570, N/A
1602 NUUANU AVE
HONOLULU, HI 96817

Click here for full text details

HI LUST
Facility Id: 9-101725

7-ELEVEN NUUANU PALI (Continued) — **U001235570**

Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-101725
Tank Status: Currently in Use

J51
WNW
1/4-1/2
0.452 mi.
2387 ft.
Relative: Higher

DOLE PACKAGED FOODS CO
801 DILLINGHAM BLVD.
HONOLULU, HI 96817

Database(s)	EDR ID Number / EPA ID Number
CERC-NFRAP	1000197948
RCRA NonGen / NLR	HID981424385

Click here for full text details

CERC-NFRAP
EPA Id: HID981424385

RCRA NonGen / NLR
EPA Id: HID981424385

J52
WNW
1/4-1/2
0.452 mi.
2387 ft.
Relative: Higher

DOLE IWILEI
801 DILLINGHAM BLVD
HONOLULU, HI 96817

Database(s)	EDR ID Number / EPA ID Number
HI SHWS	S106816902
HI SPILLS	N/A
HI INST CONTROL	

Click here for full text details

J53
WNW
1/4-1/2
0.452 mi.
2387 ft.
Relative: Higher

DOLE IWILEI CANNERY
801 DILLINGHAM BLVD
HONOLULU, HI 96817

Database(s)	EDR ID Number / EPA ID Number
HI LUST	U001235209
HI UST	N/A

Click here for full text details

HI LUST
Facility Id: 9-100746
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-100746
Tank Status: Permanently Out of Use

54
South
1/4-1/2
0.461 mi.
2434 ft.
Relative: Higher

HARBOR COURT PROJECT
CORNER OF QUEEN AND BETHEL ST
HONOLULU, HI 96800

Database(s)	EDR ID Number / EPA ID Number
HI LUST	U003402831
HI UST	N/A

Click here for full text details

HI LUST
Facility Id: 9-102464
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-102464
Tank Status: Permanently Out of Use

K55
WSW
1/4-1/2
0.467 mi.
2464 ft.
Relative: Higher

580 NORTH NIMITZ HIGHWAY
580 N NIMITZ HWY
HONOLULU, HI 96817

Database(s)	EDR ID Number / EPA ID Number
HI SHWS	S109096040
HI ENG CONTROLS	N/A

Click here for full text details

K56
WSW
1/4-1/2
0.467 mi.
2464 ft.
Relative: Higher

HARRY & JEANETTE WEINBERG FOUNDATION
580 N NIMITZ HWY
HONOLULU, HI 96817

Database(s)	EDR ID Number / EPA ID Number
HI LUST	U003154754
HI UST	N/A

Click here for full text details

HI LUST
Facility Id: 9-102995
Facility Status: Case Transferred to HEER (regulated)

HI UST
Facility Id: 9-102995
Tank Status: Permanently Out of Use

K57
WSW
1/4-1/2
0.484 mi.
2556 ft.
Relative: Higher

CITY MILL
660 N NIMITZ HWY
HONOLULU, HI 96817

Database(s)	EDR ID Number / EPA ID Number
HI SHWS	U001235472
HI LUST	N/A
HI UST	
HI INST CONTROL	

Click here for full text details

HI LUST
Facility Id: 9-101398
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-101398
Tank Status: Permanently Out of Use

L58
SE
1/4-1/2
0.492 mi.
2599 ft.

Relative: Higher

TENNEY'S BISHOP UNION
169 S BERETANIA ST
HONOLULU, HI 96813

HI LUST **U001235003**
HI UST **N/A**

Click here for full text details

HI LUST
Facility Id: 9-100015
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-100015
Tank Status: Permanently Out of Use

59
WSW
1/2-1
0.502 mi.
2652 ft.

Relative: Higher

ZIPPY'S 634 N NIMITZ HIGHWAY
634 N NIMITZ HWY
HONOLULU, HI 96781

HI SHWS **S110061866**
HI SPILLS **N/A**
HI ENG CONTROLS
HI INST CONTROL

Click here for full text details

L60
SE
1/2-1
0.508 mi.
2681 ft.

Relative: Higher

CAPITOL PLACE DEVELOPMENT PROJECT
1212 QUEEN EMMA ST
HONOLULU, HI 96813

HI SHWS **S108008488**
N/A

Click here for full text details

61
South
1/2-1
0.514 mi.
2713 ft.

Relative: Higher

HARBOR COURT
66 QUEEN ST
HONOLULU, HI 96813

HI SHWS **1006820894**
N/A

Click here for full text details

M62
WSW
1/2-1
0.548 mi.
2894 ft.

Relative: Higher

HAWAIIAN GRAIN CORPORATION
701 N NIMITZ HWY
HONOLULU, HI 96817

HI SHWS **U003402808**
HI LUST **N/A**
HI UST

Click here for full text details

HI LUST
Facility Id: 9-100852
Facility Status: Case Transferred to HEER (regulated)

HI UST

HAWAIIAN GRAIN CORPORATION (Continued) **U003402808**

Facility Id: 9-100852
Tank Status: Permanently Out of Use

63
WSW
1/2-1
0.557 mi.
2943 ft.

Relative: Higher

SAUSE BROTHERS
ALAKEA ST
HONOLULU, HI 96817

HI SHWS **S107024013**
HI SPILLS **N/A**

Click here for full text details

N64
WNW
1/2-1
0.561 mi.
2963 ft.

Relative: Higher

PIER 51 HONOLULU HARBOR, OIL/DIESEL LEAK TO OCEAN
925 DILLINGHAM BLVD
HONOLULU, HI 96817

FINDS **1006819934**
HI SHWS **N/A**
HI ENG CONTROLS
HI INST CONTROL
HI VCP

Click here for full text details

M65
WSW
1/2-1
0.570 mi.
3009 ft.

Relative: Higher

HAWAIIAN FLOUR MILL
703 N NIMITZ HWY
HONOLULU, HI 96808

HI SHWS **S106817404**
N/A

Click here for full text details

N66
WNW
1/2-1
0.570 mi.
3009 ft.

Relative: Higher

THEO DAVIES CATERPILLAR REPAIR SITE
935 DILLINGHAM BLVD
HONOLULU, HI 96817

HI SHWS **S109096031**
HI ENG CONTROLS **N/A**
HI INST CONTROL

Click here for full text details

M67
WSW
1/2-1
0.574 mi.
3030 ft.

Relative: Higher

MOANA PAA KAI
705 N NIMITZ HWY
HONOLULU, HI 96817

RCRA-CESQG **1000146699**
HI SHWS **HID982411357**
HI SPILLS

Click here for full text details

RCRA-CESQG
EPA Id: HID982411357

O68
West
1/2-1
0.575 mi.
3037 ft.
Relative: Higher

POLYNESIAN HOSPITALITY
330 PACIFIC ST
HONOLULU, HI 96817

Click here for full text details

Database(s)	EDR ID Number / EPA ID Number
RCRA-CESQG	1000906758
FINDS	HI0000589812
HI SHWS	
HI LUST	
HI UST	
HI SPILLS	
HI Financial Assurance	

RCRA-CESQG
EPA Id: HI0000589812

HI LUST
Facility Id: 9-101379
Facility Status: Active Remediation

HI UST
Facility Id: 9-101379
Tank Status: Permanently Out of Use
Tank Status: Currently in Use

O69
West
1/2-1
0.579 mi.
3059 ft.
Relative: Higher

BREWER ENVIRONMENTAL INDUSTRIES-PACIFIC STREET
311 PACIFIC ST
HONOLULU, HI 96817

Click here for full text details

Database(s)	EDR ID Number / EPA ID Number
HI SHWS	1000436248
HI SPILLS	N/A
HI VCP	

O70
West
1/2-1
0.582 mi.
3073 ft.
Relative: Higher

356 PACIFIC STREET BWS TRENCHING SHEEN
356 PACIFIC ST
HONOLULU, HI

Click here for full text details

Database(s)	EDR ID Number / EPA ID Number
HI SHWS	S110169069
HI SPILLS	N/A

N71
WNW
1/2-1
0.585 mi.
3089 ft.
Relative: Higher

HONOLULU COMMUNITY COLLEGE GAS STATION
874 DILLINGHAM BLVD
HONOLULU, HI 96817

Click here for full text details

Database(s)	EDR ID Number / EPA ID Number
HI SHWS	1006820629
	N/A

72
West
1/2-1
0.594 mi.
3138 ft.
Relative: Higher

BHP GASCO BENZENE SITE
616 IWILEI RD
HONOLULU, HI 96817

Click here for full text details

Database(s)	EDR ID Number / EPA ID Number
HI SHWS	S110277531
HI SPILLS	N/A
HI INST CONTROL	
HI AIRS	

HI AIRS
Facility Id: 0551-01-N

73
NE
1/2-1
0.596 mi.
3145 ft.
Relative: Higher

KUAKINI MEDICAL DEVELOPMENT CORP
347 N KUAKINI ST
HONOLULU, HI 96817

Click here for full text details

Database(s)	EDR ID Number / EPA ID Number
RCRA-SQG	1000270690
FINDS	HID077701613
HI SHWS	
HI LUST	
HI UST	
HI SPILLS	
HI Financial Assurance	

RCRA-SQG
EPA Id: HID077701613

HI LUST
Facility Id: 9-100264
Facility Status: Site Cleanup Completed (NFA)
Facility Status: Site Cleanup Completed with EHE/EHMP

HI UST
Facility Id: 9-100264
Tank Status: Permanently Out of Use
Tank Status: Currently In Use

P74
West
1/2-1
0.597 mi.
3150 ft.
Relative: Higher

UNOCAL 76 HONOLULU LRNG CTR
411 PACIFIC ST
HONOLULU, HI 96817

Click here for full text details

Database(s)	EDR ID Number / EPA ID Number
RCRA NonGen / NLR	1000167494
FINDS	HID981652696
HI SHWS	
HI UST	
HI SPILLS	
HI VCP	
HI Financial Assurance	

RCRA NonGen / NLR
EPA Id: HID981652696

HI UST
Facility Id: 9-100108
Tank Status: Permanently Out of Use

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
P75 **West** **1/2-1** **0.603 mi.** **3184 ft.** **Relative: Higher**	**BHP GASCO** **432 PACIFIC STREET** **HONOLULU, HI 96817** Click here for full text details	**EDR MGP**	**1008409005** **N/A**
76 **WSW** **1/2-1** **0.605 mi.** **3194 ft.** **Relative: Higher**	**700 N NIMITZ IDPP RELEASE** **700 N NIMITZ HWY** **HONOLULU, HI** Click here for full text details	**HI SHWS** **HI SPILLS** **HI ENG CONTROLS** **HI INST CONTROL**	**S110061245** **N/A**
Q77 **WSW** **1/2-1** **0.621 mi.** **3281 ft.** **Relative: Higher**	**BHP PIER 29** **739 N NIMITZ HWY** **HONOLULU, HI 96817** Click here for full text details	**HI SHWS**	**S106816192** **N/A**
R78 **WNW** **1/2-1** **0.639 mi.** **3372 ft.** **Relative: Higher**	**COSTCO WAREHOUSE** **525 ALAKAWA ST** **HONOLULU, HI 96817** Click here for full text details	**HI SHWS** **HI ENG CONTROLS** **HI INST CONTROL** **HI VCP**	**S108008497** **N/A**
Q79 **WSW** **1/2-1** **0.646 mi.** **3410 ft.** **Relative: Higher**	**755 N NIMITZ HWY** **755 N NIMITZ HWY** **HONOLULU, HI** Click here for full text details	**HI SHWS** **HI SPILLS** **HI ENG CONTROLS** **HI INST CONTROL**	**S110061246** **N/A**
R80 **WNW** **1/2-1** **0.647 mi.** **3414 ft.** **Relative: Higher**	**COSTCO GAS STATION** **520 ALAKAWA ST** **HONOLULU, HI 96817** Click here for full text details	**HI SHWS** **HI ENG CONTROLS** **HI INST CONTROL** **HI VCP**	**S108859910** **N/A**

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
S81 **WSW** **1/2-1** **0.681 mi.** **3594 ft.** **Relative: Higher**	**775 NORTH NIMITZ HIGHWAY** **775 N NIMITZ HWY** **HONOLULU, HI** Click here for full text details	**HI SHWS** **HI ENG CONTROLS** **HI INST CONTROL**	**S110061247** **N/A**
S82 **WSW** **1/2-1** **0.700 mi.** **3696 ft.** **Relative: Higher**	**EQUILON ENTERPRISES LLC HONOLULU TERMINAL** **789 N NIMITZ HWY** **HONOLULU, HI 96817** Click here for full text details	**HI SHWS**	**S115488694** **N/A**
83 **WNW** **1/2-1** **0.704 mi.** **3719 ft.** **Relative: Higher**	**HOME DEPOT** **421 ALAKAWA ST** **HONOLULU, HI 96817** Click here for full text details	**HI SHWS** **HI ENG CONTROLS** **HI INST CONTROL**	**S105887731** **N/A**
84 **South** **1/2-1** **0.705 mi.** **3720 ft.** **Relative: Higher**	**HAWAIIAN ELECTRIC - HONOLULU GENERATING STATION** **170 ALA MOANA BOULEVARD** **HONOLULU, HI 96813** Click here for full text details	**RCRA-TSDF** **CERC-NFRAP** **CORRACTS** **RCRA-CESQG** **HI SHWS** **HI SPILLS** **CA HAZNET** **HI AIRS** **2020 COR ACTION**	**1000146691** **HID000150680**

RCRA-TSDF
EPA Id: HID000150680

CERC-NFRAP
EPA Id: HID000150680

RCRA-CESQG
EPA Id: HID000150680

HI AIRS
Facility Id: 0238-01-C

85 WSW 1/2-1 0.706 mi. 3728 ft. — Relative: Higher

PAULEY PETROLEUM
795 N NIMITZ HWY
HONOLULU, HI 96817

HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST CONTROL
S108009116 / N/A

Click here for full text details

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86 NW 1/2-1 0.713 mi. 3766 ft. — Relative: Higher

JBL HAWAII, LTD
905 KOKEA ST
HONOLULU, HI 96817

HI SHWS, HI ENG CONTROLS, HI INST CONTROL
1006820832 / N/A

Click here for full text details

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87 WSW 1/2-1 0.721 mi. 3805 ft. — Relative: Higher

PIER 30 TUG BOAT FUEL SPILL
777 N NIMITZ HWY
HONOLULU, HI 96817

HI SHWS, HI SPILLS
U001235369 / N/A

Click here for full text details

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88 SE 1/2-1 0.730 mi. 3857 ft. — Relative: Higher

THE QUEEN'S MEDICAL CENTER
1301 PUNCHBOWL ST
HONOLULU, HI 96813

HI SHWS, HI LUST, HI UST, HI AIRS, HI Financial Assurance
1000490311 / N/A

Click here for full text details

HI LUST
Facility Id: 9-100901
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-100901
Tank Status: Currently In Use
Tank Status: Permanently Out of Use

HI AIRS
Facility Id: 0353-02-C

T89 West 1/2-1 0.749 mi. 3956 ft. — Relative: Higher

WEYERHAEUSER
900 N NIMITZ HWY
HONOLULU, HI 96817

HI SHWS, HI SPILLS
S106821137 / N/A

Click here for full text details

T90 West 1/2-1 0.752 mi. 3969 ft. — Relative: Higher

HAWAIIAN ELECTRIC COMPANY (HECO) - IWILEI TANK YARD
855 N NIMITZ HWY
HONOLULU, HI 96818

HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST CONTROL
U001235311 / N/A

Click here for full text details

T91 West 1/2-1 0.755 mi. 3987 ft. — Relative: Higher

861-869 NORTH NIMITZ HIGHWAY
861-869 N NIMITZ HWY
HONOLULU, HI 96817

HI SHWS, HI ENG CONTROLS, HI INST CONTROL
S108859941 / N/A

Click here for full text details

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92 ENE 1/2-1 0.762 mi. 4021 ft. — Relative: Higher

RICHARD'S CHEVRON
1909 NUUANU AVE
HONOLULU, HI 96817

HI SHWS, HI SPILLS, HI INST CONTROL, HI Financial Assurance
1000601437 / N/A

Click here for full text details

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93 WNW 1/2-1 0.763 mi. 4027 ft. — Relative: Higher

BEST BUY
ALAKAWA ST & NIMITZ HWY
HONOLULU, HI 96817

HI SHWS, HI SPILLS
S108008729 / N/A

Click here for full text details

U94 West 1/2-1 0.780 mi. 4118 ft. — Relative: Higher

CHEVRON HONOLULU TRANSPORTATION TERMINAL
933 N NIMITZ HWY
HONOLULU, HI 96817

HI SHWS, HI ENG CONTROLS, HI Financial Assurance
U003154454 / N/A

Click here for full text details

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
95 NNW 1/2-1 0.781 mi. 4124 ft. Relative: Higher	GTE-HAWAIIAN TEL EMPLOYEES FEDERAL CREDIT UNION (HTEFCU) 1138 N KING ST HONOLULU, HI 96817 Click here for full text details	HI SHWS HI ENG CONTROLS HI INST CONTROL	1006820922 N/A
U96 West 1/2-1 0.793 mi. 4188 ft. Relative: Higher	HAWAII STEVEDORES 965 N NIMITZ HWY HONOLULU, HI 96817 Click here for full text details	HI SHWS HI SPILLS HI ENG CONTROLS	S106817380 N/A
97 West 1/2-1 0.816 mi. 4309 ft. Relative: Higher	GTE HAWAIIAN TEL - CONTAMINATED SOIL ALAKAWA ST & NIMITZ HWY HONOLULU, HI 96817 Click here for full text details	HI SHWS HI SPILLS HI ENG CONTROLS HI INST CONTROL	S106817210 N/A
98 WNW 1/2-1 0.816 mi. 4310 ft. Relative: Higher	CLASSIC BOWL 1190 DILLINGHAM BLVD HONOLULU, HI Click here for full text details	HI SHWS	S117391422 N/A
99 SE 1/2-1 0.838 mi. 4425 ft. Relative: Higher	1510 FREAR STREET 1510 FREAR ST HONOLULU, HI 96813 Click here for full text details	HI SHWS HI SPILLS	S107024174 N/A
100 West 1/2-1 0.842 mi. 4448 ft. Relative: Higher	HART STREET WWPS 1031 N NIMITZ HWY HONOLULU, HI 96817 Click here for full text details HI UIC Facility Id/Lat Long Min Coord: 3-1952.05.1-2	HI SHWS HI UIC	U003154453 N/A

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
V101 WNW 1/2-1 0.857 mi. 4524 ft. Relative: Higher	MCCABE, HAMILTON, & RENNY COMPANY, LTD 1130 N NIMITZ HWY HONOLULU, HI 96817 Click here for full text details	HI SHWS HI SPILLS	1006818946 N/A
V102 West 1/2-1 0.876 mi. 4625 ft. Relative: Higher	CHEVRON KAPALAMA TERMINAL 1105 N NIMITZ HWY HONOLULU, HI 96817 Click here for full text details	HI SHWS HI SPILLS HI INST CONTROL	S108008763 N/A
103 NW 1/2-1 0.885 mi. 4672 ft. Relative: Higher	TAKAMIYA PROPERTY 850 MOOWAA ST HONOLULU, HI 96817 Click here for full text details	HI SHWS HI SPILLS	S106820561 N/A
104 NW 1/2-1 0.888 mi. 4690 ft. Relative: Higher	ROSS TRUSTS 819 MOOWAA ST HONOLULU, HI 96817 Click here for full text details	HI SHWS HI VCP	S103290154 N/A
105 WNW 1/2-1 0.905 mi. 4780 ft. Relative: Higher	DOMESTIC COMMERCIAL FISHING VILLAGE 1133 N NIMITZ HWY HONOLULU, HI 96817 Click here for full text details	HI SHWS HI SPILLS HI ENG CONTROLS HI INST CONTROL	S111677154 N/A
106 WNW 1/2-1 0.919 mi. 4854 ft. Relative: Higher	KAMEHAMEHA SCHOOLS - 1336 DILLINGHAM BOULEVARD 1336 DILLINGHAM BLVD HONOLULU, HI 96813 Click here for full text details	HI SHWS HI SPILLS	S110061575 N/A

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
107 SSE 1/2-1 0.977 mi. 5161 ft. Relative: Higher	**QUEEN EMMALANI TOWER** **600 QUEEN ST** **HONOLULU, HI 96813** Click here for full text details	**CERC-NFRAP** **RCRA NonGen / NLR** **FINDS** **HI SHWS** **HI SPILLS** **HI ENG CONTROLS** **HI INST CONTROL**	**1000688441** **HID982442394**

CERC-NFRAP
EPA Id: HID984466698

RCRA NonGen / NLR
EPA Id: HID982442394

108 WNW 1/2-1 0.991 mi. 5235 ft. Relative: Higher	**1385 COLBURN STREET** **1385 COLBURN ST** **KAPALAMA, HI 96817** Click here for full text details	**HI SHWS** **HI SPILLS**	**S115488666** **N/A**

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
HI	AIRS	List of Permitted Facilities	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	BROWNFIELDS	Brownfields Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	CDL	Clandestine Drug Lab Listing	Department of Health	08/04/2010	09/10/2010	10/22/2010
HI	DRYCLEANERS	Permitted Drycleaner Facility Listing	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	ENG CONTROLS	Engineering Control Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	Financial Assurance	Financial Assurance Information Listing	Department of Health	12/01/2014	12/19/2014	01/28/2015
HI	INST CONTROL	Sites with Institutional Controls	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	LUST	Leaking Underground Storage Tank Database	Department of Health	12/16/2014	12/19/2014	01/28/2015
HI	RGA HWS	Recovered Government Archive State Hazardous Waste Facilitie	Department of Health		07/01/2013	01/08/2014
HI	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Health		07/01/2013	01/17/2014
HI	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	Department of Health		07/01/2013	01/03/2014
HI	SHWS	Sites List	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	SPILLS	Release Notifications	Department of Health	12/02/2014	12/22/2014	01/28/2015
HI	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	03/10/2012	01/03/2013	02/11/2013
HI	SWF/LF	Permitted Landfills in the State of Hawaii	Department of Health	09/17/2012	04/03/2013	05/10/2013
HI	UIC	Underground Injection Wells Listing	Department of Health	02/07/2013	02/12/2013	04/09/2013
HI	UST	Underground Storage Tank Database	Department of Health	12/18/2014	12/19/2014	01/28/2015
HI	VCP	Voluntary Response Program Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	04/22/2013	03/03/2015	03/09/2015
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2011	02/26/2013	04/19/2013
US	CERCLIS	Comprehensive Environmental Response, Compensation, and Liab	EPA	10/25/2013	11/11/2013	02/13/2014
US	CERCLIS-NFRAP	CERCLIS No Further Remedial Action Planned	EPA	10/25/2013	11/11/2013	02/13/2014
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	07/01/2014	09/10/2014	10/20/2014
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	01/23/2015	02/13/2015	03/09/2015
US	CORRACTS	Corrective Action Report	EPA	12/09/2014	12/29/2014	01/29/2015
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DELISTED NPL	National Priority List Deletions	EPA	12/16/2014	01/08/2015	02/09/2015
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	07/31/2012	08/07/2012	09/18/2012
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EDR US Hist Auto Stat	EDR Exclusive Historic Gas Stations	EDR, Inc.			
US	EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	09/29/2014	09/30/2014	11/06/2014
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	07/21/2014	10/07/2014	10/20/2014
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
US	FEMA UST	Underground Storage Tank Listing	FEMA	01/01/2010	02/16/2010	04/12/2010
US	FINDS	Facility Index System/Facility Registry System	EPA	08/16/2014	09/10/2014	10/20/2014
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	06/06/2014	09/10/2014	09/18/2014
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	12/29/2014	12/30/2014	03/09/2015
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	01/23/2015	02/06/2015	03/09/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	02/01/2013	05/01/2013	11/01/2013

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	01/30/2015	02/05/2015	03/09/2015
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/10/2015	03/13/2015
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	01/28/2015	01/30/2015	03/13/2015
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	01/08/2015	01/08/2015	02/09/2015
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2005	12/08/2006	01/11/2007
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	02/01/2013	05/01/2013	01/27/2014
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	01/30/2015	02/05/2015	03/13/2015
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/13/2015	03/13/2015
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	01/29/2015	01/30/2015	03/13/2015
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	12/14/2014	02/13/2015	03/13/2015
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	09/29/2014	10/01/2014	11/06/2014
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	11/25/2014	11/26/2014	01/29/2015
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	02/18/2014	03/18/2014	04/24/2014
US	LUCIS	Land Use Control Information System	Department of the Navy	12/03/2014	12/12/2014	01/29/2015
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	12/29/2014	01/08/2015	01/29/2015
US	NPL	National Priority List	EPA	12/16/2014	01/08/2015	02/09/2015
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	07/01/2014	10/15/2014	11/17/2014
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	02/01/2011	10/19/2011	01/10/2012
US	PRP	Potentially Responsible Parties	EPA	10/25/2013	10/17/2014	10/20/2014
US	Proposed NPL	Proposed National Priority List Sites	EPA	12/16/2014	01/08/2015	02/09/2015
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	10/07/2014	10/08/2014	10/20/2014
US	RCRA NonGen / NLR	RCRA - Non Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RMP	Risk Management Plans	Environmental Protection Agency	08/01/2014	08/12/2014	11/06/2014
US	ROD	Records Of Decision	EPA	11/25/2013	12/12/2013	02/24/2014
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	03/07/2011	03/09/2011	05/02/2011
US	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2011	07/31/2013	09/13/2013
US	TSCA	Toxic Substances Control Act	EPA	12/31/2012	01/15/2015	01/29/2015
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	09/14/2010	10/07/2011	03/01/2012
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/16/2014	10/31/2014	11/17/2014
US	US AIRS MINOR	Air Facility System Data	EPA	10/16/2014	10/31/2014	11/17/2014

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	12/22/2014	12/22/2014	01/29/2015
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	11/19/2014	11/21/2014	01/29/2015
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	12/30/2014	12/31/2014	01/29/2015
US	Oil/Gas Pipelines	GeoData Digital Line Graphs from 1:100,000-Scale Maps	USGS			
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
US	USGS 7.5' Topographic Map	Scanned Digital USGS 7.5' Topographic Map (DRG)	USGS			

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

KALANIHUIA E
1220 AALA ST.
HONOLULU, HI 96817

TARGET PROPERTY COORDINATES

Latitude (North):	21.316 - 21˚ 18' 57.60''
Longitude (West):	157.8627 - 157˚ 51' 45.72''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	617955.2
UTM Y (Meters):	2357407.8
Elevation:	3 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	21157-C7 HONOLULU, HI
Most Recent Revision:	Not reported
West Map:	21157-C8 PEARL HARBOR, HI
Most Recent Revision:	Not reported

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

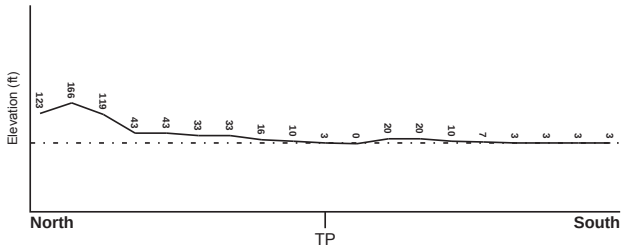
TOPOGRAPHIC INFORMATION

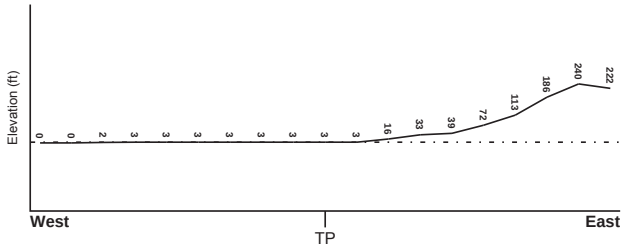
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General West

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 3 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
HONOLULU, HI	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 15003C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
HONOLULU	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

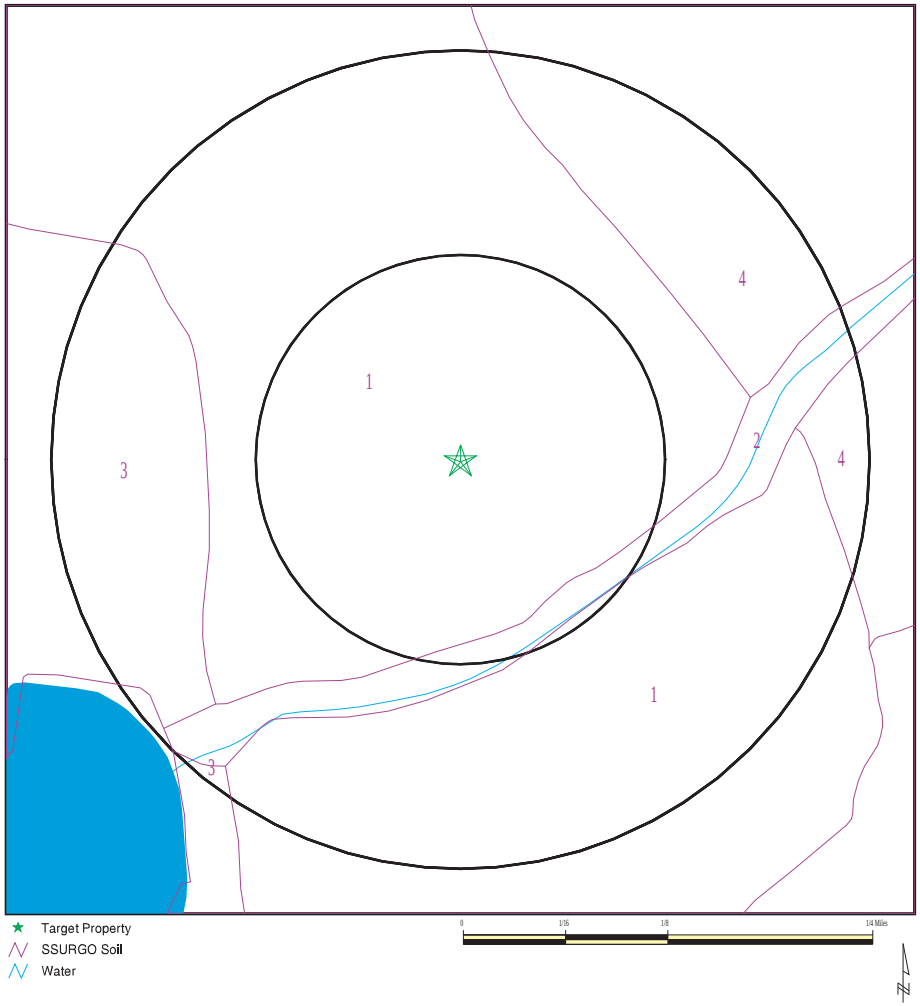
Era: -
System: -
Series: -
Code: N/A *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: -

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4237094.42s



SITE NAME: Kalanihuia E ADDRESS: 1220 Aala St. Honolulu HI 96817 LAT/LONG: 21.316 / 157.8627	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.42s DATE: March 17, 2015 5:38 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Ewa

Soil Surface Texture: silty clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		Soil Reaction (pH)
1	0 inches	7 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	ML-K (proposed)	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6
2	7 inches	29 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	ML-K (proposed)	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6
3	29 inches	38 inches	bedrock	Not reported	Not reported	Max: 42 Min: 1	Max: Min:

Soil Map ID: 2

Soil Component Name: Water > 40 acres

Soil Surface Texture: silty clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class:
Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

Soil Map ID: 3

Soil Component Name: Fill land, mixed

Soil Surface Texture: gravelly sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 152 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	gravelly sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 1.41	Max: 7.3 Min: 6.1

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	5 inches	59 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 1.41	Max: 7.3 Min: 6.1
3	59 inches	70 inches	bedrock	Not reported	Not reported	Max: 0.42 Min: 0.02	Max: Min:

Soil Map ID: 4

Soil Component Name: Kaena

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Poorly drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 107 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4.23 Min: 0.42	Max: 7.3 Min: 6.6
2	9 inches	37 inches	stony clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 7.3 Min: 6.6

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
3	37 inches	53 inches	stony clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 7.3 Min: 6.6

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	USGS40000269794	1/8 - 1/4 Mile NW
B3	USGS40000269805	1/8 - 1/4 Mile NNE
4	USGS40000269742	1/8 - 1/4 Mile SSE
C7	USGS40000269731	1/4 - 1/2 Mile SSW
D8	USGS40000269785	1/4 - 1/2 Mile East
F11	USGS40000269795	1/4 - 1/2 Mile WNW
E14	USGS40000269729	1/4 - 1/2 Mile SSE
E16	USGS40000269728	1/4 - 1/2 Mile SSE
H20	USGS40000269751	1/4 - 1/2 Mile WSW
I26	USGS40000269719	1/4 - 1/2 Mile SSE
G27	USGS40000269778	1/4 - 1/2 Mile West
G28	USGS40000269779	1/4 - 1/2 Mile West
G29	USGS40000269780	1/4 - 1/2 Mile West
J30	USGS40000269718	1/4 - 1/2 Mile South
K32	USGS40000269790	1/4 - 1/2 Mile West
K33	USGS40000269799	1/4 - 1/2 Mile WNW
L38	USGS40000269733	1/4 - 1/2 Mile SE

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
G39	USGS40000269768	1/4 - 1/2 Mile West
J40	USGS40000269713	1/4 - 1/2 Mile South
K41	USGS40000269800	1/4 - 1/2 Mile WNW
M42	USGS40000269810	1/4 - 1/2 Mile NNW
G44	USGS40000269771	1/4 - 1/2 Mile West
K46	USGS40000269796	1/4 - 1/2 Mile WNW
G48	USGS40000269763	1/4 - 1/2 Mile West
O50	USGS40000269784	1/4 - 1/2 Mile East
K51	USGS40000269801	1/4 - 1/2 Mile WNW
N54	USGS40000269711	1/4 - 1/2 Mile South
P58	USGS40000269717	1/4 - 1/2 Mile SSE
J59	USGS40000269708	1/4 - 1/2 Mile South
K60	USGS40000269802	1/4 - 1/2 Mile WNW
J62	USGS40000269706	1/4 - 1/2 Mile South
J63	USGS40000269707	1/4 - 1/2 Mile South
J64	USGS40000269705	1/2 - 1 Mile South
Q66	USGS40000269704	1/2 - 1 Mile SSE
P69	USGS40000269715	1/2 - 1 Mile SSE
P70	USGS40000269716	1/2 - 1 Mile SSE
R71	USGS40000269822	1/2 - 1 Mile North
S74	USGS40000269772	1/2 - 1 Mile West
P75	USGS40000269712	1/2 - 1 Mile SSE
N81	USGS40000269700	1/2 - 1 Mile South
N82	USGS40000269701	1/2 - 1 Mile South
T85	USGS40000269697	1/2 - 1 Mile South
S88	USGS40000269773	1/2 - 1 Mile West
S89	USGS40000269781	1/2 - 1 Mile West
S90	USGS40000269786	1/2 - 1 Mile West
U92	USGS40000269788	1/2 - 1 Mile West
T93	USGS40000269692	1/2 - 1 Mile South
V99	USGS40000269699	1/2 - 1 Mile SSE
T102	USGS40000269690	1/2 - 1 Mile South
T103	USGS40000269691	1/2 - 1 Mile South
V104	USGS40000269703	1/2 - 1 Mile SSE
W105	USGS40000269688	1/2 - 1 Mile South
W106	USGS40000269689	1/2 - 1 Mile South
U108	USGS40000269789	1/2 - 1 Mile West
X111	USGS40000269813	1/2 - 1 Mile NW
X112	USGS40000269811	1/2 - 1 Mile NW
X113	USGS40000269812	1/2 - 1 Mile NW
W116	USGS40000269682	1/2 - 1 Mile South
W117	USGS40000269683	1/2 - 1 Mile South
Y118	USGS40000269721	1/2 - 1 Mile SE
Z119	USGS40000269693	1/2 - 1 Mile SSW
X120	USGS40000269815	1/2 - 1 Mile NW
X121	USGS40000269816	1/2 - 1 Mile NW
X122	USGS40000269817	1/2 - 1 Mile NW
X123	USGS40000269814	1/2 - 1 Mile NW
V133	USGS40000269695	1/2 - 1 Mile SSE
Z135	USGS40000269684	1/2 - 1 Mile SSW
W137	USGS40000269679	1/2 - 1 Mile South
AA139	USGS40000269674	1/2 - 1 Mile South

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
AB141	USGS40000269666	1/2 - 1 Mile South
AB142	USGS40000269667	1/2 - 1 Mile South
AC144	USGS40000269681	1/2 - 1 Mile SSE
AD145	USGS40000269710	1/2 - 1 Mile SE
AE148	USGS40000269647	1/2 - 1 Mile South
151	USGS40000269730	1/2 - 1 Mile WSW
AF152	USGS40000269649	1/2 - 1 Mile SSE
AG153	USGS40000269850	1/2 - 1 Mile North
AH155	USGS40000269673	1/2 - 1 Mile SSE
AI157	USGS40000269852	1/2 - 1 Mile North
AG161	USGS40000269853	1/2 - 1 Mile North
AG162	USGS40000269854	1/2 - 1 Mile North
AF163	USGS40000269646	1/2 - 1 Mile SSE
AJ166	USGS40000269687	1/2 - 1 Mile SE
AG168	USGS40000269863	1/2 - 1 Mile North
169	USGS40000269791	1/2 - 1 Mile West
AK170	USGS40000269754	1/2 - 1 Mile West
AK172	USGS40000269764	1/2 - 1 Mile West
AL173	USGS40000269678	1/2 - 1 Mile SE
AL175	USGS40000269672	1/2 - 1 Mile SE
AL177	USGS40000269670	1/2 - 1 Mile SE
AL178	USGS40000269671	1/2 - 1 Mile SE
AM180	USGS40000269635	1/2 - 1 Mile SSE
AM181	USGS40000269636	1/2 - 1 Mile SSE
AM184	USGS40000269634	1/2 - 1 Mile SSE
AL185	USGS40000269664	1/2 - 1 Mile SE
AL196	USGS40000269657	1/2 - 1 Mile SE
AL197	USGS40000269658	1/2 - 1 Mile SE
AL198	USGS40000269656	1/2 - 1 Mile SE
AL199	USGS40000269654	1/2 - 1 Mile SE
AL200	USGS40000269655	1/2 - 1 Mile SE
AL201	USGS40000269662	1/2 - 1 Mile SE
AL202	USGS40000269663	1/2 - 1 Mile SE
AL203	USGS40000269661	1/2 - 1 Mile SE
AL204	USGS40000269659	1/2 - 1 Mile SE
AL205	USGS40000269660	1/2 - 1 Mile SE
207	USGS40000269855	1/2 - 1 Mile NNW
AN210	USGS40000269617	1/2 - 1 Mile South
AO211	USGS40000269618	1/2 - 1 Mile South

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
I21	HI0000236	1/4 - 1/2 Mile SSE

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP

STATE DATABASE WELL INFORMATION

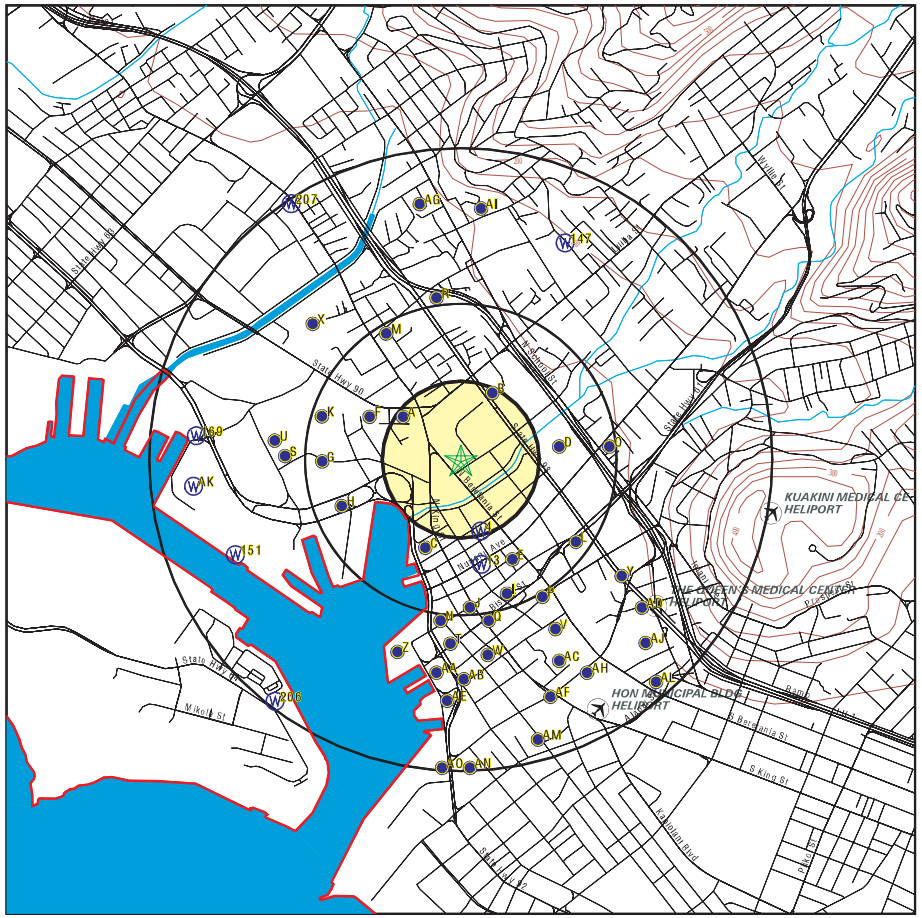
MAP ID	WELL ID	LOCATION FROM TP
A2	HI8000000002359	1/8 - 1/4 Mile NW
B5	HI8000000002369	1/8 - 1/4 Mile NNE
C6	HI8000000002306	1/4 - 1/2 Mile SSW
E9	HI8000000002307	1/4 - 1/2 Mile SSE
D10	HI8000000002348	1/4 - 1/2 Mile East
F12	HI8000000002358	1/4 - 1/2 Mile WNW
13	HI8000000002302	1/4 - 1/2 Mile South
E15	HI8000000002303	1/4 - 1/2 Mile SSE
E17	HI8000000002301	1/4 - 1/2 Mile SSE
G18	HI8000000002338	1/4 - 1/2 Mile West
H19	HI8000000002318	1/4 - 1/2 Mile WSW
J22	HI8000000002294	1/4 - 1/2 Mile South
G23	HI8000000002342	1/4 - 1/2 Mile West
G24	HI8000000002344	1/4 - 1/2 Mile West
G25	HI8000000002343	1/4 - 1/2 Mile West
K31	HI8000000002354	1/4 - 1/2 Mile West
K34	HI8000000002364	1/4 - 1/2 Mile WNW
J35	HI8000000002292	1/4 - 1/2 Mile South
L36	HI8000000002308	1/4 - 1/2 Mile SE
G37	HI8000000002335	1/4 - 1/2 Mile West
M43	HI8000000002375	1/4 - 1/2 Mile NNW
G45	HI8000000002328	1/4 - 1/2 Mile West
K47	HI8000000002357	1/4 - 1/2 Mile WNW
N49	HI8000000002290	1/4 - 1/2 Mile South
K52	HI8000000002363	1/4 - 1/2 Mile WNW
O53	HI8000000002349	1/4 - 1/2 Mile East
P55	HI8000000002295	1/4 - 1/2 Mile SSE
J56	HI8000000002286	1/4 - 1/2 Mile South
J57	HI8000000002287	1/4 - 1/2 Mile South
K61	HI8000000002362	1/4 - 1/2 Mile WNW
I65	HI8000000002288	1/2 - 1 Mile SSE
P67	HI8000000002297	1/2 - 1 Mile SSE
P68	HI8000000002296	1/2 - 1 Mile SSE
P72	HI8000000002293	1/2 - 1 Mile SSE
S73	HI8000000002337	1/2 - 1 Mile West
R76	HI8000000002389	1/2 - 1 Mile North
N77	HI8000000002279	1/2 - 1 Mile South
N78	HI8000000002278	1/2 - 1 Mile South
Q79	HI8000000002281	1/2 - 1 Mile South
Q80	HI8000000002280	1/2 - 1 Mile South
T83	HI8000000002277	1/2 - 1 Mile South
N84	HI8000000002276	1/2 - 1 Mile South
S86	HI8000000002341	1/2 - 1 Mile West
S87	HI8000000002347	1/2 - 1 Mile West
U91	HI8000000002353	1/2 - 1 Mile West
T94	HI8000000002266	1/2 - 1 Mile South
T95	HI8000000002265	1/2 - 1 Mile South
T96	HI8000000002267	1/2 - 1 Mile South
V97	HI8000000002282	1/2 - 1 Mile SSE
V98	HI8000000002284	1/2 - 1 Mile SSE
W100	HI8000000002269	1/2 - 1 Mile South
W101	HI8000000002268	1/2 - 1 Mile South

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
U107	HI8000000002352	1/2 - 1 Mile West
W109	HI8000000002260	1/2 - 1 Mile South
W110	HI8000000002261	1/2 - 1 Mile South
Y114	HI8000000002300	1/2 - 1 Mile SE
Z115	HI8000000002264	1/2 - 1 Mile SSW
V124	HI8000000002271	1/2 - 1 Mile SSE
X125	HI8000000002379	1/2 - 1 Mile NW
X126	HI8000000002380	1/2 - 1 Mile NW
X127	HI8000000002377	1/2 - 1 Mile NW
X128	HI8000000002378	1/2 - 1 Mile NW
X129	HI8000000002383	1/2 - 1 Mile NW
X130	HI8000000002384	1/2 - 1 Mile NW
X131	HI8000000002381	1/2 - 1 Mile NW
X132	HI8000000002382	1/2 - 1 Mile NW
Z134	HI8000000002259	1/2 - 1 Mile SSW
W136	HI8000000002254	1/2 - 1 Mile South
AA138	HI8000000002246	1/2 - 1 Mile South
AB140	HI8000000002245	1/2 - 1 Mile South
AC143	HI8000000002257	1/2 - 1 Mile SSE
AD146	HI8000000002289	1/2 - 1 Mile SE
147	HI8000000002419	1/2 - 1 Mile NNE
AE149	HI8000000002227	1/2 - 1 Mile South
AF150	HI8000000002230	1/2 - 1 Mile SSE
AH154	HI8000000002250	1/2 - 1 Mile SSE
AG156	HI8000000002429	1/2 - 1 Mile North
AI158	HI8000000002430	1/2 - 1 Mile North
AF159	HI8000000002229	1/2 - 1 Mile SSE
AJ160	HI8000000002272	1/2 - 1 Mile SE
AG164	HI8000000002436	1/2 - 1 Mile North
AG165	HI8000000002435	1/2 - 1 Mile North
AF167	HI8000000002225	1/2 - 1 Mile SSE
AG171	HI8000000002450	1/2 - 1 Mile North
AL174	HI8000000002247	1/2 - 1 Mile SE
AL176	HI8000000002248	1/2 - 1 Mile SE
AM179	HI8000000002214	1/2 - 1 Mile SSE
AM182	HI8000000002207	1/2 - 1 Mile SSE
AL183	HI8000000002237	1/2 - 1 Mile SE
AL186	HI8000000002240	1/2 - 1 Mile SE
AL187	HI8000000002239	1/2 - 1 Mile SE
AL188	HI8000000002238	1/2 - 1 Mile SE
AL189	HI8000000002243	1/2 - 1 Mile SE
AL190	HI8000000002244	1/2 - 1 Mile SE
AL191	HI8000000002241	1/2 - 1 Mile SE
AL192	HI8000000002242	1/2 - 1 Mile SE
AL193	HI8000000002234	1/2 - 1 Mile SE
AL194	HI8000000002235	1/2 - 1 Mile SE
AL195	HI8000000002236	1/2 - 1 Mile SE
206	HI8000000002226	1/2 - 1 Mile SW
AN208	HI8000000002185	1/2 - 1 Mile South
AO209	HI8000000002184	1/2 - 1 Mile South

PHYSICAL SETTING SOURCE MAP - 4237094.42s



- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location

SITE NAME: Kalanihuia E ADDRESS: 1220 Aala St. Honolulu HI 96817 LAT/LONG: 21.316 / 157.8627	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.42s DATE: March 17, 2015 5:38 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
A1 **NW** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269794**
A2 **NW** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002359**
B3 **NNE** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269805**
4 **SSE** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269742**
B5 **NNE** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002369**
C6 **SSW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002306**
C7 **SSW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269731**
D8 **East** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269785**
E9 **SSE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002307**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
D10 **East** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002348**
F11 **WNW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269795**
F12 **WNW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002358**
13 **South** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002302**
E14 **SSE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269729**
E15 **SSE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002303**
E16 **SSE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269728**
E17 **SSE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002301**
G18 **West** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002338**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
H19 **WSW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002318**
H20 **WSW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269751**
I21 **SSE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FRDS PWS**	**HI0000236**
J22 **South** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002294**
G23 **West** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002342**
G24 **West** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002344**
G25 **West** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002343**
I26 **SSE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269719**
G27 **West** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269778**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
G28 **West** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269779**
G29 **West** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269780**
J30 **South** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269718**
K31 **West** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002354**
K32 **West** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269790**
K33 **WNW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269799**
K34 **WNW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002364**
J35 **South** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002292**
L36 **SE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002308**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
G37 **West** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002335**
L38 **SE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269733**
G39 **West** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269768**
J40 **South** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269713**
K41 **WNW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269800**
M42 **NNW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269810**
M43 **NNW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002375**
G44 **West** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269771**
G45 **West** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002328**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
K46 **WNW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269796**
K47 **WNW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002357**
G48 **West** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269763**
N49 **South** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002290**
O50 **East** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269784**
K51 **WNW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269801**
K52 **WNW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002363**
O53 **East** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002349**
N54 **South** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269711**

Map ID Direction Distance Elevation		Database	EDR ID Number
P55 **SSE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002295**
J56 **South** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002286**
J57 **South** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002287**
P58 **SSE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269717**
J59 **South** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269708**
K60 **WNW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269802**
K61 **WNW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002362**
J62 **South** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269706**
J63 **South** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269707**

Map ID Direction Distance Elevation		Database	EDR ID Number
J64 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269705**
I65 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002288**
Q66 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269704**
P67 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002297**
P68 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002296**
P69 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269715**
P70 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269716**
R71 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269822**
P72 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002293**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
S73 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002337**
S74 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269772**
P75 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269712**
R76 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002389**
N77 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002279**
N78 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002278**
Q79 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002281**
Q80 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002280**
N81 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269700**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
N82 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269701**
T83 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002277**
N84 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002276**
T85 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269697**
S86 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002341**
S87 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002347**
S88 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269773**
S89 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269781**
S90 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269786**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
U91 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002353**
U92 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269788**
T93 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269692**
T94 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002266**
T95 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002265**
T96 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002267**
V97 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002282**
V98 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002284**
V99 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269699**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
W100 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002269**
W101 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002268**
T102 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269690**
T103 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269691**
V104 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269703**
W105 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269688**
W106 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269689**
U107 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002352**
U108 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269789**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
W109 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002260**
W110 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002261**
X111 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269813**
X112 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269811**
X113 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269812**
Y114 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002300**
Z115 **SSW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002264**
W116 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269682**
W117 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269683**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
Y118 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269721**
Z119 **SSW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269693**
X120 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269815**
X121 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269816**
X122 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269817**
X123 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269814**
V124 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002271**
X125 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002379**
X126 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002380**

Map ID Direction Distance Elevation		Database	EDR ID Number
X127 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002377**
X128 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002378**
X129 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002383**
X130 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002384**
X131 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002381**
X132 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002382**
V133 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269695**
Z134 **SSW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002259**
Z135 **SSW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269684**

Map ID Direction Distance Elevation		Database	EDR ID Number
W136 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002254**
W137 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269679**
AA138 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002246**
AA139 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269674**
AB140 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002245**
AB141 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269666**
AB142 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269667**
AC143 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002257**
AC144 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269681**

Map ID Direction Distance Elevation		Database	EDR ID Number
AD145 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269710**
AD146 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002289**
147 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002419**
AE148 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269647**
AE149 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002227**
AF150 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002230**
151 **WSW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269730**
AF152 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269649**
AG153 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269850**

Map ID Direction Distance Elevation		Database	EDR ID Number
AH154 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002250**
AH155 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269673**
AG156 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002429**
AI157 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269852**
AI158 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002430**
AF159 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002229**
AJ160 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002272**
AG161 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269853**
AG162 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269854**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
AF163 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269646**
AG164 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002436**
AG165 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002435**
AJ166 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269687**
AF167 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002225**
AG168 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269863**
169 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269791**
AK170 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269754**
AG171 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002450**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
AK172 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269764**
AL173 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269678**
AL174 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002247**
AL175 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269672**
AL176 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002248**
AL177 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269670**
AL178 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269671**
AM179 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002214**
AM180 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269635**

Map ID Direction Distance Elevation		Database	EDR ID Number
AM181 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269636**
AM182 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002207**
AL183 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002237**
AM184 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269634**
AL185 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269664**
AL186 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002240**
AL187 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002239**
AL188 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002238**
AL189 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002243**

Map ID Direction Distance Elevation		Database	EDR ID Number
AL190 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002244**
AL191 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002241**
AL192 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002242**
AL193 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002234**
AL194 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002235**
AL195 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002236**
AL196 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269657**
AL197 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269658**
AL198 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269656**

Map ID Direction Distance Elevation		Database	EDR ID Number
AL199 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269654**
AL200 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269655**
AL201 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269662**
AL202 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269663**
AL203 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269661**
AL204 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269659**
AL205 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269660**
206 **SW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002226**
207 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269855**

Map ID Direction Distance Elevation		Database	EDR ID Number
AN208 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002185**
AO209 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002184**
AN210 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269617**
AO211 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269618**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for HONOLULU County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 96817

Number of sites tested: 10

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.110 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	0.200 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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EXHIBIT C

Section 106 Consultation &

Architectural Inventory Survey Information

DAVID Y. IGE
GOVERNOR OF HAWAII

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

KEKOA KALUHIWA
FIRST DEPUTY

JEFFREY T. PEARSON
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555

December 2, 2015

IN REPLY REFER TO:
LOG: 2015.02939, 2015.03568
DOC NO: 1511JLP42
Architecture, Archaeology
History and Culture

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
P.O. Box 17907
Honolulu, HI 96817

SUBJECT: **Chapter 6E-8 and National Historic Preservation Act Section (NHPA) Section 106 Consultation – Department of Housing and Urban Development (HUD) Repair and Rehabilitation Project Department of Human Services, Hawai‘i Public Housing Authority (HPHA) Kalanihuia Rehabilitation Project – 1220 Aala Street Honolulu Ahupua‘a, Kona District, Island of O‘ahu TMK: (1) 1-7-026:006**

Thank you for your initial submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services (DHS), Hawaii Public Housing Authority (HPHA) consultation with SHPD in accordance with 36 CFR 800.3 and Hawaii Revised Statutes (HRS), Chapter 6E. We received your supplemental submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience.

The submittals indicate that the HPHA is requesting the State Historic Preservation Officer’s (SHPO) concurrence with a determination of “no effect” for the proposed HUD repair and rehabilitation improvement projects involving 43 existing public housing developments located throughout the State over the next fivd5 (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 consultation on their behalf.

This letter addresses Kalanihuia Rehabilitation Project, 1220 Aala Street. The HPHA has identified the area of potential effects (APE) as the 1.88 acre area parcel owned by the State (HPHA) which is identified as TMK: (1) 1-7-026:006. DHS/HPHA have indicated at this stage of the planning process, they are unclear whether the subject 1.88-acre project area will require any ground disturbances.

Our records indicate that no archaeological inventory survey has been conducted within the subject parcel and that no historic properties have been identified. However, based on nearby studies potential exists to encounter subsurface traditional Hawaiian and/or historic properties within the subject parcel.

The SHPD has reviewed the undertaking at 1220 Aala, and the SHPO’s determination is **no adverse effect** pursuant to NHPA Section 106 and **no historic properties affected** pursuant to HRS §6E-8 within the APE **provided the following conditions are met:**

- If ground disturbing activity is anticipated, DHS must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation;
- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;
- Submit information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;

- Submit a TMK map showing the full extent of the project area within the affected parcel(s);
- Submit description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Submit summary of land use history, such as previous intensive cultivation, grubbing or grading; and
- Submit copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions regarding archaeological resources or concerns please contact Susan Lebo at (808) 692-8019 or at Susan.A.Lebo@hawaii.gov. For any history and cultural concerns please contact Kaʻāhiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov. Please contact Jessica Puff at Jessica.L.Puff@hawaii.gov or (808) 692-8023 for any questions regarding architectural concerns or this letter.

Sincerely,

Alan S. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

KALANIHUIA

Project	Kalanihuia
Architect	James Tsugawa
Built	1969
National Register Eligibility	Eligible
Criteria	A and C
Significance	Association with the development of public housing in Hawaii and architecturally significant in typical design of the public housing in its period in Honolulu
Character Defining Features	Modern style high rise with central courtyard, use of decorative concrete blocks, intact bathrooms and kitchen, aluminum jalousie windows with original locking lever handles, and stainless steel curtain rod at studio unit.

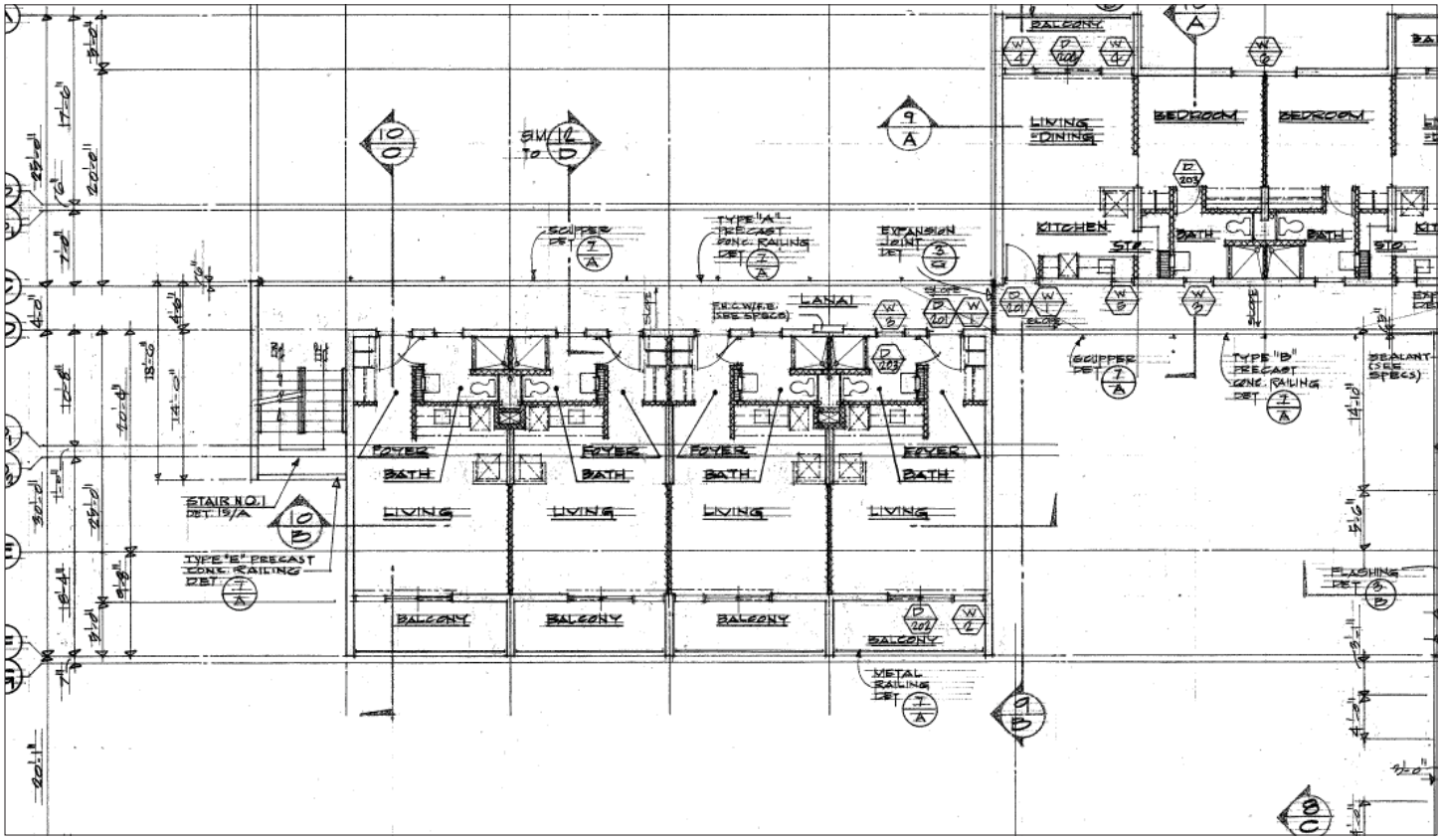
Structural Engineer: Donald Lo

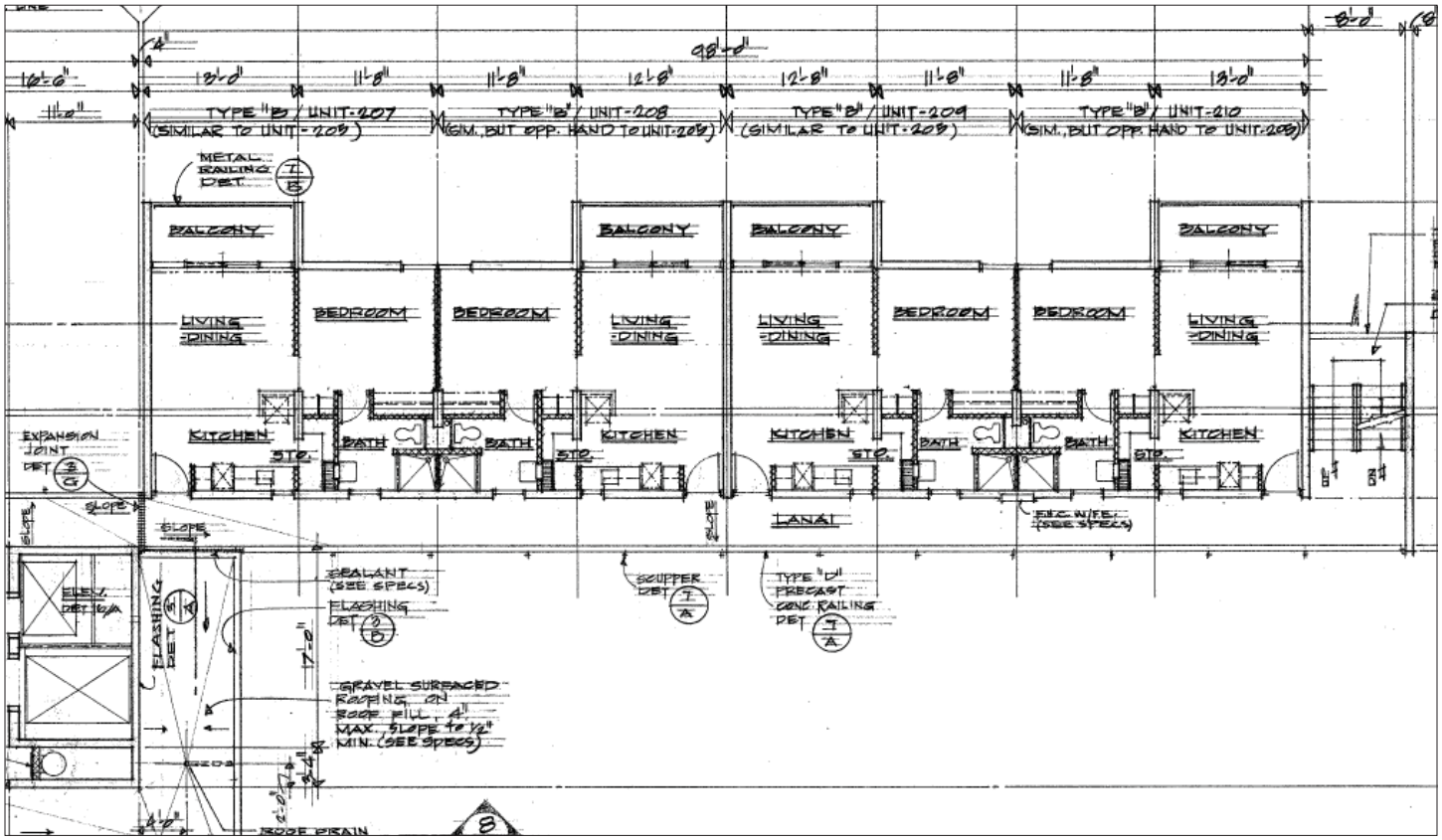
Landscape Architect: Richard Tongg

Description

Kalanihuia is located at the corner of Beretania Street and the recently completed extension of Aala Street, across from Aala Park. Sited on a 1.9 parcel this fifteen story, modern style high rise building houses ninety one bedroom and sixty studio units, as well as a community hall and management offices. The reinforced concrete building sits on pre-stressed concrete piles and utilizes pre-stressed concrete joists, and basically runs mauka-makai. All floors above the ground floor are similar. The high rise's foot print presents a variation on the standard rectangular box by having a right-of-center, 32 feet long, vertical circulation wing project 30 feet from the face of the building, and the makai end of the building jogs outward a similar 30 feet for the final 59 feet 4inches. To the right (mauka) side of the vertical circulation wing the building runs for 98 feet, while to the left, it runs for 49 feet 4inches before making the jog. A single, 239 feet 8inches lanai/corridor runs the length of the building on each floor and services all the single stacked units. The lanai/corridor features a 3 feet 9inches high, pre-cast panel railing, with the panels spaced 4inches apart. At each end of the building is an open, 8 feet wide set of stairs which runs from the ground to the top story.

Exterior of Kalanihuia





Typical Floor Plan, Studio (above) and One Bedroom (below)
James K. Tsugawa, A.I.A. & Associates, *Typ. Floor Plan : Second Floor, Interior Finish & Dr. Schedules, Roof Plan: Low Roof* , Sheet 2, 1967, Hawaii Housing Authority.

KALANIHUIA

The sixty studio units, four per floor, are housed in the jog at the makai end of the building, and add further texture to the facade by having a band of inset lanai run across their portion of the Diamond Head elevation. The lanai have wrought iron railings and are accessed from sliding aluminum doors. The interiors of the studios have 3inches wide cmu partition walls, concrete ceilings, and 9inches square, white vinyl tile floors, some of which have been patched with 12inches square vinyl tiles. The bathroom and kitchen remain intact and the latter features a stainless steel curtain rod, which runs the length of the wall with the appliances and sink on it. In this manner the presence of the kitchen can be hidden by a curtain from the rest of the studio's room. A floor to ceiling jalousie window is adjacent to the aluminum sliding doors that access the lanai. The bathroom retains its original tiled shower. As is typical of many public housing units in Hawaii, the clothes closets have no doors, only a curtain rod.

Lanai

Curtain Rod at Studio Kitchen

Original Shower Tile

Open Closet

The vertical circulation wing holds two elevators and a trash chute on one side and a concrete, dogleg stairway on the other. The elevator lobby is in the center of the wing, and its front side is enclosed by perforated, decorative concrete block with a quatrefoil pattern. A set of aluminum sliding doors is on the opposite, lanai/corridor, and helps regulate the wind going through the lobby.

The remainder of the main building houses the one bedroom units, six to a floor. As with the studio units the bathrooms and kitchens retain much of their integrity. The living room has an aluminum sliding door in its rear wall which accesses an outset lanai. The bedroom flows off the living room, unimpeded by a doorway or door. Similarly the kitchen flows around a partition wall into the living room. The flooring, walls, and ceilings are similar to those of the studio apartments.

All the units have jalousie transoms above their front doors. All windows in the units are jalousie and many retain their distinctive and original locking lever handles.

Left: One Bedroom Kitchen

Transom above the Entry Door

Original Lever Handles

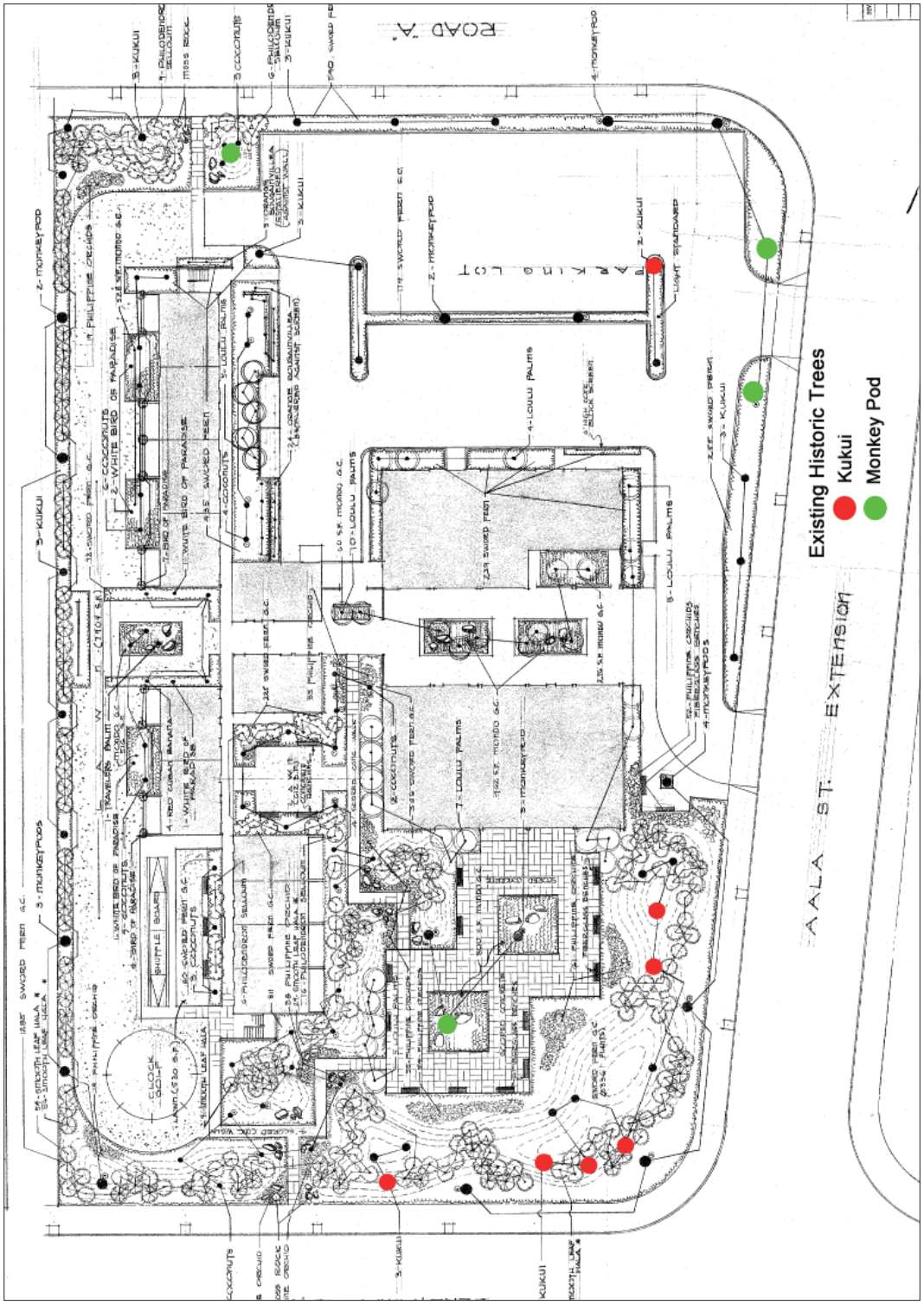
Projecting out from the building, in front of the vertical circulation wing is a flat roofed, single story, 80 feet 4inches x 120 feet wing, which features a 32 feet wide central courtyard that runs the depth of the wing. The courtyard is entered through a pair of wrought iron gates, and has a central planter which contains Manila Palms and other smaller plants. None of the plantings are original. The front and rear walls of the courtyard are of the same decorative block as in the elevator wing, while along the sides of the courtyard are doors to offices and a community center. The flat roofs sheltering these rooms have overhanging eaves supported by pre-stressed concrete rafters. Upon first entering the courtyard on its right side is a garden area niche screened off by a decorative concrete block wall. It has square openings in the roof to allow Manila palms to grow up towards the sky. Originally the courtyard flowed into a covered passageway that flowed into the mail and elevator lobbies; however, now an aluminum door flanked by fixed windows secures the entry to the building at the end of the courtyard.

Courtyard from Above

Court side

Left: Palms at the Courtyard

Most all of the historic landscaping has disappeared with the passage of time. However several major trees, including four monkey pod, as well as a number of kukui, still stand (see below). The paved patio off the community center on the makai side of the property has been reconfigured and a former golf area is no longer extant.



Original Landscape Plan Showing Existing Tress
James K. Tsugawa, A.I.A. & Associates, *Landscape Plan,* Sheet 60, 1967, Hawaii Housing Authority.

KALANIHUIA

Kalanihuia's building remains very much intact. There have been only minor alterations to the building, such as the enclosing of the once open entry with aluminum doors and some of the flooring has been repaired with 12inches square vinyl tiles and doors and door knobs have been replaced. These alterations are not sufficient to affect the historic character of the building in a significant manner. As such the building retains its integrity of location, setting, design, materials, craftsmanship, feelings and association.

History and Significance

Kalanihuia was the third elderly housing project to be undertaken by the HHA on Oahu, having been preceded by Punchbowl Homes and Makuaalii. Constructed within the Kukui Redevelopment Project area, it was built on lands which had been cleared by the HRA.

Kalanihuia appears to be significant at a statewide level under Criterion A, for its associations with the development of public housing for senior citizens in Hawaii and under Criterion C for its architecture which is typical of high rise buildings of the period in Honolulu.

Original Rendering

The three elderly housing projects opened by HHA on Oahu during the 1960s are Punchbowl Homes, Makau Alii and Kalanihuia. Mason Architects in 2010 considered the earliest project, Punchbowl Homes, to meet the criteria for listing in the National Register of Historic Places. It is a midrise, seven story, building and opened in 1960, allocating 96 units for senior citizens and another 60 to low income families. Such action was justified on the grounds that the HHA did not believe it could obtain sufficient rent from the elderly to make the project economically feasible. A secondary reason may have been the Authority's uncertainty as to the demand for elderly housing, for in 1967, in anticipation of the opening of Makua Alii, and its 300 person waiting list, HHA director Yoshio Yanagawa found such demand "a pleasant surprise," as "When the federal people first approved the Punchbowl project for senior citizens, they were skeptical about the demand. But now we are finding that even among the Oriental families, who traditionally have stronger filial ties, these apartments for senior citizens are becoming more popular. Maybe in our changing culture, the older parents are finding it less attractive to be built-in baby sitters."[30] Both the 19 story Makua Alii and the 15 story Kalanihuia projects were devoted exclusively to the elderly, reflecting the change which had transpired during the 1960s, as well as the increase in the elderly population. As such Kalanihuia is significant for its associations with public housing's growing concern for the housing of senior citizens.

Kalanihui is also architecturally significant as a good example of a high rise building constructed in Hawaii during the late 1960s. Its use of reinforced concrete as well as pre-stressed concrete and cmu blocks in its construction was typical of its period, as was the single stacking of units along a lanai corridor. The latter design element was borrowed from walk-up apartments of the 1950s and early 1960s, and was adapted to a number of high rise apartments in Hawaii such as the Oahuan (1957), the Consulate (1965), and Ala Wai Plaza (1970). As was typical of high rise apartments of the period, the units relied on natural ventilation rather than air conditioning. The siting of the building was also in keeping with the best practices of the time, by having the long side of the building run mauka-makai, resulting in less obstructed ocean and mountain views and providing larger avenues for the trade winds to flow through. The building's design is also distinctive with its breaking up the rectangularity of the typical box with its outset vertical circulation wing and the studio units' jog. The use of decorative concrete block screens to enhance ventilation also contributes further visual variety.

Kalanihuia was designed by Honolulu architect James Tsugawa (1930-2006), who graduated from Hilo High School and received his degree in architecture from the University of Oregon. After working in California for five years, he returned to Hawaii and opened his own office in 1965. In addition to this tasteful high rise, he designed many residences as well as Kawaiahao Plaza.

The only two high rise buildings studied in the survey were Makua Alii and Kalanihuia. Both were built to address the needs of elderly housing and retain a high degree of historic integrity. As such Kalanihuia appears to meet the criteria for listing in the National Register as excellent examples of high rise public housing and also as excellent examples of public housing provided for the elderly.

30 Advertiser June 3, 1967.

HAWAII PUBLIC HOUSING AUTHORITY

ENVIRONMENTAL REVIEW

MAKAMAE

Honolulu, O`ahu

AMP 35
HPHA No. 1046

Prepared for:

State of Hawaii
Hawaii Public Housing Authority

Prepared by:

HHF PLANNERS
places for people

U.S. Department of Housing and Urban Development
451 Seventh Street, SW
Washington, DC 20410
www.hud.gov

espanol.hud.gov

Environmental Review for Activity/Project that is Categorically Excluded Subject to Section 58.5

Pursuant to 24 CFR 58.35(a)

Project Information

Project Name: Makamae (AMP 35)

Responsible Entity: Hawaii Public Housing Authority
1002 North School Street
Honolulu, HI 96817

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

State/Local Identifier: State of Hawai‘i

Preparer: Mr. Scott Ezer, Vice President
HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawai‘i 96813

Certifying Officer Name and Title: Mr. David Y. Ige
Governor, State of Hawai‘i

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

Consultant (if applicable): HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawai‘i 96813

Direct Comments to: Mr. Hakim Ouansafi, Executive Director
Hawaii Public Housing Authority
1002 North School Street
Honolulu, Hawai‘i 96817

Project Location: 21 S. Kuakini Street
Honolulu, Hawai‘i 96813

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]**:**

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a "major construction activity" and would involve one or a combination of several HUD designated categories of actions.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent;
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons;
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland;
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation;
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls);
7. Interior and exterior renovations and rehabilitation;
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site;
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Level of Environmental Review Determination:

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.5. Compliance with and completion of conformance determinations for other statute, executive order, or regulation has been completed and support the Categorical Exclusion.

Funding Information

Grant Number	HUD Program	Funding Amount
To be determined	Capital Fund	To be determined
To be determined	Economic Development Initiative Special Project Grant	To be determined
To be determined	Other Grants	To be determined

Estimated Total HUD Funded Amount:

To be determined by HUD using a formula and based upon federal budget.

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]**:**

Depends upon funds available.

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	*The project is not within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.*
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☒	*The State of Hawai'i does not have any designated coastal barrier resource units. (http://www.fws.gov/CBRA/Maps/Mapper.html)*
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes ☐ No ☒	*As indicated in the Flood Insurance Rate Panel Number 15003C0354G, Effective: January 19, 2011, Index Date: November 05, 2014, this housing project is located within Flood Hazard Zone X (areas determined to be outside the 0.2% annual chance floodplain). A field inspection and information obtained from the site manager confirmed no major flooding issues within the site. Based on its description, this project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.*

STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5		
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes ☐ No ☒	*The State of Hawai'i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. EPA's Green Book for currently designated "nonattainment areas" as of June 2015. Planned repair and rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.*
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes ☐ No ☒	*Documentation from the Office of Planning determined that projects receiving federal funds do not require review for consistency with Hawai'i's Coastal Zone Management (CZM) program.*
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☐ No ☒	*There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.*
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes ☒ No ☐	*The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (USFWS) in their letter dated September 28, 2015 which is included in the Appendices, while project-specific mitigation measures are identified in the following section*
Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes ☐ No ☒	*There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.*

Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes ☐ No ☒	*The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.*
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes ☐ No ☒	*This housing project is located in Zone X, an area of minimal flooding (i.e., 0.2% annual chance flood), and is located outside the 500-year flood zone. A field inspection and information obtained from AMP Manager confirmed no major flooding issues within the project site.*
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes ☐ No ☒	*The Makamae housing project was first occupied in 1970 and is 45 years old. To be eligible for listing in the National Register of Historic Places (NRHP), a property must meet the National Register criteria for evaluation which involves examining its integrity, significance, and age (generally at least 50 years old). Due to its age, this housing project does not meet the eligibility criteria to be evaluated for the NRHP. In a letter to the State Historic Preservation Officer dated July 23, 2015, the HPHA determined that no historic properties would be affected by repair and rehabilitation improvements for this housing project. No comments or objections about this no effect determination were received.*
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes ☐ No ☒	*The project site is not situated along a highway that has a high volume of vehicular traffic. The HUD noise calculator estimated noise levels at the project site to be 58.2 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.*
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes ☐ No ☒	*The housing project is located within the O‘ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation.*

Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☐ No ☒	*There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.* *(http://www.fws.gov/wetlands/data/mapper.HTML)*
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes ☐ No ☒	*There are no Wild and Scenic Rivers in Hawai'i, which excludes this project from mitigation or formal consultation requirements (http://www.rivers.gov/map.php)*
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes ☐ No ☒	*Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, these improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects on minority populations and low-income populations. Improvements should benefit low-income and minority populations living within this housing project.*

Field Inspection (Date and completed by)**:** May 29, 2015
Joseph Tamburello, Planner
HHF Planners

Summary of Findings and Conclusions:

Repair and rehabilitation improvements implemented for this existing housing project by HPHA should not result in significant environmental impacts based upon research data collected, a field inspection, consultation with the site manager and maintenance staff, consultation with pertinent resource agencies, and prior HPHA experience implementing repair and rehabilitation improvements. Therefore, repair and rehabilitation improvements would comply and be consistent with the statutes, executive orders, and regulations addressed. Furthermore, HPHA would evaluate improvements planned to ensure the work is consistent with the designated categories of actions described under the project description section. Compliance with these factors evaluated are further addressed in the attached Source Documentation Statutory Worksheet along with relevant technical reports/assessments.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Law, Authority, or Factor	Mitigation Measure
Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	*Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.* *Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.* *Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.* *Newell's shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.* *Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.* *Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo'i, impoundments or other vegetated water bodies.*

	1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols. *2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.* *3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.* *In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.* *<u>Additional Measures</u>: The following additional measures would be implemented:* *1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.*

Determination:

☒ This categorically excluded activity/project converts to **EXEMPT** per Section 58.34(a)(12), because it does not require any mitigation for compliance with any listed statutes or authorities, nor requires any formal permit or license; **Funds may be committed and drawn down after certification of this part** for this (now) EXEMPT project; OR

☐ This categorically excluded activity/project cannot convert to Exempt status because one or more statutes or authorities listed at Section 58.5 requires formal consultation or mitigation. Complete consultation/mitigation protocol requirements, **publish NOI/RROF and obtain "Authority to Use Grant Funds"** (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR

☐ This project is not categorically excluded OR, if originally categorically excluded, is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

Preparer Signature: _____ Date: 11-10-15

Name/Title/Organization: Mr. Scott Ezer, Vice President
HHF Planners

Responsible Entity Agency Official Signature:

_____ Date: APR 28 2016

Name/Title: Mr. David Y. Ige, Governor

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

Makamae (HA # 1046)

TMK: (1) 2-2-001:020

Hawai‘i Public Housing Authority (HPHA) Environmental Review

SOURCE DOCUMENTATION (SD) STATUTORY WORKSHEET

Site Visit Date: May 29, 2015
Prepared By: Joseph Tamburello

The Makamae elderly housing project is located in the Nu‘uanu community of urban Honolulu on the island of O‘ahu. Nu‘uanu is situated northeast of Downtown Honolulu.

The housing site is bordered by Kuakini Street to the northeast, and access is provided from Nu‘uanu Avenue. The property is located directly across Kuakini Street from Kawānanakoa Middle School and Neighborhood Park. This housing project is within HPHA’s Asset Management Project (AMP) 35 which includes four other housing projects.

Makamae was established in 1971 and has a street address of 21 S. Kuakini Street. The property consists of 1.08 acres, and it is identified as Tax Map Key (TMK) No. (1) 2-2-001:020. The housing project is comprised of a single four-story mid-rise apartment building with both studio and one-bedroom units. The State’s land use designation for the property is the “Urban District.” The City’s zoning for the majority of the parcel is A-1 Low-Density Apartment, however the driveway fronting Nu‘uanu Avenue falls within the B-1 Neighborhood Business District.

The project site is not located within a tsunami evacuation zone, and the entire site is located in Flood Zone X, an area of minimal flood hazard (Community Panel Number 15003C0354G, Effective: January 19, 2011, Index Date: November 05, 2014).

The following figures in Exhibit A provide supporting information on this housing project:

Figure 1: Location Map
Figure 2: TMK Map
Figure 3: Site Map
Figure 4: Flood Map

COMPLIANCE FACTORS

I. AIRPORT CLEAR ZONES AND ACCIDENT POTENTIAL ZONES (24 CFR PART 51D)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The housing project does not lie within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: 24 CFR 51 (D).

Honolulu International Airport Master Plan - 2010 (August 1994), State Department of Transportation, Airports Division;

*Hawai`i Airports and Flying Safety Guide (2012-13, Fifth Edition, Revision 1)* Hawai`i Department of Transportation, Airports Division; and

http://hidot.hawaii.gov/airports/files/2013/01/Airport-Safety-Guide-2012-2013-5rev1.pdf

II. COASTAL BARRIER RESOURCES (COASTAL BARRIER IMPROVEMENT ACT OF 1990 [16 USC 3501])

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i does not have any designated coastal barrier resource units.

SUPPORTING DOCUMENTATION:

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/cbra/maps/mapper.html (Date accessed: 6/30/15).

III. FLOOD INSURANCE (FLOOD DISASTER PROTECTION ACT OF 1973 AND NATIONAL FLOOD INSURANCE REFORM ACT OF 1994 [42 USC 4001-4128 AND 42 USC 5154a])

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program.

As indicated in the Flood Insurance Rate Panel Number 15003C0354G, Effective: January 19, 2011, Index Date: November 05, 2014, this housing project is located within Flood Hazard Zone X (areas determined to be outside the 0.2% annual chance floodplain). A field inspection and information obtained from the site manager confirmed no major flooding issues within the site. Based on its description, this project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal signs of flooding problems. An interview with the AMP Manager also determined that major ponding or flooding issues are currently not an issue for the project site.

Printed: Flood Insurance Rate Map, Community Panel Number 15003C0354G, Effective: January 19, 2011, Index Date: November 05, 2014.

Hawai`i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 7/27/15)

IV. CLEAN AIR ACT (40 CFR PARTS 6, 51, 93)

SUPPORTING DOCUMENTS	
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. Environmental Protection Agency's Green Book for currently designated "nonattainment areas" as of June 2015. Planned rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.

SUPPORTING DOCUMENTATION:

Printed: *State of Hawai‘i Annual Summary 2013 Air Quality Data*. State of Hawai'i, Department of Health, July 2014.

U.S. Environmental Protection Agency website at: http://epa.gov/airquality/greenbk/

V. COASTAL ZONE MANAGEMENT ACT (16 USC 1451, SECTIONS 307 (C), (D)

CONTACT:

Mr. John Nakagawa
Office of Planning
Department of Business, Economic Development & Tourism
State of Hawai‘i
P.O. Box 2359
Honolulu, Hawai'i, 96804-2359

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

Documentation from the Office of Planning determined that projects receiving federal funds do not require review for consistency with Hawai‘i's Coastal Zone Management (CZM) program.

SUPPORTING DOCUMENTATION:

Contact: In an email to the Office of Planning (OP) dated July 27, 2015, the HPHA determined that the use of HUD funds for the implementation of repair and rehabilitation improvements does not require review for consistency with Hawai‘i's CZM program. The OP confirmed this determination in an email dated July 28, 2015 and it is included in the Appendices.

Experience: Previous reviews conducted by OP in 2003, 2005, and 2010 determined that projects receiving federal funds from HUD do not require CZM federal consistency review. OP's current determination confirms this condition is still applicable. Copies of these prior documentations are included in the Appendices.

VI. CONTAMINATION AND TOXIC SUBSTANCES (24 CFR PART 50.3 & 58.5(I)(2))

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Project Not Affected.

There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.

SUPPORTING DOCUMENTATION:

Field: A site inspection and interview with the Asset Management Project (AMP) Manager revealed no presence of any toxic or radioactive materials on the project site that warrant concern. Small quantities of gasoline and solvents for routine maintenance and lawn equipment are stored in a secured area within the main building.

Study: Environmental Data Resources, Inc. (EDR), conducted a search of available environmental records and prepared a Radius Map Report (Inquiry Number 4237094.46s, March 17, 2015). EDR reviewed more than 25 federal and statewide regulatory databases for information regarding the treatment, storage, disposal and release of toxic chemicals at the project site and within specific radii (generally 1 mile) of the site. A Detail Map within the EDR report documents those sites identified within a 0.25 mile radius of the project site. The EDR report in Exhibit B includes the results of their research findings.

The EDR report notes the following activities within a 0.125 mile radius of the project site: the subject housing site: 7-11 Nuʻuanu (63 feet away) contains two UST (20,000 gallons, gasoline) Currently in Use. Three UST, Permanently Out of Use. Consulate General of Japan (61 feet away) is Classified as a Conditionally Exempt Small Quantity Generator (Handler), no violations found. Malulani Hale has one LUST, status: Site Cleanup Complete (NFA) and one UST status: Permanently Out of Use. Richard's Chevron had TPH-D, r and PCE in soils above Industrial/Commercial Tier I levels; Controls Required to Manage Contamination; Spills: Hydraulic Oil and other contaminants, the Hazard is Managed with Controls. Richard's Chevron is classified as a Conditionally Exempt Small Quantity Generator (Handler), no violations found. 7-Eleven Nuuanu Pali has two LUST, status: Site Cleanup Completed (NFA); UST 30,000 gallons, gasoline, Currently in Use. Rehab Hospital of the Pacific UST, status: Permanently Out of Use. Kaneda's Food and Party Supplies, two UST, status: Permanently Out of Use

This project site was not identified as a Formerly Used Defense Site (FUDS) by the U.S. Army Corps of Engineers and is not subject to any cleanup actions for Department of Defense-generated contamination.

VII. ENDANGERED SPECIES (50 CFR PART 402)

CONTACT:
Mr. Loyal Mehrhoff, Field Supervisor
Pacific Islands Administrator
Fish and Wildlife Services
U.S. Department of the Interior
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawai'i 96813
Tel. #: 792-9400

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Adverse Effect Subject to Mitigation

The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices.

SUPPORTING DOCUMENTATION:

Contact: A letter from the HPHA dated July 24, 2015 was submitted to the Pacific Island Administrator for the FWS determining that repair and rehabilitation improvements that may be implemented using HUD funds for this housing project would have no likelihood of effect on any listed species or proposed species, or existing or proposed designated critical habitat subject to certain measures. Concurrence with this determination along with proposed minimization and avoidance measures was received from the FWS in a letter dated September 28, 2015 which is included in the Appendices. This housing project is subject to the following minimization and avoidance measures.

Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.

Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.

Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.

Newell's shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If

nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.

Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.

Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo‘i, impoundments or other vegetated water bodies.

1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS’s recommended Hawaiian Waterbird Survey Protocols.
2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.
3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.

In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.

Additional Measures: The following additional measures would be implemented:

1. No vegetation or soil disturbance shall be conducted outside a project’s previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.

Experience: The FWS was previously consulted as part of environmental reviews that were completed in 2005 (39 housing projects) and 2010 (70 housing projects) which supported the determination that repair and rehabilitation improvements would either: 1) have no likelihood of effect for certain housing projects; or 2) not likely adversely affect federally listed species or critical habitat for certain housing projects subject to mitigative measures. A summary of these consultation efforts follows.

2005 Consultation: In a letter dated July 15, 2005, the Housing and Community Development Corporation of Hawai‘i (predecessor to the HPHA), determined that the implementation of minor repair and rehabilitation improvements for 39 housing projects

would not have an adverse effect on federally-listed species or critical habitat. In a letter dated August 11, 2005, the FWS concurred with the HCDCH determination.

2010 Consultation: In a letter dated May 17, 2010, the HPHA informed the FWS that HUD funds would be used to immediately implement repair and rehabilitation improvements for six housing projects on O'ahu and the island of Hawai`i. In a subsequent letter dated May 21, 2010, the FWS was informed that HPHA would be using HUD funds to implement minor repair and rehabilitation improvements for 64 projects throughout the State. In both letters, the HPHA determined that the repair and rehabilitation improvements were not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat. Based on further consultation and a meeting with FWS staff on June 24, 2010, the HPHA determined that repair and rehabilitation improvements for most of their housing projects would not likely adversely affect any listed or proposed species, or existing or proposed designated habitat, subject to various mitigative measures for certain housing projects.

VIII. EXPLOSIVE AND FLAMMABLE OPERATIONS (24 CFR PART 51C)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

SUPPORTING DOCUMENTATION:

Field: Field inspection was limited to the exterior of residential buildings and associated structures for this housing project. No above-ground explosive or flammable material storage containers in excess of 100 gallons were observed at the site.

Printed: 24 CFR Part 51, Subpart C addresses acceptable separation distance from above-ground explosive or flammable fuels or chemical containers. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

IX. FARMLANDS PROTECTION (7 CFR PART 658)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. Since the property consists of an existing housing development within an urbanized area, no farmlands would be impacted by the implementation of repair and rehabilitation improvements.

Printed: The property is designated for "Urban" use by the State Land Use Commission and the County's zoning for the parcel is RD-3.75 Double-Family Residential District.

Hawai`i Office of Planning website at: http://planning.hawaii.gov/gis/
(Date accessed: 6/30/2015)

X. FLOODPLAIN MANAGEMENT (EXECUTIVE ORDER 11988, 24 CFR PART 55)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program

This housing project is located in Zone X, an area of minimal flooding (i.e., 0.2% annual chance flood), and is located outside the 500-year flood zone. A field inspection and information obtained from AMP Manager confirmed no major flooding issues within the project site.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal signs of previous flooding problems. An interview with the AMP Manager also determined that no major ponding or flooding issues occur on the project site.

Printed: Flood Insurance Rate Map, Community Panel Number 15003C0354G, Effective: January 19, 2011, Index Date: November 05, 2014

Hawai`i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/ (Date accessed 7/21/15)

XI. HISTORIC PRESERVATION (NATIONAL HISTORIC PRESERVATION ACT OF 1966; SECTIONS 106 AND 110; 36 CFR, PART 800)

CONTACT:	SUPPORTING DOCUMENTS	
Ms. Suzanne Case, Chairperson	X	Field
Department of Land and Natural Resources (DLNR)	X	Contact
State of Hawai‘i	X	Printed
1151 Punchbowl Street		Experience
Honolulu, Hawai‘i 96813	X	Study
Tel. #: 587-0400		

DETERMINATION:

Status Category: No Effect on Historic Properties

The subject housing site was built in 1970 and is 45 years old. To be eligible for listing in the National Register of Historic Places (NRHP), a property must meet the National Register criteria for evaluation which involves examining its integrity, significance, and age (generally at least 50 years old). Due to its age, this housing project does not meet the eligibility criteria to be evaluated for the NRHP. In a letter to the State Historic Preservation Officer (SHPO) dated July 23, 2015, the HPHA determined that no historic properties would be affected (no effect) by repair and rehabilitation improvements for this housing project. No comments or objections about this no effect determination were received.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the subject housing site did not locate any existing or potential archaeological sites (e.g., heiau) or cultural features on the property. An interview with the property manager and maintenance supervisor indicates that no known sites or features are present on the property.

Contact: A letter from the HPHA dated July 23, 2015, which is included in the Appendix, was submitted to the State Historic Preservation Officer [SHPO] (Chair of State Board of Land and Natural Resources) as part of Section 106 consultation determining that no historic properties would be affected (no effect) by repair and rehabilitation improvements that may be implemented using HUD funds for this housing project. The SHPO did not submit any comments or objections on the “no effect” determination for this housing project, which included follow-up e-mails with the State Historic Preservation Division regarding a response. On September 28, 2015, notice of HPHA’s determination was also distributed to several native Hawaiian organizations and the various County Planning Departments. No concerns or opposition to this determination was received.

Printed: A review of the U.S. National Parks Service website for the National Register of Historic Places did not identify any historic properties within the limits of this housing project. A similar review of the State DLNR website for the State Register of Historic Places revealed that there are no historic properties within the project site.

National Register: U.S. National Park Service website at: http://www.nps.gov/nr/research/ (Date accessed: 7/2/15).

State Register: Hawai`i Department of Land and Natural Resources website at: http://dlnr.hawaii.gov/shpd/state-register/ (Date accessed: 7/2/15).

Experience: In letter to the State Historic Preservation Officer (SHPO) dated April 19, 2011, the HPHA determined that minor repair and rehabilitation improvement at 57 public housing projects throughout Hawai'i (including this housing site) would have "no effect" on historic properties. The SHPO had no comments or objections on the "no effect" determination.

XII. NOISE ABATEMENT CONTROL (24 CFR PART 51B)

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Within HUD Noise Standards

The project site is not situated along a highway that has a high volume of vehicular traffic. The HUD noise calculator estimated noise levels at the project site to be 58.2 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

SUPPORTING DOCUMENTATION:

Field: No significant noise generating sources were identified within the project site during the site inspection. The subject housing site is located within an urban residential neighborhood. Although it is within proximity of the Pali Highway, it is approximately 450 feet away from the centerline of the highway and traffic noise is buffered by surrounding apartment buildings and structures. Furthermore, an interview with the AMP Manager did not identify any loud noise producing sources in the area. As a result, notable noise sources are predominantly associated with vehicular traffic along adjacent streets. Traffic noise did not appear significant during the site visit.

Study: The HUD day/night noise level calculator was used to estimate approximate traffic noise. Traffic counts were based on 2013 Hawai'i State Department of Transportation data taken along the Kīna'u Street (a minor County arterial road). Using this HUD calculator, the estimated noise levels from both streets combined at the project site is 58.2 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to

significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

XIII. SOLE SOURCE AQUIFER (40 CFR PART 149)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact on Sole Source Aquifer

The housing project is located within the O‘ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation. However, if exceptional circumstances require compliance steps with any of these authorities, such compliance must be established and documented prior to approving the site-specific loan or grant.

SUPPORTING DOCUMENTATION:

Printed: This determination was based upon review of the Sole Source Aquifer Memorandum of 4/30/90 (Sections II.B.1 and II.B.2) and consideration of the type of rehabilitation related improvements that would be conducted for this project.

XIV. WETLANDS PROTECTION (EXECUTIVE ORDER 11990)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the property did not identify the presence of any wetlands.

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/wetlands/data/mapper.html (Date accessed 7/23/2015).

XV. WILD AND SCENIC RIVERS ACT (16 USC 1271, SECTION 7 (B), (C))

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no Wild and Scenic Rivers in Hawai‘i, which excludes this project from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: National Wild and Scenic Rivers System website at: http://www.rivers.gov/index.php (Date accessed: 6/30/2015).

XVI. ENVIRONMENTAL JUSTICE (EXECUTIVE ORDER NO. 12898)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Conflict with Requirements

Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, repair and rehabilitation improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations. Repair and rehabilitation improvements should benefit low-income and minority populations living within this housing project.

SUPPORTING DOCUMENTATION:

Printed: Executive Order 12898.

U.S. Department of Housing and Urban Development website at:
https://www.hudexchange.info/environmental-review/environmental-justice/

EXHIBIT A

Location Map, TMK Map, Site Map, Flood Map, and Site Photos

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

HONOLULU RAIL TRANSIT

Transit Corridor

Transit Station

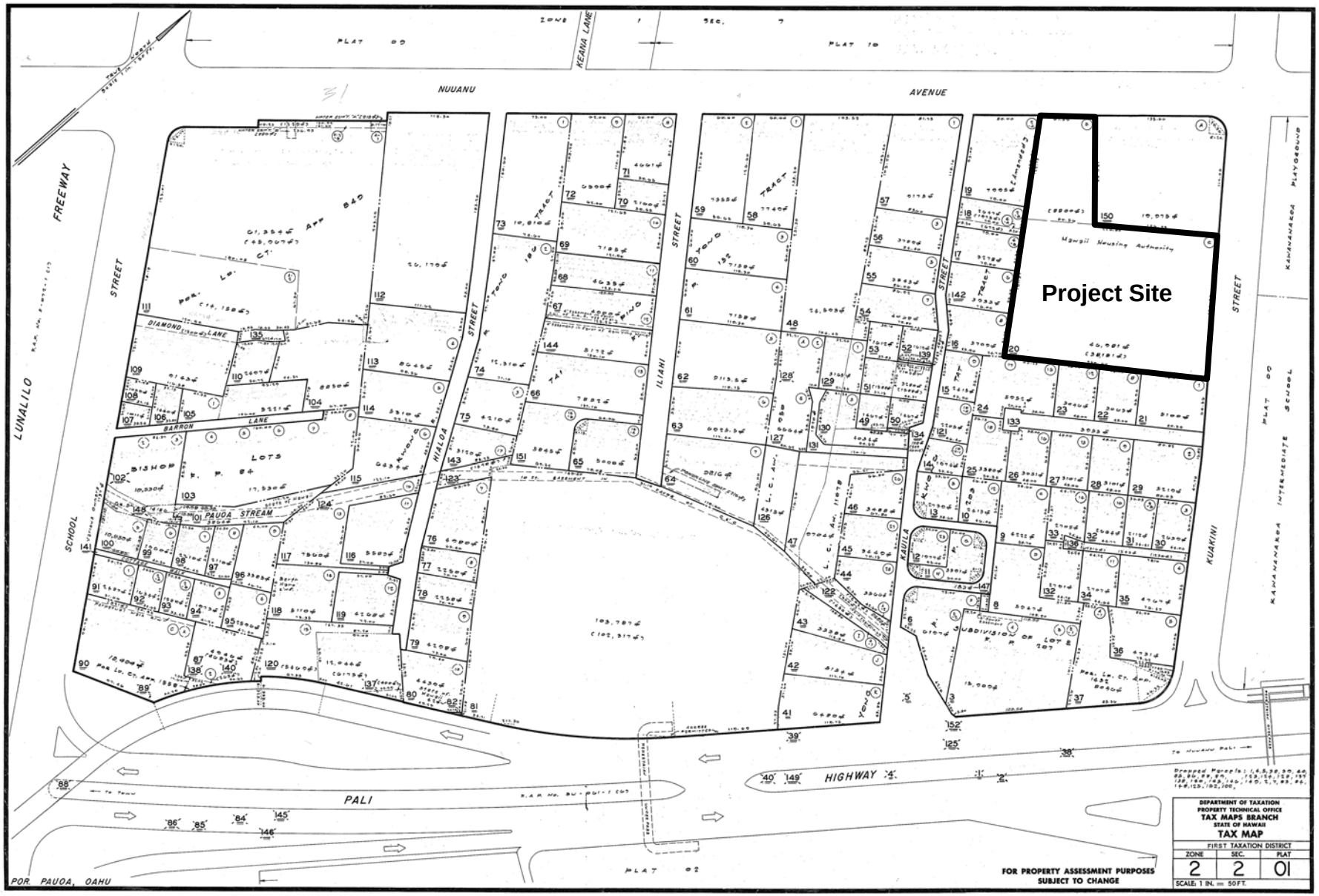
HPHA No. 1046 - Makamae (AMP 35)

Figure 1 - Project Location Map

Honolulu, O'ahu

1,500 FT

HHF PLANNERS
places for people

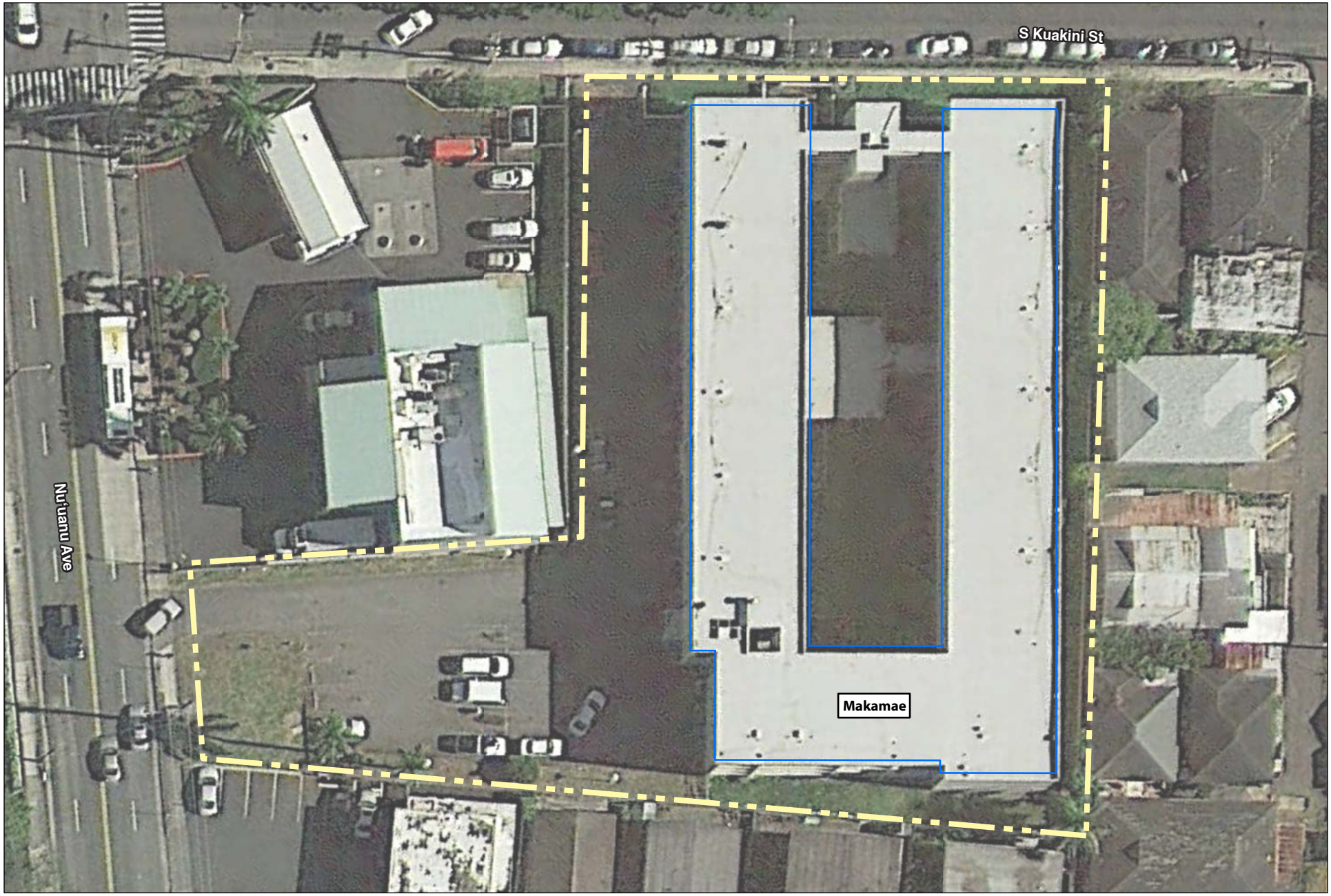


HPHA No. 1046 - Makamae (AMP 35)

Figure 2 - TMK Map

Honolulu, O'ahu

HHF PLANNERS
places for people



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1046 - Makamae (AMP 35)

Figure 3 - Site Map

Honolulu, O'ahu

30 FEET

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

LEGEND

Zone X - Outside the 0.2% Annual Chance of Flood

HPHA No. 1046 - Makamae (AMP 35)

Figure 4 - Flood Map

Honolulu, O'ahu

30 FEET

HHF PLANNERS
places for people

MAKAMAE
SITE PHOTOS

Nuuanu Ave fronting project site (at right)

Project parking lot and front yard condition

Courtyard landscaping

Drain inlet

Kuakini Street, project site is on the right

Front yard along Kuakini Street, facing east

MAKAMAE
SITE PHOTOS

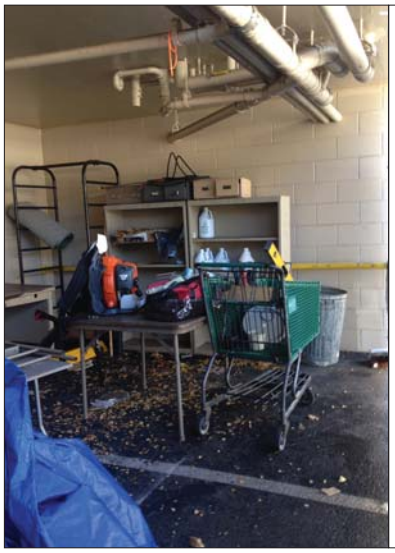
Font yard, along Kuakini Street, facing west

Project's southeastern side yard condition

Project's southwestern side yard conditon, view towards Nuuanu Ave

North elevation of building, view from Kuakini Street

Trash pickup area facing Nuuanu Ave parking lot



Secured storage area

EXHIBIT B

EDR Radius Map Report

Makamae E
21 S. Kuakini St.
Honolulu, HI 96813

Inquiry Number: 4237094.46s
March 17, 2015

EDR Summary Radius Map Report

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

FORM-NULL-PVC

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

21 S. KUAKINI ST.
HONOLULU County, HI 96813

COORDINATES

Latitude (North):	21.3185000 - 21˚ 19' 6.60''
Longitude (West):	157.8531000 - 157˚ 51' 11.16''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	618949.0
UTM Y (Meters):	2357691.5
Elevation:	66 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	USGS 7.5 min quad index

MAPPED SITES SUMMARY

Target Property Address:
21 S. KUAKINI ST.
, HI 96813

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
Reg	SAND ISLAND MILITARY		DOD	Same	5053, WSW
A1		1755 NUUANU AVE	EDR US Hist Auto Stat	Lower	109, WNW
A2	7-11 NUUANU	1755 NUUANU AVE	LUST, UST, Financial Assurance	Lower	109, WNW
3	CONSULATE GENERAL OF	1742 NUUANU AVE	RCRA-CESQG, FINDS	Lower	295, West
4		1808 NUUANU AVE	EDR US Hist Auto Stat	Higher	330, North
5		40 ILIAHI ST	EDR US Hist Auto Stat	Lower	541, SW
6		26 HIALOA ST	EDR US Hist Cleaners	Lower	760, SW
7	MALULANI HALE	114 N KUAKINI ST	LUST, UST	Lower	809, NW
B8	RICHARD'S CHEVRON	1909 NUUANU AVE	SHWS, SPILLS, INST CONTROL, Financial Assurance	Higher	882, NNE
B9	RICHARDS CHEVRON SER	1909 NUUANU AVE	RCRA-CESQG	Higher	882, NNE
10		1627 NUUANU AVE	EDR US Hist Cleaners	Lower	892, SW
B11		1909 NUUANU AVE	EDR US Hist Auto Stat	Higher	892, NNE
12	7-ELEVEN NUUANU PALI	1602 NUUANU AVE	LUST, UST, Financial Assurance	Lower	1133, SW
13	REHAB HOSPITAL OF TH	226 N KUAKINI ST	UST	Lower	1184, NW
14		2002 PAUOA RD	EDR US Hist Auto Stat	Higher	1186, ENE
15	KANEDA'S FOOD & PART	40 S SCHOOL ST	UST	Lower	1229, SSW
16	KEITH'S SERVICE & SA	2004 PACIFIC HEIGHTS	LUST, UST, Financial Assurance	Higher	1372, ENE
17	KUAKINI MEDICAL DEVE	347 N KUAKINI ST	RCRA-SQG, FINDS, SHWS, LUST, UST, SPILLS,...	Higher	1583, NW
18	HIRAM'S CHEVRON SERV	140 S. SCHOOL ST	LUST, UST, Financial Assurance	Higher	1747, South
19	HONOLULU SAKE BREWER	2150 BOOTH RD	SHWS, LUST, UST, SPILLS	Higher	2078, ENE
20	SASAMOTO UNION SERVI	33 S VINEYARD BLVD	LUST, UST	Lower	2219, SW
C21	B & A AUTOMOTIVE	1739 LILIHA ST	LUST, UST	Higher	2365, NW
C22	LILIHA CHEVRON	1748 LILIHA ST	LUST, UST	Higher	2375, NW
23	SAKE BREWERY & ICE C		FUDS	Higher	2491, NNE
24	LANCE GOYA CHEVRON	504 N SCHOOL ST	SHWS, LUST, UST, ENG CONTROLS, INST CONTROL,...	Lower	2628, WNW
25	HALL MARK DRY CLEANE	1470 LILIHA ST	SHWS	Lower	2838, WNW
26	TOWN INN	248-258 N BERETANIA	SHWS, INST CONTROL, VCP	Lower	3468, WSW
27	CAPITOL PLACE DEVELO	1212 QUEEN EMMA ST	SHWS	Lower	3491, SSW
28	1510 FREAR STREET	1510 FREAR ST	SHWS, SPILLS	Higher	3556, South
29	SAINT FRANCIS HOSPIT	2230 LILIHA ST	SHWS, LUST, UST, SPILLS	Higher	3594, North
30	THE QUEEN'S MEDICAL	1301 PUNCHBOWL ST	SHWS, LUST, UST, AIRS, Financial Assurance	Lower	3786, South
31	LILIHA CIVIC CENTER	337 N KING ST	SHWS	Lower	3941, WSW
32	IWILEI PROJECT SITE	IWILEI RD & N KING S	SHWS	Lower	4004, WSW
33	KEKAULIKE DIAMOND HE	163 N HOTEL ST	SHWS, SPILLS	Lower	4027, WSW
34	215 NORTH KING STREE	215 N KING ST	SHWS	Lower	4075, WSW
35	IWILEI FRUIT AND VEG	920 IWILEI ROAD	SHWS, LUST, UST	Lower	4200, WSW
36	SENIOR RESIDENCES AT	888 IWILEI RD	SHWS, INST CONTROL	Lower	4337, WSW
37	AWA WASTEWATER PUMP	190 N NIMITZ HWY	SHWS, SPILLS	Lower	4442, WSW
D38	VON HAMM TEXTILES	546 KAAAHI ST	SHWS, SPILLS, ENG CONTROLS, INST CONTROL	Lower	4480, West

MAPPED SITES SUMMARY

Target Property Address:
21 S. KUAKINI ST.
, HI 96813

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
D39	NUUANU AUTO COMPANY	545 KAAAHI ST	SHWS	Lower	4489, West
40	YEE HOP BUILDING MAU	950 MAUNAKEA ST	SHWS	Lower	4546, SW
41	373 NORTH NIMITZ HIG	373 N NIMITZ HWY	SHWS, SPILLS	Lower	4603, WSW
42	HAWAIIAN GAS PRODUCT	516-520 KUWILI ST	EDR MGP	Lower	4956, West
43	HARBOR COURT	66 QUEEN ST	SHWS	Lower	5103, SW
44	TRAVEL PLAZA TRANSPO	818 PINE ST	SHWS, LUST, UST, Financial Assurance	Lower	5167, West
45	420-470 NORTH NIMITZ	420-470 N NIMITZ HWY	SHWS, ENG CONTROLS	Lower	5168, WSW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA generators list

RCRA-CESQG: A review of the RCRA-CESQG list, as provided by EDR, and dated 12/09/2014 has revealed that there are 2 RCRA-CESQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
RICHARDS CHEVRON SER	1909 NUUANU AVE	NNE 1/8 - 1/4 (0.167 mi.)	B9	8

Lower Elevation	Address	Direction / Distance	Map ID	Page
CONSULATE GENERAL OF	***1742 NUUANU AVE***	***W 0 - 1/8 (0.056 mi.)***	***3***	***7***

State- and tribal - equivalent CERCLIS

SHWS: A review of the SHWS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 24 SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
RICHARD'S CHEVRON	***1909 NUUANU AVE***	***NNE 1/8 - 1/4 (0.167 mi.)***	***B8***	***8***
KUAKINI MEDICAL DEVE	***347 N KUAKINI ST***	***NW 1/4 - 1/2 (0.300 mi.)***	***17***	***10***
HONOLULU SAKE BREWER	***2150 BOOTH RD***	***ENE 1/4 - 1/2 (0.394 mi.)***	***19***	***11***
1510 FREAR STREET	***1510 FREAR ST***	***S 1/2 - 1 (0.673 mi.)***	***28***	***13***
SAINT FRANCIS HOSPIT	***2230 LILIHA ST***	***N 1/2 - 1 (0.681 mi.)***	***29***	***13***

Lower Elevation	Address	Direction / Distance	Map ID	Page
LANCE GOYA CHEVRON	***504 N SCHOOL ST***	***WNW 1/4 - 1/2 (0.498 mi.)***	***24***	***12***
HALL MARK DRY CLEANE	1470 LILIHA ST	WNW 1/2 - 1 (0.538 mi.)	25	13
TOWN INN	***248-258 N BERETANIA***	***WSW 1/2 - 1 (0.657 mi.)***	***26***	***13***

Lower Elevation	Address	Direction / Distance	Map ID	Page
CAPITOL PLACE DEVELO	1212 QUEEN EMMA ST	SSW 1/2 - 1 (0.661 mi.)	27	13
THE QUEEN'S MEDICAL	***1301 PUNCHBOWL ST***	***S 1/2 - 1 (0.717 mi.)***	***30***	***14***
LILIHA CIVIC CENTER	337 N KING ST	WSW 1/2 - 1 (0.746 mi.)	31	14
IWILEI PROJECT SITE	IWILEI RD & N KING S	WSW 1/2 - 1 (0.758 mi.)	32	14
KEKAULIKE DIAMOND HE	***163 N HOTEL ST***	***WSW 1/2 - 1 (0.763 mi.)***	***33***	***14***
215 NORTH KING STREE	215 N KING ST	WSW 1/2 - 1 (0.772 mi.)	34	15
IWILEI FRUIT AND VEG	***920 IWILEI ROAD***	***WSW 1/2 - 1 (0.795 mi.)***	***35***	***15***
SENIOR RESIDENCES AT	***888 IWILEI RD***	***WSW 1/2 - 1 (0.821 mi.)***	***36***	***15***
AWA WASTEWATER PUMP	***190 N NIMITZ HWY***	***WSW 1/2 - 1 (0.841 mi.)***	***37***	***15***
VON HAMM TEXTILES	***546 KAAAHI ST***	***W 1/2 - 1 (0.848 mi.)***	***D38***	***15***
NUUANU AUTO COMPANY	545 KAAAHI ST	W 1/2 - 1 (0.850 mi.)	D39	16
YEE HOP BUILDING MAU	950 MAUNAKEA ST	SW 1/2 - 1 (0.861 mi.)	40	16
373 NORTH NIMITZ HIG	***373 N NIMITZ HWY***	***WSW 1/2 - 1 (0.872 mi.)***	***41***	***16***
HARBOR COURT	66 QUEEN ST	SW 1/2 - 1 (0.966 mi.)	43	16
TRAVEL PLAZA TRANSPO	***818 PINE ST***	***W 1/2 - 1 (0.979 mi.)***	***44***	***16***
420-470 NORTH NIMITZ	***420-470 N NIMITZ HWY***	***WSW 1/2 - 1 (0.979 mi.)***	***45***	***17***

State and tribal leaking storage tank lists

LUST: A review of the LUST list, as provided by EDR, and dated 12/16/2014 has revealed that there are 11 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
KEITH'S SERVICE & SA	***2004 PACIFIC HEIGHTS***	***ENE 1/4 - 1/2 (0.260 mi.)***	***16***	***10***
Facility Status: Site Cleanup Completed (NFA)				
KUAKINI MEDICAL DEVE	***347 N KUAKINI ST***	***NW 1/4 - 1/2 (0.300 mi.)***	***17***	***10***
Facility Status: Site Cleanup Completed (NFA)				
Facility Status: Site Cleanup Completed with EHE/EHMP				
HIRAM'S CHEVRON SERV	***140 S. SCHOOL ST***	***S 1/4 - 1/2 (0.331 mi.)***	***18***	***11***
Facility Status: Site Cleanup Completed (NFA)				
HONOLULU SAKE BREWER	***2150 BOOTH RD***	***ENE 1/4 - 1/2 (0.394 mi.)***	***19***	***11***
Facility Status: Site Cleanup Completed (NFA)				
B & A AUTOMOTIVE	***1739 LILIHA ST***	***NW 1/4 - 1/2 (0.448 mi.)***	***C21***	***11***
Facility Status: Site Cleanup Completed (NFA)				
LILIHA CHEVRON	***1748 LILIHA ST***	***NW 1/4 - 1/2 (0.450 mi.)***	***C22***	***12***
Facility Status: Site Cleanup Completed (NFA)				

Lower Elevation	Address	Direction / Distance	Map ID	Page
7-11 NUUANU	***1755 NUUANU AVE***	***WNW 0 - 1/8 (0.021 mi.)***	***A2***	***7***
Facility Status: Site Cleanup Completed (NFA)				
MALULANI HALE	***114 N KUAKINI ST***	***NW 1/8 - 1/4 (0.153 mi.)***	***7***	***8***
Facility Status: Site Cleanup Completed (NFA)				
7-ELEVEN NUUANU PALI	***1602 NUUANU AVE***	***SW 1/8 - 1/4 (0.215 mi.)***	***12***	***9***
Facility Status: Site Cleanup Completed (NFA)				
SASAMOTO UNION SERVI	***33 S VINEYARD BLVD***	***SW 1/4 - 1/2 (0.420 mi.)***	***20***	***11***
Facility Status: Site Cleanup Completed (NFA)				
LANCE GOYA CHEVRON	***504 N SCHOOL ST***	***WNW 1/4 - 1/2 (0.498 mi.)***	***24***	***12***
Facility Status: Site Cleanup Completed with EHMP				
Facility Status: Site Cleanup Completed (NFA)				

State and tribal registered storage tank lists

UST: A review of the UST list, as provided by EDR, and dated 12/18/2014 has revealed that there are 5 UST sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
7-11 NUUANU	***1755 NUUANU AVE***	***WNW 0 - 1/8 (0.021 mi.)***	***A2***	***7***
MALULANI HALE	***114 N KUAKINI ST***	***NW 1/8 - 1/4 (0.153 mi.)***	***7***	***8***
7-ELEVEN NUUANU PALI	***1602 NUUANU AVE***	***SW 1/8 - 1/4 (0.215 mi.)***	***12***	***9***
REHAB HOSPITAL OF TH	226 N KUAKINI ST	NW 1/8 - 1/4 (0.224 mi.)	13	9
KANEDA'S FOOD & PART	40 S SCHOOL ST	SSW 1/8 - 1/4 (0.233 mi.)	15	10

State and tribal institutional control / engineering control registries

ENG CONTROLS: A review of the ENG CONTROLS list, as provided by EDR, and dated 12/02/2014 has revealed that there is 1 ENG CONTROLS site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
LANCE GOYA CHEVRON	***504 N SCHOOL ST***	***WNW 1/4 - 1/2 (0.498 mi.)***	***24***	***12***

INST CONTROL: A review of the INST CONTROL list, as provided by EDR, and dated 12/02/2014 has revealed that there are 2 INST CONTROL sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
RICHARD'S CHEVRON	***1909 NUUANU AVE***	***NNE 1/8 - 1/4 (0.167 mi.)***	***B8***	***8***

Lower Elevation	Address	Direction / Distance	Map ID	Page
LANCE GOYA CHEVRON	***504 N SCHOOL ST***	***WNW 1/4 - 1/2 (0.498 mi.)***	***24***	***12***

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

DOD: A review of the DOD list, as provided by EDR, and dated 12/31/2005 has revealed that there is 1 DOD site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAND ISLAND MILITARY		WSW 1/2 - 1 (0.957 mi.)	0	7

EXECUTIVE SUMMARY

FUDS: A review of the FUDS list, as provided by EDR, and dated 06/06/2014 has revealed that there is 1 FUDS site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAKE BREWERY & ICE C		NNE 1/4 - 1/2 (0.472 mi.)	23	12

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: A review of the EDR MGP list, as provided by EDR, has revealed that there is 1 EDR MGP site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
HAWAIIAN GAS PRODUCT	516-520 KUWILI ST	W 1/2 - 1 (0.939 mi.)	42	16

EDR US Hist Auto Stat: A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there are 5 EDR US Hist Auto Stat sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	1808 NUUANU AVE	N 0 - 1/8 (0.062 mi.)	4	7
Not reported	1909 NUUANU AVE	NNE 1/8 - 1/4 (0.169 mi.)	B11	9
Not reported	2002 PAUOA RD	ENE 1/8 - 1/4 (0.225 mi.)	14	9

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	1755 NUUANU AVE	WNW 0 - 1/8 (0.021 mi.)	A1	7
Not reported	40 ILIAHI ST	SW 0 - 1/8 (0.102 mi.)	5	8

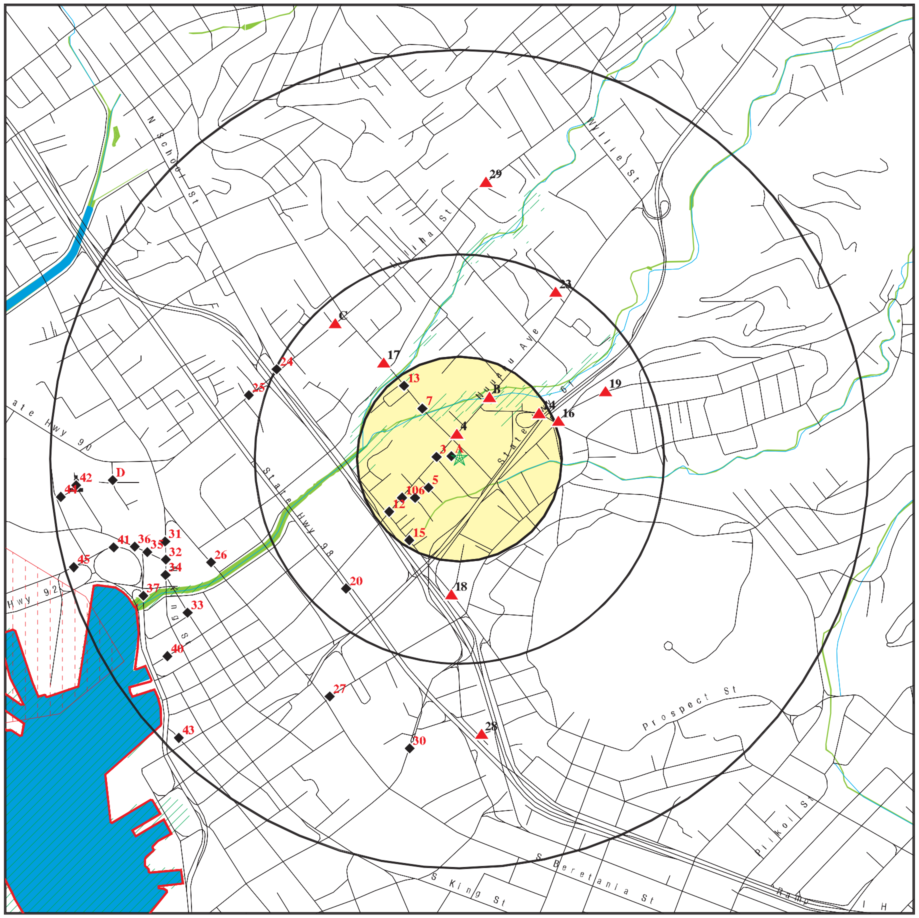
EDR US Hist Cleaners: A review of the EDR US Hist Cleaners list, as provided by EDR, has revealed that there are 2 EDR US Hist Cleaners sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	26 HIALOA ST	SW 1/8 - 1/4 (0.144 mi.)	6	8
Not reported	1627 NUUANU AVE	SW 1/8 - 1/4 (0.169 mi.)	10	9

Count: 5 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
HONOLULU	S117391417	1339 SCHOOL STREET	1339, 1341, 1343 N SCHOOL ST		SHWS, ENG CONTROLS, INST CONT
HONOLULU	S106708609	CANNON CLUB	DIAMOND HEAD RD		SHWS, BROWNFIELDS
HONOLULU	S111704706	FORMER KAPALAMA MILITARY RESERVATI	N NIMITZ HWY		SHWS
HONOLULU	S108008765	CITIZENS ENERGY SERVICES PIER 38	NIMITZ HWY		SHWS, SPILLS, ENG CONTROLS, INS CONTROL
HONOLULU	S106819311	NIMITZ HIGHWAY WATER IMPROVEMENT P	N NIMITZ HWY	96817	SHWS

OVERVIEW MAP - 4237094.46S



Target Property
Sites at elevations higher than or equal to the target property
Sites at elevations lower than the target property
Manufactured Gas Plants
National Priority List Sites
Dept. Defense Sites

Indian Reservations BIA
County Boundary
Oil & Gas pipelines from USGS
100-year flood zone
500-year flood zone
National Wetland Inventory

0 1/4 1/2 1 Miles

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Makamae E ADDRESS: 21 S. Kuakini St. Honolulu HI 96813 LAT/LONG: 21.3185 / 157.8531	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.46s DATE: March 17, 2015 5:38 pm

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DETAIL MAP - 4237094.46S

Target Property
Sites at elevations higher than or equal to the target property
Sites at elevations lower than the target property
Manufactured Gas Plants
Sensitive Receptors
National Priority List Sites
Dept. Defense Sites

Indian Reservations BIA
Oil & Gas pipelines from USGS
100-year flood zone
500-year flood zone
National Wetland Inventory

0 1/16 1/8 1/4 Miles

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Makamae E ADDRESS: 21 S. Kuakini St. Honolulu HI 96813 LAT/LONG: 21.3185 / 157.8531	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.46s DATE: March 17, 2015 5:38 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		1	1	NR	NR	NR	2
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
SHWS	1.000		0	1	3	20	NR	24
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		1	2	8	NR	NR	11
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250		1	4	NR	NR	NR	5

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		0	0	1	NR	NR	1
INST CONTROL	0.500		0	1	1	NR	NR	2
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	1	NR	1
FUDS	1.000		0	0	1	0	NR	1
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	1	NR	1
EDR US Hist Auto Stat	0.250		3	2	NR	NR	NR	5
EDR US Hist Cleaners	0.250		0	2	NR	NR	NR	2
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
RGA HWS	TP		NR	NR	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
DOD **Region** **WSW** **1/2-1** **5053 ft.**	**SAND ISLAND MILITARY RESERVATION** **SAND ISLAND MILITARY RESE (County), HI** Click here for full text details	**DOD**	**CUSA147757** **N/A**
A1 **WNW** **< 1/8** **0.021 mi.** **109 ft.** **Relative:** **Lower**	**1755 NUUANU AVE** **HONOLULU, HI 96817** Click here for full text details	**EDR US Hist Auto Stat**	**1015273501** **N/A**
A2 **WNW** **< 1/8** **0.021 mi.** **109 ft.** **Relative:** **Lower**	**7-11 NUUANU** **1755 NUUANU AVE** **HONOLULU, HI 96817** Click here for full text details **LUST** Facility Id: 9-101196 Facility Status: Site Cleanup Completed (NFA) **UST** Facility Id: 9-101196 Tank Status: Permanently Out of Use Tank Status: Currently In Use	**LUST** **UST** **Financial Assurance**	**U001235410** **N/A**
3 **West** **< 1/8** **0.056 mi.** **295 ft.** **Relative:** **Lower**	**CONSULATE GENERAL OF JAPAN** **1742 NUUANU AVE** **HONOLULU, HI 96817** Click here for full text details **RCRA-CESQG** EPA Id: HIR000035402	**RCRA-CESQG** **FINDS**	**1004688960** **HIR000035402**
4 **North** **< 1/8** **0.062 mi.** **330 ft.** **Relative:** **Higher**	**1808 NUUANU AVE** **HONOLULU, HI 96817** Click here for full text details	**EDR US Hist Auto Stat**	**1015279521** **N/A**

5
SW
< 1/8
0.102 mi.
541 ft.

Relative: Lower

40 ILIAHI ST
HONOLULU, HI 96817

Click here for full text details

EDR US Hist Auto Stat — **1015467882**, **N/A**

6
SW
1/8-1/4
0.144 mi.
760 ft.

Relative: Lower

26 HIALOA ST
HONOLULU, HI 96817

Click here for full text details

EDR US Hist Cleaners — **1015029786**, **N/A**

7
NW
1/8-1/4
0.153 mi.
809 ft.

Relative: Lower

MALULANI HALE
114 N KUAKINI ST
HONOLULU, HI 96800

Click here for full text details

LUST
Facility Id: 9-102930
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-102930
Tank Status: Permanently Out of Use

LUST — **U003154727**
UST — **N/A**

B8
NNE
1/8-1/4
0.167 mi.
882 ft.

Relative: Higher

RICHARD'S CHEVRON
1909 NUUANU AVE
HONOLULU, HI 96817

Click here for full text details

SHWS — **1000601437**
SPILLS — **N/A**
INST CONTROL
Financial Assurance

B9
NNE
1/8-1/4
0.167 mi.
882 ft.

Relative: Higher

RICHARDS CHEVRON SERV
1909 NUUANU AVE
HONOLULU, HI 96817

Click here for full text details

RCRA-CESQG
EPA Id: HID984466599

RCRA-CESQG — **1004688869**, **HID984466599**

10
SW
1/8-1/4
0.169 mi.
892 ft.

Relative: Lower

1627 NUUANU AVE
HONOLULU, HI 96817

Click here for full text details

EDR US Hist Cleaners — **1015001276**, **N/A**

B11
NNE
1/8-1/4
0.169 mi.
892 ft.

Relative: Higher

1909 NUUANU AVE
HONOLULU, HI 96817

Click here for full text details

EDR US Hist Auto Stat — **1015290959**, **N/A**

12
SW
1/8-1/4
0.215 mi.
1133 ft.

Relative: Lower

7-ELEVEN NUUANU PALI
1602 NUUANU AVE
HONOLULU, HI 96817

Click here for full text details

LUST
Facility Id: 9-101725
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-101725
Tank Status: Currently in Use

LUST — **U001235570**
UST — **N/A**
Financial Assurance

13
NW
1/8-1/4
0.224 mi.
1184 ft.

Relative: Lower

REHAB HOSPITAL OF THE PACIFIC
226 N KUAKINI ST
HONOLULU, HI 96817

Click here for full text details

UST
Facility Id: 9-103321
Tank Status: Permanently Out of Use

UST — **U003221911**, **N/A**

14
ENE
1/8-1/4
0.225 mi.
1186 ft.

Relative: Higher

2002 PAUOA RD
HONOLULU, HI 96813

Click here for full text details

EDR US Hist Auto Stat — **1015303386**, **N/A**

15 SSW 1/8-1/4 0.233 mi. 1229 ft.
Relative: Lower

KANEDA'S FOOD & PARTY SUPPLIES
40 S SCHOOL ST
HONOLULU, HI 96800

UST — **U001237380** / **N/A**

Click here for full text details

UST
Facility Id: 9-102220
Tank Status: Permanently Out of Use

---

16 ENE 1/4-1/2 0.260 mi. 1372 ft.
Relative: Higher

KEITH'S SERVICE & SALES
2004 PACIFIC HEIGHTS RD
HONOLULU, HI 96813

LUST, UST, Financial Assurance — **U003221637** / **N/A**

Click here for full text details

LUST
Facility Id: 9-101028
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-101028
Tank Status: Currently in Use
Tank Status: Permanently Out of Use

---

17 NW 1/4-1/2 0.300 mi. 1583 ft.
Relative: Higher

KUAKINI MEDICAL DEVELOPMENT CORP
347 N KUAKINI ST
HONOLULU, HI 96817

RCRA-SQG, FINDS, SHWS, LUST, UST, SPILLS, Financial Assurance — **1000270690** / **HID077701613**

Click here for full text details

RCRA-SQG
EPA Id: HID077701613

LUST
Facility Id: 9-100264
Facility Status: Site Cleanup Completed (NFA)
Facility Status: Site Cleanup Completed with EHE/EHMP

UST
Facility Id: 9-100264
Tank Status: Permanently Out of Use
Tank Status: Currently In Use

18 South 1/4-1/2 0.331 mi. 1747 ft.
Relative: Higher

HIRAM'S CHEVRON SERVICE
140 S. SCHOOL ST
HONOLULU, HI 96813

LUST, UST, Financial Assurance — **1000150007** / **N/A**

Click here for full text details

LUST
Facility Id: 9-101229
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-101229
Tank Status: Currently in Use

---

19 ENE 1/4-1/2 0.394 mi. 2078 ft.
Relative: Higher

HONOLULU SAKE BREWERY CO, LTD
2150 BOOTH RD
HONOLULU, HI 96813

SHWS, LUST, UST, SPILLS — **U003221588** / **N/A**

Click here for full text details

LUST
Facility Id: 9-100247
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-100247
Tank Status: Permanently Out of Use

---

20 SW 1/4-1/2 0.420 mi. 2219 ft.
Relative: Lower

SASAMOTO UNION SERVICE L-5005
33 S VINEYARD BLVD
HONOLULU, HI 96813

LUST, UST — **U003221548** / **N/A**

Click here for full text details

LUST
Facility Id: 9-100022
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-100022
Tank Status: Permanently Out of Use

C21 NW 1/4-1/2 0.448 mi. 2365 ft.
Relative: Higher

B & A AUTOMOTIVE
1739 LILIHA ST
HONOLULU, HI 96817

LUST, UST — **U001235479** / **N/A**

Click here for full text details

LUST
Facility Id: 9-101426

B & A AUTOMOTIVE (Continued) — **U001235479**

Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-101426
Tank Status: Permanently Out of Use

C22 / NW / 1/4-1/2 / 0.450 mi. / 2375 ft. / Relative: Higher

LILIHA CHEVRON
1748 LILIHA ST
HONOLULU, HI 96817

Database(s): **LUST, UST**
EDR ID Number: **U001235687**
EPA ID Number: **N/A**

Click here for full text details

LUST
Facility Id: 9-102069
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-102069
Tank Status: Permanently Out of Use

---

23 / NNE / 1/4-1/2 / 0.472 mi. / 2491 ft. / Relative: Higher

SAKE BREWERY & ICE CO
HONOLULU, HI

Database(s): **FUDS**
EDR ID Number: **1012129410**
EPA ID Number: **N/A**

Click here for full text details

---

24 / WNW / 1/4-1/2 / 0.498 mi. / 2628 ft. / Relative: Lower

LANCE GOYA CHEVRON
504 N SCHOOL ST
HONOLULU, HI 96817

Database(s): **SHWS, LUST, UST, ENG CONTROLS, INST CONTROL, Financial Assurance**
EDR ID Number: **U003402822**
EPA ID Number: **N/A**

Click here for full text details

LUST
Facility Id: 9-101259
Facility Status: Site Cleanup Completed with EHMP
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-101259
Tank Status: Permanently Out of Use

25 / WNW / 1/2-1 / 0.538 mi. / 2838 ft. / Relative: Lower

HALL MARK DRY CLEANERS
1470 LILIHA ST
HONOLULU, HI 96814

Database(s): **SHWS**
EDR ID Number: **S104534167**
EPA ID Number: **N/A**

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26 / WSW / 1/2-1 / 0.657 mi. / 3468 ft. / Relative: Lower

TOWN INN
248-258 N BERETANIA ST
HONOLULU, HI 96817

Database(s): **SHWS, INST CONTROL, VCP**
EDR ID Number: **1006819555**
EPA ID Number: **N/A**

Click here for full text details

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27 / SSW / 1/2-1 / 0.661 mi. / 3491 ft. / Relative: Lower

CAPITOL PLACE DEVELOPMENT PROJECT
1212 QUEEN EMMA ST
HONOLULU, HI 96813

Database(s): **SHWS**
EDR ID Number: **S108008488**
EPA ID Number: **N/A**

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28 / South / 1/2-1 / 0.673 mi. / 3556 ft. / Relative: Higher

1510 FREAR STREET
1510 FREAR ST
HONOLULU, HI 96813

Database(s): **SHWS, SPILLS**
EDR ID Number: **S107024174**
EPA ID Number: **N/A**

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29 / North / 1/2-1 / 0.681 mi. / 3594 ft. / Relative: Higher

SAINT FRANCIS HOSPITAL
2230 LILIHA ST
HONOLULU, HI 96817

Database(s): **SHWS, LUST, UST, SPILLS**
EDR ID Number: **U001235227**
EPA ID Number: **N/A**

Click here for full text details

LUST
Facility Id: 9-100785
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-100785
Tank Status: Permanently Out of Use

30 South 1/2-1 0.717 mi. 3786 ft. Relative: Lower

THE QUEEN'S MEDICAL CENTER
1301 PUNCHBOWL ST
HONOLULU, HI 96813

SHWS 1000490311
LUST N/A
UST
AIRS
Financial Assurance

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LUST
Facility Id: 9-100901
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-100901
Tank Status: Currently In Use
Tank Status: Permanently Out of Use

AIRS
Facility Id: 0353-02-C

---

31 WSW 1/2-1 0.746 mi. 3941 ft. Relative: Lower

LILIHA CIVIC CENTER
337 N KING ST
HONOLULU, HI 96817

SHWS 1006819345
N/A

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32 WSW 1/2-1 0.758 mi. 4004 ft. Relative: Lower

IWILEI PROJECT SITE (IWILEI BROWNFIELDS)
IWILEI RD & N KING ST
HONOLULU, HI 96817

SHWS S107022564
N/A

Click here for full text details

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33 WSW 1/2-1 0.763 mi. 4027 ft. Relative: Lower

KEKAULIKE DIAMOND HEAD BLOCK REVITALIZATION
163 N HOTEL ST
HONOLULU, HI 96817

SHWS 1006819184
SPILLS N/A

Click here for full text details

34 WSW 1/2-1 0.772 mi. 4075 ft. Relative: Lower

215 NORTH KING STREET CONSTRUCTION SITE, TANKS 1 & 2
215 N KING ST
HONOLULU, HI 96814

SHWS S106815334
N/A

Click here for full text details

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35 WSW 1/2-1 0.795 mi. 4200 ft. Relative: Lower

IWILEI FRUIT AND VEGETABLE WAREHOUSE
920 IWILEI ROAD
HONOLULU, HI 96813

SHWS U003858603
LUST N/A
UST

Click here for full text details

LUST
Facility Id: 9-103747
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-103747
Tank Status: Permanently Out of Use

---

36 WSW 1/2-1 0.821 mi. 4337 ft. Relative: Lower

SENIOR RESIDENCES AT IWILEI
888 IWILEI RD
HONOLULU, HI 96813

SHWS S111704855
INST CONTROL N/A

Click here for full text details

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37 WSW 1/2-1 0.841 mi. 4442 ft. Relative: Lower

AWA WASTEWATER PUMP STATION
190 N NIMITZ HWY
HONOLULU, HI 96817

SHWS S105262868
SPILLS N/A

Click here for full text details

D38 West 1/2-1 0.848 mi. 4480 ft. Relative: Lower

VON HAMM TEXTILES
546 KAAAHI ST
HONOLULU, HI 96817

SHWS S106820929
SPILLS N/A
ENG CONTROLS
INST CONTROL

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D39
West
1/2-1
0.850 mi.
4489 ft.

Relative: Lower

NUUANU AUTO COMPANY LTD
545 KAAAHI ST
HONOLULU, HI 96817

SHWS **S111704825**
N/A

Click here for full text details

40
SW
1/2-1
0.861 mi.
4546 ft.

Relative: Lower

YEE HOP BUILDING MAUNAKEA STREET
950 MAUNAKEA ST
HONOLULU, HI

SHWS **S106821168**
N/A

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41
WSW
1/2-1
0.872 mi.
4603 ft.

Relative: Lower

373 NORTH NIMITZ HIGHWAY
373 N NIMITZ HWY
HONOLULU, HI 96817

SHWS **S106815507**
SPILLS **N/A**

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42
West
1/2-1
0.939 mi.
4956 ft.

Relative: Lower

HAWAIIAN GAS PRODUCTS LTD
516-520 KUWILI ST
HONOLULU, HI 96817

EDR MGP **1008409006**
N/A

Click here for full text details

43
SW
1/2-1
0.966 mi.
5103 ft.

Relative: Lower

HARBOR COURT
66 QUEEN ST
HONOLULU, HI 96813

SHWS **1006820894**
N/A

Click here for full text details

44
West
1/2-1
0.979 mi.
5167 ft.

Relative: Lower

TRAVEL PLAZA TRANSPORTATION, LLC
818 PINE ST
HONOLULU, HI 96817

SHWS **U003154753**
LUST **N/A**
UST
Financial Assurance

Click here for full text details

LUST
Facility Id: 9-102991
Facility Status: Site Cleanup Completed (NFA)

TRAVEL PLAZA TRANSPORTATION, LLC (Continued) **U003154753**

UST
Facility Id: 9-102991
Tank Status: Currently In Use
Tank Status: Permanently Out of Use

45
WSW
1/2-1
0.979 mi.
5168 ft.

Relative: Lower

420-470 NORTH NIMITZ HIGHWAY
420-470 N NIMITZ HWY
HONOLULU, HI 96817

SHWS **S106815536**
ENG CONTROLS **N/A**

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GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
HI	AIRS	List of Permitted Facilities	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	BROWNFIELDS	Brownfields Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	CDL	Clandestine Drug Lab Listing	Department of Health	08/04/2010	09/10/2010	10/22/2010
HI	DRYCLEANERS	Permitted Drycleaner Facility Listing	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	ENG CONTROLS	Engineering Control Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	Financial Assurance	Financial Assurance Information Listing	Department of Health	12/01/2014	12/19/2014	01/28/2015
HI	INST CONTROL	Sites with Institutional Controls	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	LUST	Leaking Underground Storage Tank Database	Department of Health	12/16/2014	12/19/2014	01/28/2015
HI	RGA HWS	Recovered Government Archive State Hazardous Waste Facilitie	Department of Health		07/01/2013	01/08/2014
HI	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Health		07/01/2013	01/17/2014
HI	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	Department of Health		07/01/2013	01/03/2014
HI	SHWS	Sites List	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	SPILLS	Release Notifications	Department of Health	12/02/2014	12/22/2014	01/28/2015
HI	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	03/10/2012	01/03/2013	02/11/2013
HI	SWF/LF	Permitted Landfills in the State of Hawaii	Department of Health	09/17/2012	04/03/2013	05/10/2013
HI	UIC	Underground Injection Wells Listing	Department of Health	02/07/2013	02/12/2013	04/09/2013
HI	UST	Underground Storage Tank Database	Department of Health	12/18/2014	12/19/2014	01/28/2015
HI	VCP	Voluntary Response Program Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	04/22/2013	03/03/2015	03/09/2015
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2011	02/26/2013	04/19/2013
US	CERCLIS	Comprehensive Environmental Response, Compensation, and Liab	EPA	10/25/2013	11/11/2013	02/13/2014
US	CERCLIS-NFRAP	CERCLIS No Further Remedial Action Planned	EPA	10/25/2013	11/11/2013	02/13/2014
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	07/01/2014	09/10/2014	10/20/2014
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	01/23/2015	02/13/2015	03/09/2015
US	CORRACTS	Corrective Action Report	EPA	12/09/2014	12/29/2014	01/29/2015
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DELISTED NPL	National Priority List Deletions	EPA	12/16/2014	01/08/2015	02/09/2015
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	07/31/2012	08/07/2012	09/18/2012
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EDR US Hist Auto Stat	EDR Exclusive Historic Gas Stations	EDR, Inc.			
US	EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	09/29/2014	09/30/2014	11/06/2014
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	07/21/2014	10/07/2014	10/20/2014
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
US	FEMA UST	Underground Storage Tank Listing	FEMA	01/01/2010	02/16/2010	04/12/2010
US	FINDS	Facility Index System/Facility Registry System	EPA	08/16/2014	09/10/2014	10/20/2014
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	06/06/2014	09/10/2014	09/18/2014
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	12/29/2014	12/30/2014	03/09/2015
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	01/23/2015	02/06/2015	03/09/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	02/01/2013	05/01/2013	11/01/2013

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	01/30/2015	02/05/2015	03/09/2015
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/10/2015	03/13/2015
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	01/28/2015	01/30/2015	03/13/2015
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	01/08/2015	01/08/2015	02/09/2015
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2005	12/08/2006	01/11/2007
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	02/01/2013	05/01/2013	01/27/2014
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	01/30/2015	02/05/2015	03/13/2015
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/13/2015	03/13/2015
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	01/29/2015	01/30/2015	03/13/2015
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	12/14/2014	02/13/2015	03/13/2015
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	09/29/2014	10/01/2014	11/06/2014
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	11/25/2014	11/26/2014	01/29/2015
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	02/18/2014	03/18/2014	04/24/2014
US	LUCIS	Land Use Control Information System	Department of the Navy	12/03/2014	12/12/2014	01/29/2015
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	12/29/2014	01/08/2015	01/29/2015
US	NPL	National Priority List	EPA	12/16/2014	01/08/2015	02/09/2015
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	07/01/2014	10/15/2014	11/17/2014
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	02/01/2011	10/19/2011	01/10/2012
US	PRP	Potentially Responsible Parties	EPA	10/25/2013	10/17/2014	10/20/2014
US	Proposed NPL	Proposed National Priority List Sites	EPA	12/16/2014	01/08/2015	02/09/2015
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	10/07/2014	10/08/2014	10/20/2014
US	RCRA NonGen / NLR	RCRA - Non Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RMP	Risk Management Plans	Environmental Protection Agency	08/01/2014	08/12/2014	11/06/2014
US	ROD	Records Of Decision	EPA	11/25/2013	12/12/2013	02/24/2014
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	03/07/2011	03/09/2011	05/02/2011
US	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2011	07/31/2013	09/13/2013
US	TSCA	Toxic Substances Control Act	EPA	12/31/2012	01/15/2015	01/29/2015
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	09/14/2010	10/07/2011	03/01/2012
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/16/2014	10/31/2014	11/17/2014
US	US AIRS MINOR	Air Facility System Data	EPA	10/16/2014	10/31/2014	11/17/2014

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	12/22/2014	12/22/2014	01/29/2015
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	11/19/2014	11/21/2014	01/29/2015
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	12/30/2014	12/31/2014	01/29/2015
US	Oil/Gas Pipelines	GeoData Digital Line Graphs from 1:100,000-Scale Maps	USGS			
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
US	USGS 7.5' Topographic Map	Scanned Digital USGS 7.5' Topographic Map (DRG)	USGS			

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

MAKAMAE E
21 S. KUAKINI ST.
HONOLULU, HI 96813

TARGET PROPERTY COORDINATES

Latitude (North):	21.3185 - 21˚ 19' 6.60''
Longitude (West):	157.8531 - 157˚ 51' 11.16''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	618949.0
UTM Y (Meters):	2357691.5
Elevation:	66 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	21157-C7 HONOLULU, HI
Most Recent Revision:	Not reported

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

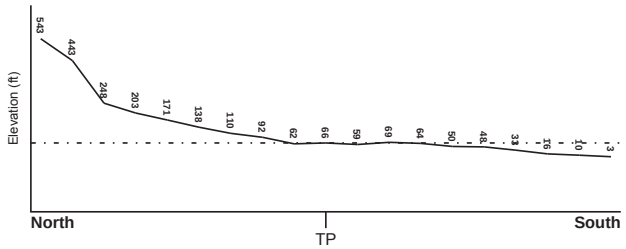
TOPOGRAPHIC INFORMATION

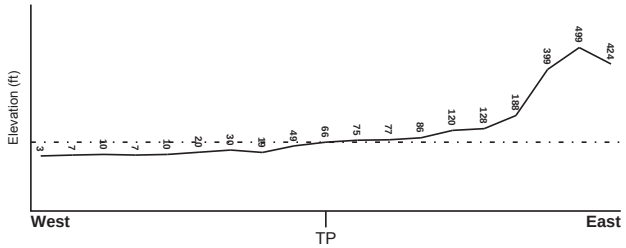
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General WSW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 66 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
HONOLULU, HI	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 15003C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
HONOLULU	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

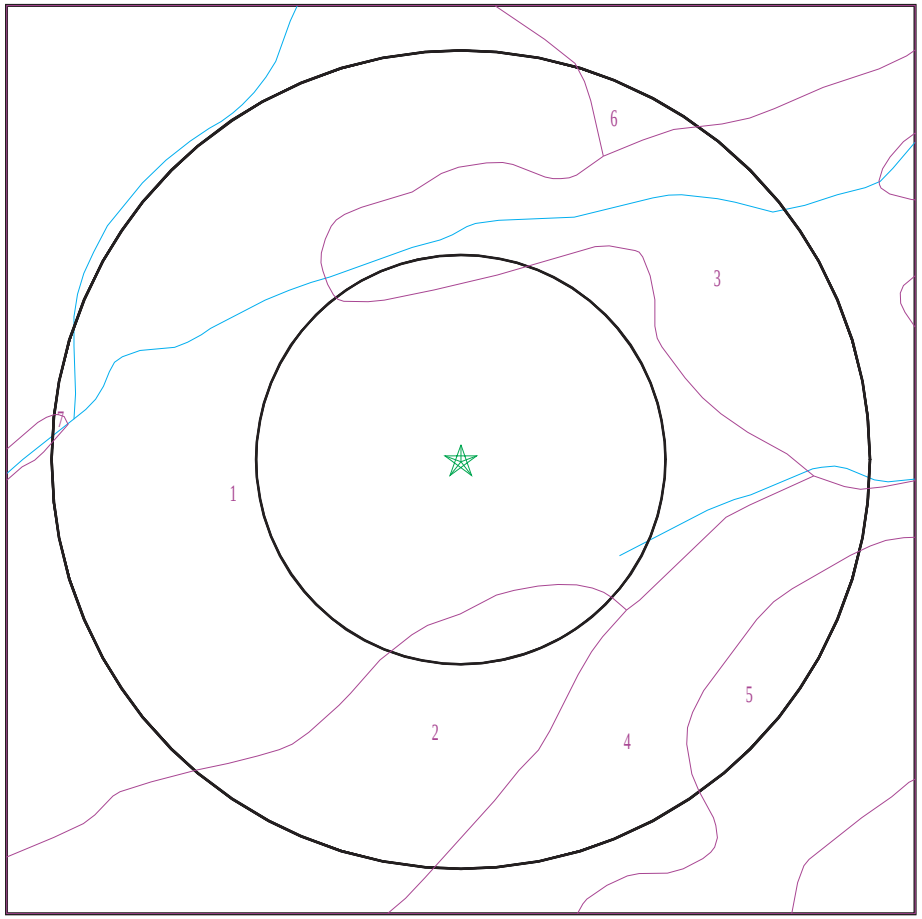
Era: -
System: -
Series: -
Code: N/A *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: -

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4237094.46s



★ Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME: Makamae E ADDRESS: 21 S. Kuakini St. Honolulu HI 96813 LAT/LONG: 21.3185 / 157.8531	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.46s DATE: March 17, 2015 5:39 pm

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DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Kaena

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Poorly drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 107 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4.23 Min: 0.42	Max: 7.3 Min: 6.6
2	9 inches	37 inches	stony clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 7.3 Min: 6.6
3	37 inches	53 inches	stony clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 7.3 Min: 6.6

Soil Map ID: 2

Soil Component Name: Makiki

Soil Surface Texture: clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	20 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 42 Min: 4.23	Max: 5.5 Min: 5.1
2	20 inches	29 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14.11 Min: 4.23	Max: 6 Min: 5.6
3	29 inches	59 inches	paragravelly clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.14 Min: 14.11	Max: 6 Min: 5.6

Soil Map ID: 3

Soil Component Name: Kawaihapai

Soil Surface Texture: stony clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	22 inches	stony clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 42.34 Min: 4.23	Max: 7.3 Min: 6.6
2	22 inches	31 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.14 Min: 14.11	Max: 7.3 Min: 6.6
3	31 inches	53 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.14 Min: 14.11	Max: 7.3 Min: 6.6

Soil Map ID: 4

Soil Component Name: Tantalus

Soil Surface Texture: silty clay loam

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	18 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.14 Min: 14.11	Max: 7.3 Min: 6.1
2	18 inches	29 inches	gravelly very fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.14 Min: 14.11	Max: 7.3 Min: 6.1
3	29 inches	59 inches	gravel	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Clean gravels, Poorly Graded Gravel.	Max: 705 Min: 141.14	Max: 7.3 Min: 6.1

Soil Map ID: 5

Soil Component Name: Tantalus

Soil Surface Texture: silty clay loam

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	18 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Gravels, Clean gravels, Poorly Graded Gravel.	Max: 141.14 Min: 14.11	Max: 7.3 Min: 6.1
2	18 inches	29 inches	gravelly very fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Gravels, Clean gravels, Poorly Graded Gravel.	Max: 141.14 Min: 14.11	Max: 7.3 Min: 6.1
3	29 inches	59 inches	gravel	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Clean gravels, Poorly Graded Gravel.	Max: 705 Min: 141.14	Max: 7.3 Min: 6.1

Soil Map ID: 6

Soil Component Name: Ewa

Soil Surface Texture: stony silty clay

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	18 inches	stony silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Gravels, Clean gravels, Poorly Graded Gravel.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6
2	18 inches	59 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Gravels, Clean gravels, Poorly Graded Gravel.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6

Soil Map ID: 7

Soil Component Name: Water > 40 acres

Soil Surface Texture: stony silty clay

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class:
Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A2	USGS40000269784	1/8 - 1/4 Mile SW
B4	USGS40000269785	1/4 - 1/2 Mile WSW
C5	USGS40000269807	1/4 - 1/2 Mile ENE
D8	USGS40000269733	1/2 - 1 Mile SSW
E10	USGS40000269805	1/2 - 1 Mile West
F12	USGS40000269721	1/2 - 1 Mile South
G15	USGS40000269710	1/2 - 1 Mile South
H19	USGS40000269728	1/2 - 1 Mile SW
20	USGS40000269742	1/2 - 1 Mile SW
I24	USGS40000269715	1/2 - 1 Mile SSW
I25	USGS40000269716	1/2 - 1 Mile SSW
H26	USGS40000269729	1/2 - 1 Mile SW
I29	USGS40000269712	1/2 - 1 Mile SSW
30	USGS40000269719	1/2 - 1 Mile SW
I31	USGS40000269717	1/2 - 1 Mile SSW
J34	USGS40000269703	1/2 - 1 Mile SSW
J37	USGS40000269699	1/2 - 1 Mile SSW
L38	USGS40000269822	1/2 - 1 Mile WNW
K40	USGS40000269687	1/2 - 1 Mile South
M42	USGS40000269794	1/2 - 1 Mile West
N44	USGS40000269704	1/2 - 1 Mile SW
O46	USGS40000269695	1/2 - 1 Mile SSW
P47	USGS40000269852	1/2 - 1 Mile NW
Q48	USGS40000269678	1/2 - 1 Mile South
Q55	USGS40000269670	1/2 - 1 Mile South
Q56	USGS40000269671	1/2 - 1 Mile South
Q57	USGS40000269672	1/2 - 1 Mile South
R60	USGS40000269718	1/2 - 1 Mile SW
R61	USGS40000269713	1/2 - 1 Mile SW
S62	USGS40000269731	1/2 - 1 Mile WSW
N64	USGS40000269705	1/2 - 1 Mile SW
O65	USGS40000269681	1/2 - 1 Mile SSW
R67	USGS40000269706	1/2 - 1 Mile SW
R68	USGS40000269707	1/2 - 1 Mile SW
T69	USGS40000269673	1/2 - 1 Mile SSW
U71	USGS40000269810	1/2 - 1 Mile WNW
Q85	USGS40000269664	1/2 - 1 Mile South
Q86	USGS40000269657	1/2 - 1 Mile South
Q87	USGS40000269658	1/2 - 1 Mile South
Q88	USGS40000269656	1/2 - 1 Mile South
Q89	USGS40000269654	1/2 - 1 Mile South

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
Q90	USGS40000269655	1/2 - 1 Mile South
Q91	USGS40000269662	1/2 - 1 Mile South
Q92	USGS40000269663	1/2 - 1 Mile South
Q93	USGS40000269661	1/2 - 1 Mile South
Q94	USGS40000269659	1/2 - 1 Mile South
Q95	USGS40000269660	1/2 - 1 Mile South
V98	USGS40000269795	1/2 - 1 Mile West
R99	USGS40000269708	1/2 - 1 Mile SW
W106	USGS40000269688	1/2 - 1 Mile SW
W107	USGS40000269689	1/2 - 1 Mile SW
X109	USGS40000269711	1/2 - 1 Mile SW
AA110	USGS40000269850	1/2 - 1 Mile NW
W111	USGS40000269682	1/2 - 1 Mile SSW
W112	USGS40000269683	1/2 - 1 Mile SSW
Y113	USGS40000269645	1/2 - 1 Mile South
Z115	USGS40000269697	1/2 - 1 Mile SW
X119	USGS40000269700	1/2 - 1 Mile SW
X120	USGS40000269701	1/2 - 1 Mile SW
AB122	USGS40000269649	1/2 - 1 Mile SSW
AA124	USGS40000269853	1/2 - 1 Mile NW

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
F13	HI0000323	1/2 - 1 Mile South

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

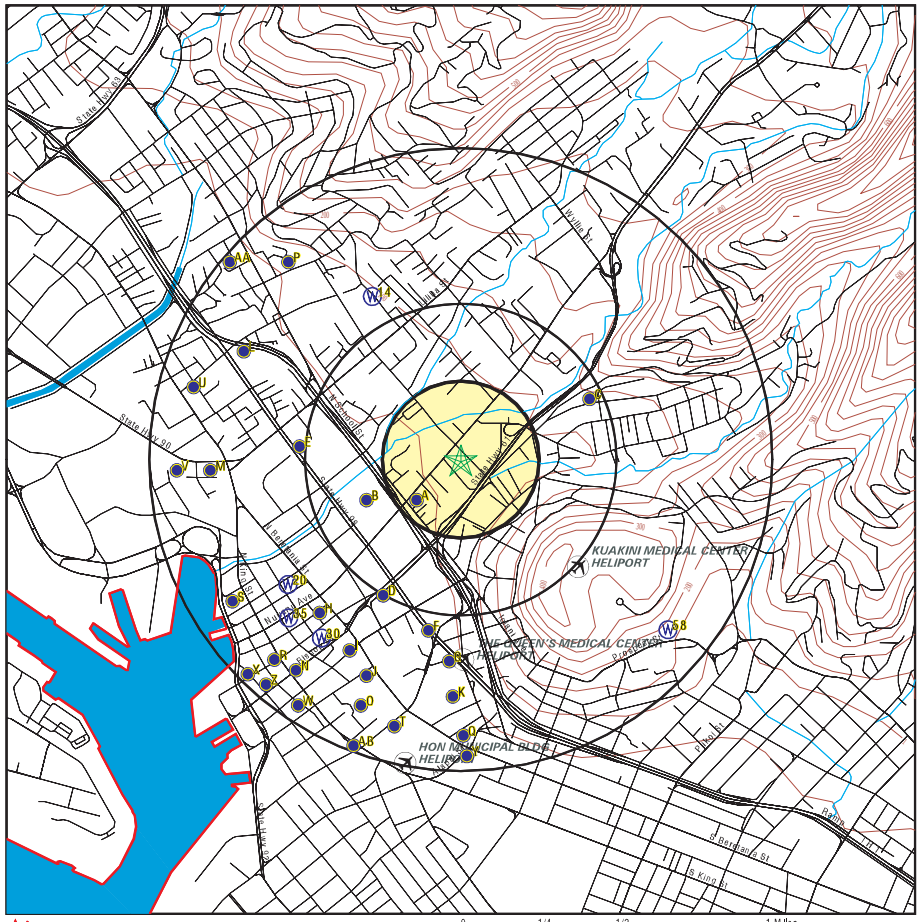
MAP ID	WELL ID	LOCATION FROM TP
A1	HI8000000002349	1/8 - 1/4 Mile SW
B3	HI8000000002348	1/4 - 1/2 Mile WSW
C6	HI8000000002373	1/4 - 1/2 Mile ENE
D7	HI8000000002308	1/4 - 1/2 Mile SSW
E9	HI8000000002369	1/2 - 1 Mile West
F11	HI8000000002300	1/2 - 1 Mile South
14	HI8000000002419	1/2 - 1 Mile NNW
H16	HI8000000002307	1/2 - 1 Mile SW
H17	HI8000000002303	1/2 - 1 Mile SW
G18	HI8000000002289	1/2 - 1 Mile South
H21	HI8000000002301	1/2 - 1 Mile SW
I22	HI8000000002297	1/2 - 1 Mile SSW
I23	HI8000000002296	1/2 - 1 Mile SSW
I27	HI8000000002293	1/2 - 1 Mile SSW
I28	HI8000000002295	1/2 - 1 Mile SSW
J32	HI8000000002284	1/2 - 1 Mile SSW
K33	HI8000000002272	1/2 - 1 Mile South

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
35	HI8000000002302	1/2 - 1 Mile SW
J36	HI8000000002282	1/2 - 1 Mile SSW
L39	HI8000000002389	1/2 - 1 Mile WNW
M41	HI8000000002359	1/2 - 1 Mile West
N43	HI8000000002288	1/2 - 1 Mile SW
O45	HI8000000002271	1/2 - 1 Mile SSW
P49	HI8000000002430	1/2 - 1 Mile NW
Q50	HI8000000002248	1/2 - 1 Mile South
Q51	HI8000000002247	1/2 - 1 Mile South
R52	HI8000000002294	1/2 - 1 Mile SW
R53	HI8000000002292	1/2 - 1 Mile SW
S54	HI8000000002306	1/2 - 1 Mile WSW
58	HI8000000002299	1/2 - 1 Mile SE
N59	HI8000000002287	1/2 - 1 Mile SW
O63	HI8000000002257	1/2 - 1 Mile SSW
T66	HI8000000002250	1/2 - 1 Mile SSW
U70	HI8000000002375	1/2 - 1 Mile WNW
Q72	HI8000000002237	1/2 - 1 Mile South
Q73	HI8000000002239	1/2 - 1 Mile South
Q74	HI8000000002238	1/2 - 1 Mile South
Q75	HI8000000002244	1/2 - 1 Mile South
Q76	HI8000000002240	1/2 - 1 Mile South
Q77	HI8000000002243	1/2 - 1 Mile South
Q78	HI8000000002242	1/2 - 1 Mile South
Q79	HI8000000002241	1/2 - 1 Mile South
Q80	HI8000000002234	1/2 - 1 Mile South
Q81	HI8000000002235	1/2 - 1 Mile South
Q82	HI8000000002236	1/2 - 1 Mile South
N83	HI8000000002281	1/2 - 1 Mile SW
N84	HI8000000002280	1/2 - 1 Mile SW
R96	HI8000000002286	1/2 - 1 Mile SW
V97	HI8000000002358	1/2 - 1 Mile West
W100	HI8000000002269	1/2 - 1 Mile SSW
W101	HI8000000002268	1/2 - 1 Mile SSW
X102	HI8000000002290	1/2 - 1 Mile SW
W103	HI8000000002260	1/2 - 1 Mile SSW
W104	HI8000000002261	1/2 - 1 Mile SSW
Y105	HI8000000002228	1/2 - 1 Mile South
Z108	HI8000000002277	1/2 - 1 Mile SW
AA114	HI8000000002429	1/2 - 1 Mile NW
X116	HI8000000002279	1/2 - 1 Mile SW
X117	HI8000000002278	1/2 - 1 Mile SW
AB118	HI8000000002230	1/2 - 1 Mile SSW
AB121	HI8000000002229	1/2 - 1 Mile SSW
X123	HI8000000002276	1/2 - 1 Mile SW
AA125	HI8000000002436	1/2 - 1 Mile NW

PHYSICAL SETTING SOURCE MAP - 4237094.46s



- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location

SITE NAME: Makamae E ADDRESS: 21 S. Kuakini St. Honolulu HI 96813 LAT/LONG: 21.3185 / 157.8531	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.46s DATE: March 17, 2015 5:39 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
A1 **SW** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002349**
A2 **SW** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269784**
B3 **WSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002348**
B4 **WSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269785**
C5 **ENE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269807**
C6 **ENE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002373**
D7 **SSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002308**
D8 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269733**
E9 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002369**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
E10 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269805**
F11 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002300**
F12 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269721**
F13 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FRDS PWS**	**HI0000323**
14 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002419**
G15 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269710**
H16 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002307**
H17 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002303**
G18 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002289**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
H19 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269728**
20 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269742**
H21 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002301**
I22 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002297**
I23 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002296**
I24 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269715**
I25 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269716**
H26 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269729**
I27 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002293**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
I28 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002295**
I29 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269712**
30 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269719**
I31 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269717**
J32 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002284**
K33 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002272**
J34 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269703**
35 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002302**
J36 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002282**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
J37 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269699**
L38 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269822**
L39 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002389**
K40 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269687**
M41 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002359**
M42 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269794**
N43 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002288**
N44 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269704**
O45 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002271**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
O46 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269695**
P47 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269852**
Q48 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269678**
P49 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002430**
Q50 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002248**
Q51 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002247**
R52 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002294**
R53 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002292**
S54 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002306**

Map ID Direction Distance Elevation		Database	EDR ID Number
Q55 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269670**
Q56 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269671**
Q57 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269672**
58 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002299**
N59 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002287**
R60 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269718**
R61 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269713**
S62 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269731**
O63 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002257**

Map ID Direction Distance Elevation		Database	EDR ID Number
N64 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269705**
O65 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269681**
T66 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002250**
R67 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269706**
R68 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269707**
T69 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269673**
U70 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002375**
U71 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269810**
Q72 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002237**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
Q73 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002239**
Q74 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002238**
Q75 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002244**
Q76 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002240**
Q77 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002243**
Q78 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002242**
Q79 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002241**
Q80 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002234**
Q81 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002235**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
Q82 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002236**
N83 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002281**
N84 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002280**
Q85 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269664**
Q86 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269657**
Q87 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269658**
Q88 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269656**
Q89 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269654**
Q90 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269655**

Map ID Direction Distance Elevation		Database	EDR ID Number
Q91 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269662**
Q92 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269663**
Q93 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269661**
Q94 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269659**
Q95 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269660**
R96 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002286**
V97 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002358**
V98 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269795**
R99 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269708**

Map ID Direction Distance Elevation		Database	EDR ID Number
W100 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002269**
W101 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002268**
X102 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002290**
W103 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002260**
W104 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002261**
Y105 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002228**
W106 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269688**
W107 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269689**
Z108 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002277**

Map ID Direction Distance Elevation		Database	EDR ID Number
X109 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269711**
AA110 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269850**
W111 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269682**
W112 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269683**
Y113 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269645**
AA114 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002429**
Z115 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269697**
X116 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002279**
X117 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002278**

Map ID Direction Distance Elevation		Database	EDR ID Number
AB118 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002230**
X119 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269700**
X120 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269701**
AB121 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002229**
AB122 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269649**
X123 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002276**
AA124 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269853**
AA125 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002436**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for HONOLULU County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 96813

Number of sites tested: 3

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.067 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	0.350 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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HAWAII PUBLIC HOUSING AUTHORITY

ENVIRONMENTAL REVIEW

PUMEHANA

Honolulu, O`ahu

AMP 35
HPHA No. 1047

Prepared for:

State of Hawaii
Hawaii Public Housing Authority

Prepared by:

HHF PLANNERS
places for people

U.S. Department of Housing and Urban Development
451 Seventh Street, SW
Washington, DC 20410
www.hud.gov

espanol.hud.gov

Environmental Review for Activity/Project that is Categorically Excluded Subject to Section 58.5

Pursuant to 24 CFR 58.35(a)

Project Information

Project Name: Pumehana (AMP 35)

Responsible Entity: Hawaii Public Housing Authority
1002 North School Street
Honolulu, HI 96817

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

State/Local Identifier: State of Hawaiʻi

Preparer: Mr. Scott Ezer, Vice President
HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaiʻi 96813

Certifying Officer Name and Title: Mr. David Y. Ige
Governor, State of Hawaiʻi

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

Consultant (if applicable): HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaiʻi 96813

Direct Comments to: Mr. Hakim Ouansafi, Executive Director
Hawaii Public Housing Authority
1002 North School Street
Honolulu, Hawaiʻi 96817

Project Location: 1212 Kīnaʻu Street
Honolulu, Hawaiʻi 96814

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]**:**

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a "major construction activity" and would involve one or a combination of several HUD designated categories of actions.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent;
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons;
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland;
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation;
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls);
7. Interior and exterior renovations and rehabilitation;
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site;
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Level of Environmental Review Determination:

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.5. Compliance with and completion of conformance determinations for other statute, executive order, or regulation has been completed and support the Categorical Exclusion.

Funding Information

Grant Number	HUD Program	Funding Amount
To be determined	Capital Fund	
To be determined	Economic Development Initiative Special Project Grant	
To be determined	Other Grants	

Estimated Total HUD Funded Amount:

To be determined by HUD using a formula and based upon federal budget.

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]**:**

Depends upon funds available.

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	*The project is not within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.*
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☒	*The State of Hawai'i does not have any designated coastal barrier resource units. (http://www.fws.gov/CBRA/Maps/Mapper.html)*
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes ☐ No ☒	*As indicated in the Flood Insurance Rate Panel Number 15003C0362G, Effective: January 19, 2011, Index Date: November 05, 2014, this housing project is located within Flood Hazard Zone X (areas determined to be outside the 0.2% annual chance floodplain). A field inspection and information obtained from the site manager confirmed no major flooding issues within the site. Based on its description, this project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.*

STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5		
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes ☐ No ☒	*The State of Hawai'i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. EPA's Green Book for currently designated "nonattainment areas" as of June 2015. Planned repair and rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.*
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes ☐ No ☒	*Documentation from the Office of Planning determined that projects receiving federal funds do not require review for consistency with Hawai'i's Coastal Zone Management (CZM) program.*
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☐ No ☒	*There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.*
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes ☒ No ☐	*The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (USFWS) in their letter dated September 28, 2015 which is included in the Appendices, while project-specific mitigation measures are identified in the following section.*
Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes ☐ No ☒	*There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.*

Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes ☐ No ☒	*The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.*
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes ☐ No ☒	*This housing project is located in Zone X, an area of minimal flooding (i.e., 0.2% annual chance flood), and is located outside the 500-year flood zone. A field inspection and information obtained from AMP Manager confirmed no major flooding issues within the project site.*
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes ☐ No ☒	*The Pumehana housing project was first occupied in 1972 and is 43 years old. To be eligible for listing in the National Register of Historic Places (NRHP), a property must meet the National Register criteria for evaluation which involves examining its integrity, significance, and age (generally at least 50 years old). Due to its age, this housing project does not meet the eligibility criteria to be evaluated for the NRHP. In a letter to the State Historic Preservation Officer dated July 23, 2015, the HPHA determined that no historic properties would be affected by repair and rehabilitation improvements for this housing project. No comments or objections about this no effect determination were received.*
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes ☐ No ☒	*The project site is not situated along a highway that has a high volume of vehicular traffic. The HUD noise calculator estimated noise levels at the project site to be 57.8 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.*
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes ☐ No ☒	*The housing project is located within the O‘ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation.*

Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☐ No ☒	*There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.* *(http://www.fws.gov/wetlands/data/mapper.HTML)*
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes ☐ No ☒	*There are no Wild and Scenic Rivers in Hawai'i, which excludes this project from mitigation or formal consultation requirements (http://www.rivers.gov/map.php)*
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes ☐ No ☒	*Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, these improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects on minority populations and low-income populations. Improvements should benefit low-income and minority populations living within this housing project.*

Field Inspection (Date and completed by)**:** May 29, 2015
Joseph Tamburello, Planner
HHF Planners

Summary of Findings and Conclusions:

Repair and rehabilitation improvements implemented for this existing housing project by HPHA should not result in significant environmental impacts based upon research data collected, a field inspection, consultation with the site manager and maintenance staff, consultation with pertinent resource agencies, and prior HPHA experience implementing repair and rehabilitation improvements. Therefore, repair and rehabilitation improvements would comply and be consistent with the statutes, executive orders, and regulations addressed. Furthermore, HPHA would evaluate improvements planned to ensure the work is consistent with the designated categories of actions described under the project description section. Compliance with these factors evaluated are further addressed in the attached Source Documentation Statutory Worksheet along with relevant technical reports/assessments.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Law, Authority, or Factor	Mitigation Measure
Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	*Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.* *Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.* *Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.* *Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.* *Newell's shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.* *Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.*

	<u>Hawaiian Waterbirds</u>: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo‘i, impoundments or other vegetated water bodies. *1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS’s recommended Hawaiian Waterbird Survey Protocols.* *2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.* *3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.* *In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.* *<u>Additional Measures</u>: The following additional measures would be implemented:* *1. No vegetation or soil disturbance shall be conducted outside a project’s previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.*

Determination:

☒ This categorically excluded activity/project converts to **EXEMPT** per Section 58.34(a)(12), because it does not require any mitigation for compliance with any listed statutes or authorities, nor requires any formal permit or license; **Funds may be committed and drawn down after certification of this part** for this (now) EXEMPT project; OR

☐ This categorically excluded activity/project cannot convert to Exempt status because one or more statutes or authorities listed at Section 58.5 requires formal consultation or mitigation. Complete consultation/mitigation protocol requirements, **publish NOI/RROF and obtain "Authority to Use Grant Funds"** (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR

☐ This project is not categorically excluded OR, if originally categorically excluded, is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

Preparer Signature: Scott Ezer Date: 11-10-15

Name/Title/Organization: Mr. Scott Ezer, Vice President
HHF Planners

Responsible Entity Agency Official Signature:
David Y. Ige Date: APR 28 2016

Name/Title: Mr. David Y. Ige, Governor

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

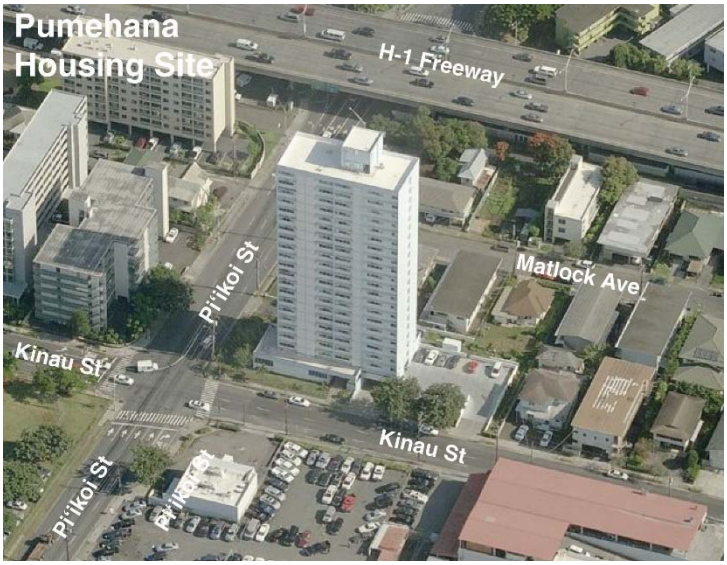
Pumehana (HA # 1047)

TMK: (1) 2-4-011:039

Hawai‘i Public Housing Authority (HPHA) Environmental Review

SOURCE DOCUMENTATION (SD) STATUTORY WORKSHEET

Site Visit Date: May 29, 2015
Prepared By: Joseph Tamburello



The Pumehana elderly housing project is located in the Makiki community of Honolulu on the island of O‘ahu. Makiki is an urban neighborhood situated at the base of Tantalus and bordered by Punchbowl Crater to the west. The housing site is positioned at the corner of Kīna’u Street and Pi‘ikoi Street opposite from Ka‘ahumanu Elementary School.

Pumehana was first occupied in 1972 and has a street address of 1212 Kinau Street. The property consists of 0.46 acres, and it is identified as Tax Map Key (TMK) No. (1) 2-4-011:039. The housing project is comprised of a single 21-story high-rise apartment building with a variety of studio and one-bedroom units, and a single two-bedroom unit. The State’s land use designation for the property is the “Urban District.” The City’s zoning for the parcel is A-2 Medium-density Apartment.

The project site is not located within a tsunami evacuation zone, and the entire site is located in Flood Zone X, an area of minimal flood hazard (Community Panel Numbers 15003C0362G, Effective: January 19, 2011; FIRM Index: November 05, 2014).

The following figures in Exhibit A provide supporting information on this housing project:

Figure 1: Location Map
Figure 2: TMK Map
Figure 3: Site Map
Figure 4: Flood Map

COMPLIANCE FACTORS

I. AIRPORT CLEAR ZONES AND ACCIDENT POTENTIAL ZONES (24 CFR PART 51D)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The housing project does not lie within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: 24 CFR 51 (D).

Honolulu International Airport Master Plan - 2010 (August 1994), State Department of Transportation, Airports Division;

*Hawai`i Airports and Flying Safety Guide (2012-13, Fifth Edition, Revision 1)* Hawai`i Department of Transportation, Airports Division; and

http://hidot.hawaii.gov/airports/files/2013/01/Airport-Safety-Guide-2012-2013-5rev1.pdf

II. COASTAL BARRIER RESOURCES (COASTAL BARRIER IMPROVEMENT ACT OF 1990 [16 USC 3501])

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i does not have any designated coastal barrier resource units.

SUPPORTING DOCUMENTATION:

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/cbra/maps/mapper.html (Date accessed: 6/30/15).

III. FLOOD INSURANCE (FLOOD DISASTER PROTECTION ACT OF 1973 AND NATIONAL FLOOD INSURANCE REFORM ACT OF 1994 [42 USC 4001-4128 AND 42 USC 5154a])

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program.

As indicated in the Flood Insurance Rate Panel Number 15003C0362G, Effective: January 19, 2011, Index Date: November 05, 2014, this housing project is located within Flood Hazard Zone X (areas determined to be outside the 0.2% annual chance floodplain). A field inspection and information obtained from the site manager confirmed no major flooding issues within the site. Based on its description, this project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal signs of flooding problems. An interview with the AMP Manager also determined that major ponding or flooding issues are currently not an issue for the project site.

Printed: Flood Insurance Rate Map, Community Panel Numbers 15003C0362G, Effective: January 19, 2011; FIRM Index: November 05, 2014.

Hawai`i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 7/27/15)

IV. CLEAN AIR ACT (40 CFR PARTS 6, 51, 93)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. Environmental Protection Agency's Green Book for currently designated "nonattainment areas" as of June 2015. Planned rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.

SUPPORTING DOCUMENTATION:

Printed: *State of Hawai‘i Annual Summary 2013 Air Quality Data*. State of Hawai'i, Department of Health, July 2014.

U.S. Environmental Protection Agency website at: http://epa.gov/airquality/greenbk/

V. COASTAL ZONE MANAGEMENT ACT (16 USC 1451, SECTIONS 307 (C), (D)

CONTACT:

Mr. John Nakagawa
Office of Planning
Department of Business, Economic Development & Tourism
State of Hawai‘i
P.O. Box 2359
Honolulu, Hawai'i, 96804-2359

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai‘i's Coastal Zone Management (CZM) program.

SUPPORTING DOCUMENTATION:

Contact: In an email to the Office of Planning (OP) dated July 27, 2015, the HPHA determined that the use of HUD funds for the implementation of repair and rehabilitation improvements does not require review for consistency with Hawai‘i's CZM program. The OP confirmed this determination in an email dated July 28, 2015 and it is included in the Appendices.

Experience: Previous reviews conducted by OP in 2003, 2005, and 2010 determined that projects receiving federal funds from HUD do not require CZM federal consistency review. OP's current determination confirms this condition is still applicable. Copies of these prior documentations are included in the Appendices.

VI. CONTAMINATION AND TOXIC SUBSTANCES (24 CFR PART 50.3 & 58.5(I)(2))

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Project Not Affected.

There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.

SUPPORTING DOCUMENTATION:

Field: A site inspection and interview with the Asset Management Project (AMP) Manager revealed no presence of any toxic or radioactive materials on the project site that warrant concern.

Study: Environmental Data Resources, Inc. (EDR), conducted a search of available environmental records and prepared a Radius Map Report (Inquiry Number 4381593.2s, August 13, 2015). EDR reviewed more than 25 federal and statewide regulatory databases for information regarding the treatment, storage, disposal and release of toxic chemicals at the project site and within specific radii (generally 1 mile) of the site. A Detail Map within the EDR report documents those sites identified within a 0.25 mile radius of the project site. The EDR report in Exhibit B includes the results of their research findings.

The EDR report notes the following activities within a 0.125 mile radius of the project site: the subject housing site, Pumehana Building was inspected for asbestos. Schuman Carriage (354 feet away) experienced a hydraulic fluid release, No Further Action Determination with Institutional Controls. Schuman Carriage has two LUST, Status: Site Cleanup Completed (NFA); Six UST, Status: Permanently Out of Use. Safeway Store #2944 is classified as a Conditionally Exempt Small Quantity Generator (Handler), no violations found.

This project site was not identified as a Formerly Used Defense Site (FUDS) by the U.S. Army Corps of Engineers and is not subject to any cleanup actions for Department of Defense-generated contamination.

VII. ENDANGERED SPECIES (50 CFR PART 402)

CONTACT:
Mr. Loyal Mehrhoff, Field Supervisor
Pacific Islands Administrator
Fish and Wildlife Services
U.S. Department of the Interior
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawai'i 96813
Tel. #: 792-9400

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Adverse Effect Subject to Mitigation

The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices.

SUPPORTING DOCUMENTATION:

Contact: A letter from the HPHA dated July 24, 2015 was submitted to the Pacific Island Administrator for the FWS determining that repair and rehabilitation improvements that may be implemented using HUD funds for this housing project would have no likelihood of effect on any listed species or proposed species, or existing or proposed designated critical habitat subject to certain measures. Concurrence with this determination along with proposed minimization and avoidance measures was received from the FWS in a letter dated September 28, 2015 which is included in the Appendices. This housing project is subject to the following minimization and avoidance measures.

Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.

Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.

Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.

Newell's shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If

nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.

Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.

Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo‘i, impoundments or other vegetated water bodies.

1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS’s recommended Hawaiian Waterbird Survey Protocols.
2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.
3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.

In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.

Additional Measures: The following additional measures would be implemented:

1. No vegetation or soil disturbance shall be conducted outside a project’s previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.

Experience: The FWS was previously consulted as part of environmental reviews that were completed in 2005 (39 housing projects) and 2010 (70 housing projects) which supported the determination that repair and rehabilitation improvements would either: 1) have no likelihood of effect for certain housing projects; or 2) not likely adversely affect federally listed species or critical habitat for certain housing projects subject to mitigative measures. A summary of these consultation efforts follows.

2005 Consultation: In a letter dated July 15, 2005, the Housing and Community Development Corporation of Hawai‘i (predecessor to the HPHA), determined that the implementation of minor repair and rehabilitation improvements for 39 housing projects

would not have an adverse effect on federally-listed species or critical habitat. In a letter dated August 11, 2005, the FWS concurred with the HCDCH determination.

2010 Consultation: In a letter dated May 17, 2010, the HPHA informed the FWS that HUD funds would be used to immediately implement repair and rehabilitation improvements for six housing projects on O'ahu and the island of Hawai`i. In a subsequent letter dated May 21, 2010, the FWS was informed that HPHA would be using HUD funds to implement minor repair and rehabilitation improvements for 64 projects throughout the State. In both letters, the HPHA determined that the repair and rehabilitation improvements were not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat. Based on further consultation and a meeting with FWS staff on June 24, 2010, the HPHA determined that repair and rehabilitation improvements for most of their housing projects would not likely adversely affect any listed or proposed species, or existing or proposed designated habitat, subject to various mitigative measures for certain housing projects.

VIII. EXPLOSIVE AND FLAMMABLE OPERATIONS (24 CFR PART 51C)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

SUPPORTING DOCUMENTATION:

Field: Field inspection was limited to the exterior of residential buildings and associated structures for this housing project. No above-ground explosive or flammable material storage containers in excess of 100 gallons were observed at the site.

Printed: 24 CFR Part 51, Subpart C addresses acceptable separation distance from above-ground explosive or flammable fuels or chemical containers. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

IX. FARMLANDS PROTECTION (7 CFR PART 658)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. Since the property consists of an existing housing development within an urbanized area, no farmlands would be impacted by the implementation of repair and rehabilitation improvements.

Printed: The property is designated for "Urban" use by the State Land Use Commission and the County's zoning for the parcel is RD-3.75 Double-Family Residential District.

Hawai`i Office of Planning website at: http://planning.hawaii.gov/gis/
(Date accessed: 6/30/2015)

X. FLOODPLAIN MANAGEMENT (EXECUTIVE ORDER 11988, 24 CFR PART 55)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program

This housing project is located in Zone X, an area of minimal flooding (i.e., 0.2% annual chance flood), and is located outside the 500-year flood zone. A field inspection and information obtained from AMP Manager confirmed no major flooding issues within the project site.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal signs of previous flooding problems. An interview with the AMP Manager also determined that no major ponding or flooding issues occur on the project site.

Printed: Flood Insurance Rate Map, Community Panel Numbers 15003C0362G, Effective: January 19, 2011, Index Date: November 05, 2014.

Hawai`i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/ (Date accessed 7/21/15)

XI. HISTORIC PRESERVATION (NATIONAL HISTORIC PRESERVATION ACT OF 1966; SECTIONS 106 AND 110; 36 CFR, PART 800)

CONTACT:	SUPPORTING DOCUMENTS	
Ms. Suzanne Case, Chairperson	X	Field
Department of Land and Natural Resources (DLNR)	X	Contact
State of Hawai‘i	X	Printed
1151 Punchbowl Street		Experience
Honolulu, Hawai‘i 96813	X	Study
Tel. #: 587-0400		

DETERMINATION:

Status Category: No Effect on Historic Properties

The subject housing site was initially occupied in 1972 and is 43 years old. To be eligible for listing in the National Register of Historic Places (NRHP), a property must meet the National Register criteria for evaluation which involves examining its integrity, significance, and age (generally at least 50 years old). Due to its age, this housing project does not meet the eligibility criteria to be evaluated for the NRHP. In a letter to the State Historic Preservation Officer (SHPO) dated July 23, 2015, the HPHA determined that no historic properties would be affected (no effect) by repair and rehabilitation improvements for this housing project. No comments or objections about this no effect determination were received.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the subject housing site did not locate any existing or potential archaeological sites (e.g., heiau) or cultural features on the property. An interview with the property manager and maintenance supervisor indicates that no known sites or features are present on the property.

Contact: A letter from the HPHA dated July 23, 2015, which is included in the Appendix, was submitted to the State Historic Preservation Officer [SHPO] (Chair of State Board of Land and Natural Resources) as part of Section 106 consultation determining that no historic properties would be affected (no effect) by repair and rehabilitation improvements that may be implemented using HUD funds for this housing project. The SHPO did not submit any comments or objections on the “no effect” determination for this housing project, which included follow-up e-mails with the State Historic Preservation Division regarding a response. On September 28, 2015, notice of HPHA’s determination was also distributed to several native Hawaiian organizations and the various County Planning Departments. No concerns or opposition to this determination was received

Printed: A review of the U.S. National Parks Service website for the National Register of Historic Places did not identify any historic properties within the limits of this housing project. A similar review of the State DLNR website for the State Register of Historic Places revealed that there are no historic properties within the project site.

National Register: U.S. National Park Service website at: http://www.nps.gov/nr/research/ (Date accessed: 7/2/15).

State Register: Hawai`i Department of Land and Natural Resources website at: http://dlnr.hawaii.gov/shpd/state-register/ (Date accessed: 7/2/15).

Experience: In letter to the State Historic Preservation Officer (SHPO) dated April 19, 2011, the HPHA determined that minor repair and rehabilitation improvement at 57 public housing projects throughout Hawai'i (including this housing site) would have "no effect" on historic properties. The SHPO had no comments or objections on the "no effect" determination.

XII. NOISE ABATEMENT CONTROL (24 CFR PART 51B)

SUPPORTING DOCUMENTS

X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Within HUD Noise Standards

The project site is not situated along a highway that has a high volume of vehicular traffic. The HUD noise calculator estimated noise levels at the project site to be 57.8 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

SUPPORTING DOCUMENTATION:

Field: No significant noise generating sources were identified within the project site during the site inspection. The subject housing site is located within an urban residential neighborhood. Although it is within proximity of the H-1 Highway, it is approximately 300 feet away from the centerline of the highway and traffic noise is buffered by surrounding apartment buildings and structures. Furthermore, an interview with the AMP Manager did not identify any loud noise producing sources in the area. As a result, notable noise sources are predominantly associated with vehicular traffic along adjacent streets. Traffic noise did not appear significant during the site visit.

Study: The HUD day/night noise level calculator was used to estimate approximate traffic noise. Traffic counts were based on 2013 Hawai'i State Department of Transportation data taken along the Kīna'u Street and another station along Pi'ikoi Street (both are minor County arterial roads). Using this HUD calculator, the estimated noise levels from both streets combined at the project site is 57.8 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and

rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

XIII. SOLE SOURCE AQUIFER (40 CFR PART 149)

	SUPPORTING DOCUMENTS
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact on Sole Source Aquifer

The housing project is located within the O‘ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation. However, if exceptional circumstances require compliance steps with any of these authorities, such compliance must be established and documented prior to approving the site-specific loan or grant.

SUPPORTING DOCUMENTATION:

Printed: This determination was based upon review of the Sole Source Aquifer Memorandum of 4/30/90 (Sections II.B.1 and II.B.2) and consideration of the type of rehabilitation related improvements that would be conducted for this project.

XIV. WETLANDS PROTECTION (EXECUTIVE ORDER 11990)

	SUPPORTING DOCUMENTS
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the property did not identify the presence of any wetlands.

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/wetlands/data/mapper.html (Date accessed 7/23/2015).

XV. WILD AND SCENIC RIVERS ACT (16 USC 1271, SECTION 7 (B), (C))

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no Wild and Scenic Rivers in Hawai‘i, which excludes this project from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: National Wild and Scenic Rivers System website at: http://www.rivers.gov/index.php (Date accessed: 6/30/2015).

XVI. ENVIRONMENTAL JUSTICE (EXECUTIVE ORDER NO. 12898)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Conflict with Requirements

Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, repair and rehabilitation improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations. Repair and rehabilitation improvements should benefit low-income and minority populations living within this housing project.

SUPPORTING DOCUMENTATION:

Printed: Executive Order 12898.

U.S. Department of Housing and Urban Development website at:
https://www.hudexchange.info/environmental-review/environmental-justice/

EXHIBIT A

Location Map, TMK Map, Site Map, Flood Map, and Site Photos

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

HONOLULU RAIL TRANSIT

Transit Corridor

Transit Station

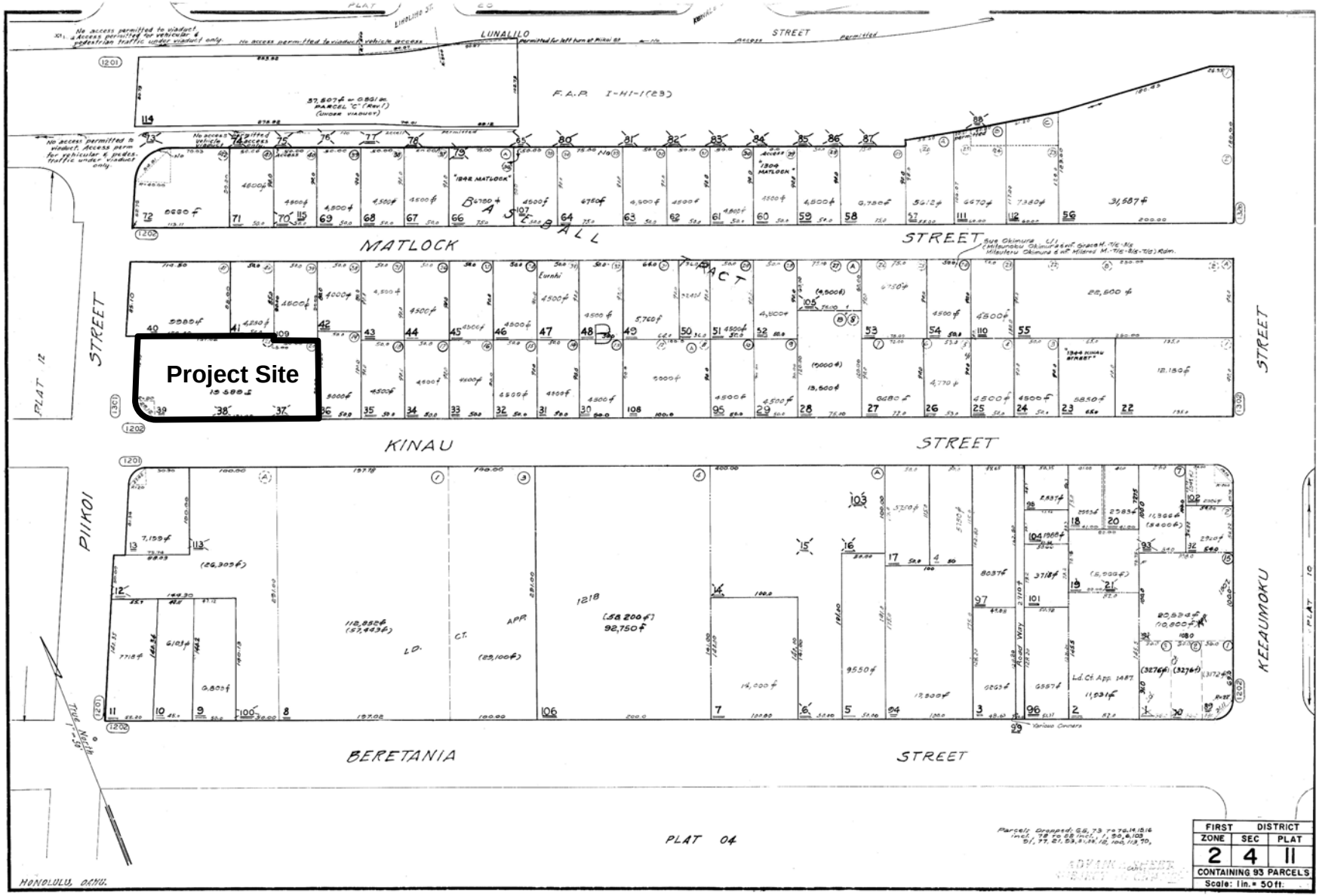
HPHA No. 1047 - Pumehana Homes (AMP 35)

Figure 1 - Project Location Map

Honolulu, O'ahu

1,000 FT

HHF PLANNERS
places for people

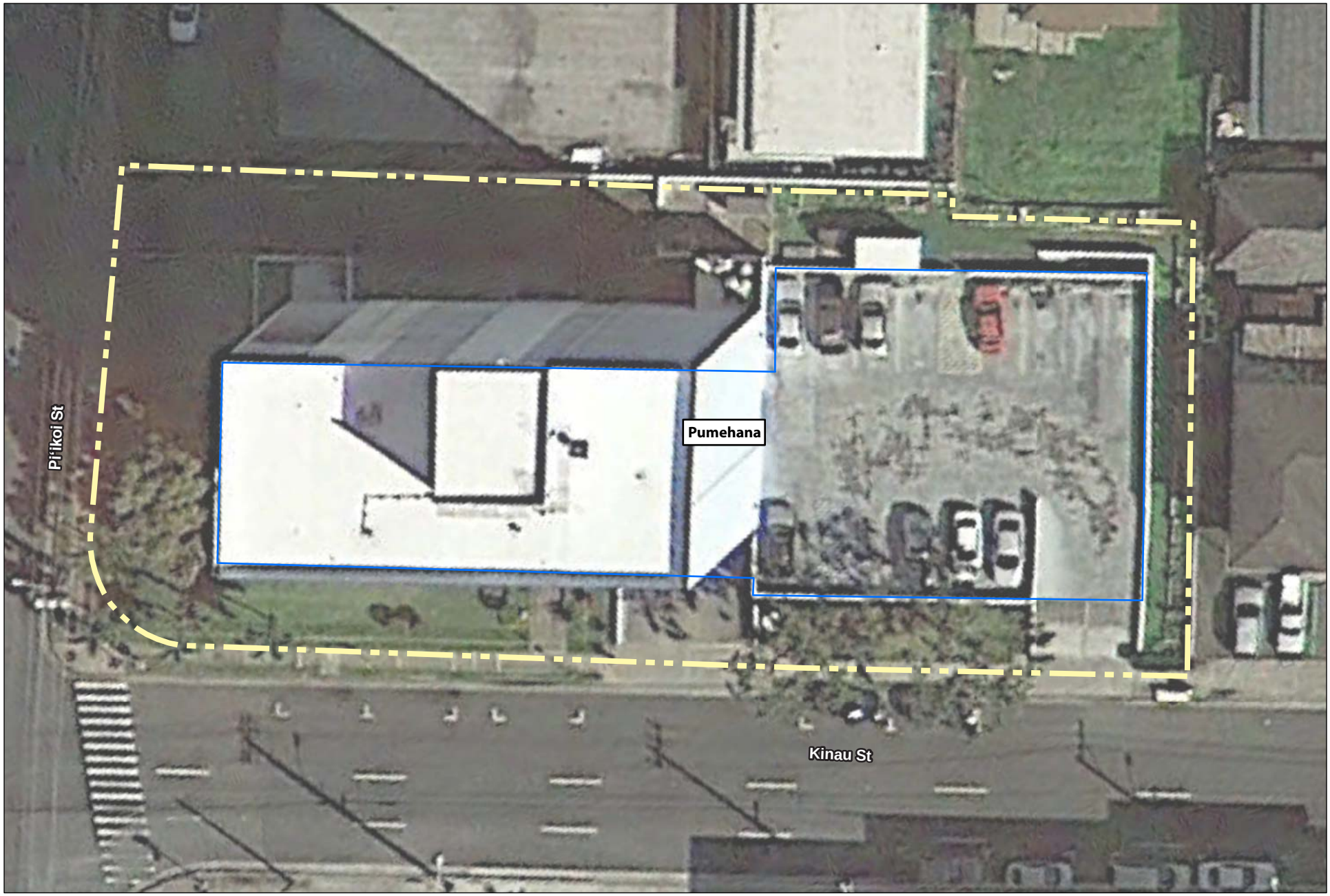


HPHA No. 1047 - Pumehana Homes (AMP 35)

Figure 2 - TMK Map

Honolulu, O'ahu

HHF PLANNERS
places for people



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1047 - Pumehana Homes (AMP 35)

Figure 3 - Site Map

Honolulu, O'ahu

20 FEET

HHF PLANNERS
places for people

Source: State of Hawaiʻi GIS Data and Google Earth Pro - 1/12/2013

LEGEND

Zone X - Outside the 0.2% Annual Chance of Flood

HPHA No. 1047 - Pumehana Homes (AMP 35)

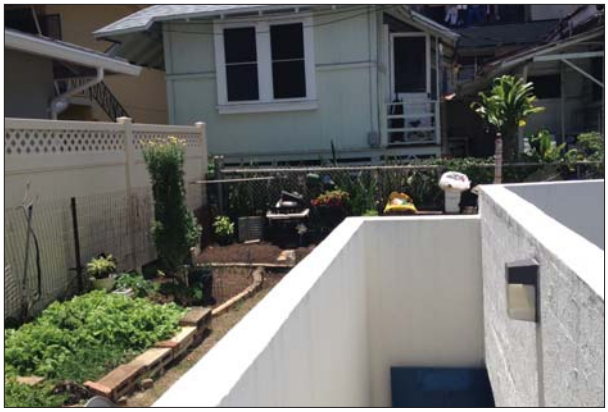
Figure 4 - Flood Map

Honolulu, Oʻahu

20 FEET

HHF PLANNERS
places for people

PUMEHANA HOMES
SITE PHOTOS



Project's northeastern corner boundary

Project's northern boundary

Project's northern boundary, view toward Piikoi Street

Project's northern boundary, view from Piikoi Street

Project's southern boundary, along Kinau Street, facing east

Project's southern boundary, along Kinau Street, facing west

PUMEHANA HOMES
SITE PHOTOS

View of rear project boundary from parking deck

Piikoi Street frontage

Front yard condition along Piikoi Street

Front yard condition at corner of Piikoi abd Kinau Street

Fuel storage for backup generator

Storage area

EXHIBIT B

EDR Radius Map Report

Pumehana
1212 Kinau Street
Honolulu, HI 96814

Inquiry Number: 4381593.2s
August 13, 2015

The EDR Radius Map™ Report with GeoCheck®

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

FORM-LBE-KKT

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

1212 KINAU STREET
HONOLULU, HI 96814

COORDINATES

Latitude (North):	21.3025000 - 21˚ 18' 9.00''
Longitude (West):	157.8422000 - 157˚ 50' 31.92''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	620092.6
UTM Y (Meters):	2355928.8
Elevation:	26 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5941635 HONOLULU, HI
Version Date:	2013

MAPPED SITES SUMMARY

Target Property Address:
1212 KINAU STREET
HONOLULU, HI 96814

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	PUMEHANA BLDG.	1212 KIHAU ST.	FTTS, HIST FTTS		TP
A2	PUMEHANA BLDG.	1212 KIHAU ST.	FINDS		TP
B3	SCHUMAN CARRIAGE MOT	1234 S BERETANIA ST	SHWS, LUST, UST, SPILLS, INST CONTROL, Financial...	Lower	354, 0.067, SSW
B4	SAFEWAY STORE #2944	1234 SOUTH BERETANIA	RCRA-CESQG	Lower	354, 0.067, SSW
5		1326 MATLOCK AVE	EDR US Hist Cleaners	Higher	671, 0.127, East
C6		1318 S BERETANIA ST	EDR US Hist Auto Stat	Lower	690, 0.131, SSE
C7	BRAKE SERVICE & SUPP	1318 S BERETANIA ST	UST	Lower	690, 0.131, SSE
C8		1330 S BERETANIA ST	EDR US Hist Cleaners	Lower	749, 0.142, SSE
9	GRACE OTSUKA APARTME	1233 YOUNG ST	SHWS, ENG CONTROLS, INST CONTROL	Lower	800, 0.152, SSW
10	PETCO #1185	1121 SOUTH BERETANIA	RCRA-CESQG	Lower	809, 0.153, WSW
D11	MIDAS	1335 S BERETANIA ST	RCRA-CESQG, FINDS	Lower	840, 0.159, SE
D12		1335 S BERETANIA ST	EDR US Hist Auto Stat	Lower	840, 0.159, SE
13	1310 PENSACOLA STREE	1310 PENSACOLA ST	SHWS	Higher	870, 0.165, WNW
D14		1357 S BERETANIA ST	EDR US Hist Cleaners	Lower	982, 0.186, SE
15	HAWAIIAN MISSION ACA	1438 PENSACOLA ST	UST, Financial Assurance	Higher	987, 0.187, NNW
E16	PIIKOI AND KING 76	1206 SOUTH KING STRE	UST, Financial Assurance	Lower	1010, 0.191, SSW
17		1334 YOUNG ST	EDR US Hist Cleaners	Lower	1088, 0.206, SSE
F18	CHEVRON 90423	1378 S BERETANIA ST	RCRA-CESQG	Lower	1100, 0.208, SE
F19		1378 S BERETANIA ST	EDR US Hist Auto Stat	Lower	1100, 0.208, SE
F20	BERETANIA CHEVRON 04	1378 S BERETANIA ST	LUST, UST, Financial Assurance	Lower	1100, 0.208, SE
E21	UNOCAL 76 SS L 3667	1012 PIIKOI ST	RCRA NonGen / NLR, FINDS	Lower	1109, 0.210, SW
E22	1012 PIIKOI STREET,	1012 PIIKOI ST	SHWS, SPILLS	Lower	1109, 0.210, SW
G23	CAL'S CLEANERS	1234 S. KING ST.	DRYCLEANERS	Lower	1129, 0.214, SSW
G24		1234 S KING ST	EDR US Hist Cleaners	Lower	1129, 0.214, SSW
G25		1239 S KING ST	EDR US Hist Auto Stat	Lower	1136, 0.215, SSW
G26	TEXACO STATION 61100	1239 S KING ST	RCRA NonGen / NLR, LUST, UST, SPILLS, Financial...	Lower	1136, 0.215, SSW
G27		1251 S KING ST	EDR US Hist Auto Stat	Lower	1142, 0.216, SSW
28	CARTWRIGHT NEIGHBORH	KEEAUMOKU ST & MATLO	SHWS	Higher	1147, 0.217, ESE
29	MARK'S PIIKOI SERVIC	1180 S KING ST	LUST, UST	Lower	1186, 0.225, SW
H30	BMW OF HONOLULU LTD	1075 S BERETANIA ST	LUST, UST	Lower	1191, 0.226, West
H31	ISA O HARRIET AND JA	1075 S BERETANIA ST	RCRA NonGen / NLR	Lower	1191, 0.226, West
32		1293 S KING ST	EDR US Hist Auto Stat	Lower	1248, 0.236, South
I33		1201 S KING ST	EDR US Hist Auto Stat	Lower	1250, 0.237, SSW
I34	CHEVRON 99425	1201 S KING ST	RCRA-CESQG	Lower	1250, 0.237, SSW
I35	PIIKOI CHEVRON SS	1201 S KING ST	LUST, UST, SPILLS, Financial Assurance	Lower	1250, 0.237, SSW
H36	TONY HYUNDAI HONOLUL	1069 S BERETANIA ST	UST, Financial Assurance	Lower	1258, 0.238, West
37		1084 YOUNG ST	EDR US Hist Auto Stat	Lower	1312, 0.248, WSW
J38	MID PAC PETROLEUM 25	1406 S BERETANIA ST	LUST, UST, Financial Assurance	Higher	1427, 0.270, SE
39	MEADOW GOLD DAIRIES	1418 YOUNG ST	SHWS, SPILLS	Lower	1523, 0.288, SE

MAPPED SITES SUMMARY

Target Property Address:
1212 KINAU STREET
HONOLULU, HI 96814

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
40	YAJIMA OIL OF USA IN	1375 S KING ST	LUST, UST, Financial Assurance	Lower	1533, 0.290, SSE
J41	MAKIKI SHELL	1436 S BERETANIA ST	LUST, UST, Financial Assurance	Lower	1547, 0.293, SE
42	C&CH MAKIKI FIRE STA	1202 WILDER AVE	LUST, UST, Financial Assurance	Higher	1675, 0.317, NE
43	HONOLULU STATION - P	1455 S BERETANIA ST	LUST, UST, Financial Assurance	Higher	1731, 0.328, SE
44	AUXILIARY SERVICES -	1039 S KING ST	SHWS, UST, Financial Assurance	Lower	1916, 0.363, WSW
45	WENS LIFE CO., INC	808 SHERIDAN ST	LUST, UST	Lower	2097, 0.397, South
K46	ALOHA/KING SELF STOR	1414 KALAKAUA AVE	SHWS, ENG CONTROLS, INST CONTROL, VCP	Lower	2410, 0.456, SE
47	MID PAC PETROLEUM 25	1505 S. KING ST.	LUST, UST, Financial Assurance	Lower	2431, 0.460, SE
48	7-11 KALAKAUA	1323 KALAKAUA AVE	SHWS, UST, Financial Assurance	Lower	2441, 0.462, SE
49	LIKE LIKE PLAZA PETR	745 KEEAUMOKU ST	SHWS	Lower	2446, 0.463, South
L50	MOTOR SUPPLY	726 SHERIDAN ST	SHWS, INST CONTROL	Lower	2449, 0.464, South
L51	HAKUYOSHA HAWAII, IN	730 SHERIDAN ST	SHWS, SPILLS, INST CONTROL, AIRS	Lower	2449, 0.464, South
K52	GAS PLUS	1524 S KING ST	LUST, UST	Lower	2520, 0.477, SE
L53	SUPERBLOCK PROPERTIE	SOUTH BLOCK (BLDG S1	LUST, UST	Lower	2539, 0.481, South
54	MID PAC PETROLEUM LL	882 S BERETANIA ST	LUST, UST, Financial Assurance	Higher	2618, 0.496, WNW
55	KAPIOLANI WOMEN'S &	1319 PUNAHOU ST	SHWS, UST, AIRS, Financial Assurance	Higher	2783, 0.527, ESE
56	CENPAC PROPERTIES -	615 PIIKOI ST	SHWS, LUST, UST, SPILLS, Financial Assurance	Lower	3036, 0.575, SSW
57	EVERSHINE X	1230 KAPIOLANI BLVD	SHWS, VCP	Lower	3155, 0.598, SSW
58	801 SOUTH HOTEL STRE	801 S HOTEL ST	SHWS	Lower	3174, 0.601, West
59	CUTTER CHEVROLET	1391 KAPIOLANI BLVD	SHWS, LUST, UST, Financial Assurance	Lower	3403, 0.645, South
60	HECO SUBSTATION: MAK	1544 MAKALOA ST	SHWS, SPILLS, INST CONTROL	Lower	3411, 0.646, South
61	WALGREENS KEEAMOKU	1460 KAPIOLANI BLVD	SHWS	Lower	3435, 0.651, South
62	ONE ARCHER LANE	801 S KING ST	SHWS, SPILLS	Lower	3456, 0.655, West
63	DURANT PROPERTIES	1235 KONA ST	SHWS, INST CONTROL	Lower	3543, 0.671, SSW
64	PACIFICA CONDOMINIUM	1009 KAPIOLANI BLVD	SHWS, LUST	Lower	3642, 0.690, WSW
65	SYMPHONY PARK	850 KAPIOLANI BLVD	SHWS, SPILLS	Lower	3761, 0.712, WSW
66	NEW OFFICE LOUNGE	1551 KAPIOLANI BLVD	SHWS, LUST, UST	Lower	3782, 0.716, South
67	PUNAHOU SCHOOL - MAI	1601 PUNAHOU ST	SHWS, LUST, UST, Financial Assurance	Higher	3787, 0.717, East
68	JAS W GLOVER LTD	1046 WAIMAMU ST	RCRA NonGen / NLR, FINDS, SHWS, LUST, UST	Lower	3861, 0.731, SW
69	RESERVE HOUSING TOWE	1141 WAIMANU ST	SHWS, SPILLS	Lower	3896, 0.738, SW
M70	HECO SOIL CONTAMINAT	CHAPIN LN & KAPIOLAN	SHWS, ENG CONTROLS, INST CONTROL	Lower	3918, 0.742, WSW
71	KOOLANI TOWER PROJEC	1189 WAIMANU ST	SHWS, SPILLS, ENG CONTROLS, INST CONTROL	Lower	3935, 0.745, SW
M72	CHUEI SHOKOH, INC.	825 KAPIOLANI BLVD	SHWS, SPILLS, ENG CONTROLS, INST CONTROL, VCP	Lower	3966, 0.751, WSW
73	FORMER KALAKAUA TRAN	1665 KALAKAUA AVE	SHWS, ENG CONTROLS, INST CONTROL	Lower	3983, 0.754, SSE
74	SELF STORAGE 1	438 KAMAKEE ST	SHWS, SPILLS	Lower	4000, 0.758, SW
75	BMW OF HONOLULU	777 KAPIOLANI BLVD	SHWS, SPILLS, ENG CONTROLS, INST CONTROL	Lower	4058, 0.769, West
76	1510 FREAR STREET	1510 FREAR ST	SHWS, SPILLS	Higher	4105, 0.777, WNW
77	HAWAII OPERA THEATER	962 KAWAIAHAO ST	SHWS, SPILLS, ENG CONTROLS, INST CONTROL	Lower	4191, 0.794, WSW
78	ROGER'S REPAIR INC	1687 KALAKAUA AVE	SHWS	Lower	4216, 0.798, SSE

MAPPED SITES SUMMARY

Target Property Address:
1212 KINAU STREET
HONOLULU, HI 96814

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
79	HD&C, 725 KAPIOLANI	725 KAPIOLANI BLVD	SHWS, SPILLS, INST CONTROL	Lower	4311, 0.816, West
80	K&Y AUTO SERVICE AND	902 KAWAIAHAO ST & 5	SHWS, SPILLS	Lower	4329, 0.820, WSW
N81	HECO PAD-MOUNTED #65	650 KAPIOLANI BLVD	SHWS, SPILLS, INST CONTROL	Lower	4400, 0.833, West
82	WALLYS GARDEN CENTER	1935 S BERETANIA ST	SHWS, SPILLS	Lower	4423, 0.838, ESE
O83	AMERICAN LINEN WAREH	837 KAWAIAHAO ST	SHWS, SPILLS	Lower	4476, 0.848, WSW
O84	836 KAWAIAHAO STREET	836 KAWAIAHAO ST	SHWS	Lower	4493, 0.851, WSW
N85	HAWAII NEWSPAPER AGE	605 KAPIOLANI BLVD	SHWS, LUST, UST, SPILLS, ENG CONTROLS, INST...	Lower	4529, 0.858, West
86	SEARS ALA MOANA	1450 ALA MOANA BLVD	SHWS	Lower	4636, 0.878, SSW
87	CONTINENTAL AUTO SER	1918 ALGAROBA ST	SHWS, SPILLS	Lower	4714, 0.893, SE
88	ALOHA MOTORS 1777 KA	1777 KAPIOLANI BLVD	SHWS, SPILLS	Lower	4802, 0.909, SSE
89	QUEEN'S MEDICAL CENT	1301 PUNCHBOWL ST	SHWS, LUST, UST, AIRS, Financial Assurance	Lower	4823, 0.913, WNW
90	HAWAII CONVENTION CE	1801 KALAKAUA AVE	SHWS, SPILLS	Lower	4899, 0.928, SSE
91	YACHT HARBOR TOWERS	1600 ALA MOANA BLVD	SHWS, SPILLS, ENG CONTROLS, INST CONTROL	Lower	5043, 0.955, South
92	RUBBER STAMP PLANTAT	746 ILANIWAI ST	SHWS	Lower	5061, 0.959, WSW
93	HAWAII INSTRUMENTATI	822 HALEKAUWILA ST	SHWS, SPILLS, ENG CONTROLS, INST CONTROL	Lower	5111, 0.968, WSW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 7 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
PUMEHANA BLDG. 1212 KIHAU ST. HONOLULU, HI 96817	FTTS HIST FTTS	N/A
PUMEHANA BLDG. 1212 KIHAU ST. HONOLULU, HI 96814	FINDS Registry ID:: 110023166401	N/A

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL..... National Priority List
Proposed NPL..... Proposed National Priority List Sites
NPL LIENS..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL..... National Priority List Deletions

Federal CERCLIS list

CERCLIS..... Comprehensive Environmental Response, Compensation, and Liability Information System
FEDERAL FACILITY..... Federal Facility Site Information listing

Federal CERCLIS NFRAP site List

CERC-NFRAP..... CERCLIS No Further Remedial Action Planned

Federal RCRA CORRACTS facilities list

CORRACTS..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

EXECUTIVE SUMMARY

Federal RCRA generators list

RCRA-LQG..... RCRA - Large Quantity Generators
RCRA-SQG..... RCRA - Small Quantity Generators

Federal institutional controls / engineering controls registries

US ENG CONTROLS..... Engineering Controls Sites List
US INST CONTROL..... Sites with Institutional Controls
LUCIS..... Land Use Control Information System

Federal ERNS list

ERNS..... Emergency Response Notification System

State and tribal landfill and/or solid waste disposal site lists

SWF/LF..... Permitted Landfills in the State of Hawaii

State and tribal leaking storage tank lists

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

INDIAN UST..... Underground Storage Tanks on Indian Land
FEMA UST..... Underground Storage Tank Listing

State and tribal voluntary cleanup sites

INDIAN VCP..... Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS..... Brownfields Sites

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations
ODI..... Open Dump Inventory
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands

Local Lists of Hazardous waste / Contaminated Sites

US CDL..... Clandestine Drug Labs
CDL..... Clandestine Drug Lab Listing
US HIST CDL..... National Clandestine Laboratory Register

Local Land Records

LIENS 2 ..... CERCLA Lien Information

Records of Emergency Release Reports

HMIRS ..... Hazardous Materials Information Reporting System
SPILLS ..... Release Notifications
SPILLS 90 ..... SPILLS 90 data from FirstSearch

Other Ascertainable Records

DOT OPS ..... Incident and Accident Data
DOD ..... Department of Defense Sites
FUDS ..... Formerly Used Defense Sites
CONSENT ..... Superfund (CERCLA) Consent Decrees
ROD ..... Records Of Decision
UMTRA ..... Uranium Mill Tailings Sites
US MINES ..... Mines Master Index File
TRIS ..... Toxic Chemical Release Inventory System
TSCA ..... Toxic Substances Control Act
SSTS ..... Section 7 Tracking Systems
ICIS ..... Integrated Compliance Information System
PADS ..... PCB Activity Database System
MLTS ..... Material Licensing Tracking System
RADINFO ..... Radiation Information Database
RAATS ..... RCRA Administrative Action Tracking System
RMP ..... Risk Management Plans
UIC ..... Underground Injection Wells Listing
AIRS ..... List of Permitted Facilities
INDIAN RESERV ..... Indian Reservations
SCRD DRYCLEANERS ..... State Coalition for Remediation of Drycleaners Listing
Financial Assurance ..... Financial Assurance Information Listing
LEAD SMELTERS ..... Lead Smelter Sites
US AIRS ..... Aerometric Information Retrieval System Facility Subsystem
EPA WATCH LIST ..... EPA WATCH LIST
US FIN ASSUR ..... Financial Assurance Information
COAL ASH EPA ..... Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER ..... PCB Transformer Registration Database
COAL ASH DOE ..... Steam-Electric Plant Operation Data
2020 COR ACTION ..... 2020 Corrective Action Program List
PRP ..... Potentially Responsible Parties

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP ..... EDR Proprietary Manufactured Gas Plants

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF ..... Recovered Government Archive Solid Waste Facilities List

RGA LUST ..... Recovered Government Archive Leaking Underground Storage Tank
RGA HWS ..... Recovered Government Archive State Hazardous Waste Facilities List

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA generators list

RCRA-CESQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

A review of the RCRA-CESQG list, as provided by EDR, and dated 03/10/2015 has revealed that there are 5 RCRA-CESQG sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SAFEWAY STORE #2944	1234 SOUTH BERETANIA	SSW 0 - 1/8 (0.067 mi.)	B4	11
PETCO #1185	1121 SOUTH BERETANIA	WSW 1/8 - 1/4 (0.153 mi.)	10	16
MIDAS	***1335 S BERETANIA ST***	***SE 1/8 - 1/4 (0.159 mi.)***	***D11***	***18***
CHEVRON 90423	1378 S BERETANIA ST	SE 1/8 - 1/4 (0.208 mi.)	F18	24
CHEVRON 99425	1201 S KING ST	SSW 1/8 - 1/4 (0.237 mi.)	I34	42

State- and tribal - equivalent CERCLIS

SHWS: The State Hazardous Waste Sites records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. The data come from the Department of Health.

A review of the SHWS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 51 SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
1310 PENSACOLA STREE	1310 PENSACOLA ST	WNW 1/8 - 1/4 (0.165 mi.)	13	20
CARTWRIGHT NEIGHBORH	KEEAUMOKU ST & MATLO	ESE 1/8 - 1/4 (0.217 mi.)	28	36
KAPIOLANI WOMEN'S &	***1319 PUNAHOU ST***	***ESE 1/2 - 1 (0.527 mi.)***	***55***	***80***

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PUNAHOU SCHOOL - MAI	1601 PUNAHOU ST	E 1/2 - 1 (0.717 mi.)	67	96
1510 FREAR STREET	1510 FREAR ST	WNW 1/2 - 1 (0.777 mi.)	76	110

Lower Elevation	Address	Direction / Distance	Map ID	Page
SCHUMAN CARRIAGE MOT	1234 S BERETANIA ST	SSW 0 - 1/8 (0.067 mi.)	B3	8
GRACE OTSUKA APARTME	1233 YOUNG ST	SSW 1/8 - 1/4 (0.152 mi.)	9	15
1012 PIIKOI STREET,	1012 PIIKOI ST	SW 1/8 - 1/4 (0.210 mi.)	E22	29
MEADOW GOLD DAIRIES	1418 YOUNG ST	SE 1/4 - 1/2 (0.288 mi.)	39	52
AUXILIARY SERVICES -	1039 S KING ST	WSW 1/4 - 1/2 (0.363 mi.)	44	63
ALOHA/KING SELF STOR	1414 KALAKAUA AVE	SE 1/4 - 1/2 (0.456 mi.)	K46	66
7-11 KALAKAUA	1323 KALAKAUA AVE	SE 1/4 - 1/2 (0.462 mi.)	48	69
LIKE LIKE PLAZA PETR	745 KEEAUMOKU ST	S 1/4 - 1/2 (0.463 mi.)	49	72
MOTOR SUPPLY	726 SHERIDAN ST	S 1/4 - 1/2 (0.464 mi.)	L50	72
HAKUYOSHA HAWAII, IN	730 SHERIDAN ST	S 1/4 - 1/2 (0.464 mi.)	L51	73
CENPAC PROPERTIES -	615 PIIKOI ST	SSW 1/2 - 1 (0.575 mi.)	56	82
EVERSHINE X	1230 KAPIOLANI BLVD	SSW 1/2 - 1 (0.598 mi.)	57	84
801 SOUTH HOTEL STRE	801 S HOTEL ST	W 1/2 - 1 (0.601 mi.)	58	85
CUTTER CHEVROLET	1391 KAPIOLANI BLVD	S 1/2 - 1 (0.645 mi.)	59	85
HECO SUBSTATION: MAK	1544 MAKALOA ST	S 1/2 - 1 (0.646 mi.)	60	87
WALGREENS KEEAMOKU	1460 KAPIOLANI BLVD	S 1/2 - 1 (0.651 mi.)	61	88
ONE ARCHER LANE	801 S KING ST	W 1/2 - 1 (0.655 mi.)	62	89
DURANT PROPERTIES	1235 KONA ST	SSW 1/2 - 1 (0.671 mi.)	63	91
PACIFICA CONDOMINIUM	1009 KAPIOLANI BLVD	WSW 1/2 - 1 (0.690 mi.)	64	92
SYMPHONY PARK	850 KAPIOLANI BLVD	WSW 1/2 - 1 (0.712 mi.)	65	93
NEW OFFICE LOUNGE	1551 KAPIOLANI BLVD	S 1/2 - 1 (0.716 mi.)	66	95
JAS W GLOVER LTD	1046 WAIMAMU ST	SW 1/2 - 1 (0.731 mi.)	68	99
RESERVE HOUSING TOWE	1141 WAIMANU ST	SW 1/2 - 1 (0.738 mi.)	69	101
HECO SOIL CONTAMINAT	CHAPIN LN & KAPIOLAN	WSW 1/2 - 1 (0.742 mi.)	M70	102
KOOLANI TOWER PROJEC	1189 WAIMANU ST	SW 1/2 - 1 (0.745 mi.)	71	103
CHUEI SHOKOH, INC.	825 KAPIOLANI BLVD	WSW 1/2 - 1 (0.751 mi.)	M72	105
FORMER KALAKAUA TRAN	1665 KALAKAUA AVE	SSE 1/2 - 1 (0.754 mi.)	73	106
SELF STORAGE 1	438 KAMAKEE ST	SW 1/2 - 1 (0.758 mi.)	74	107
BMW OF HONOLULU	777 KAPIOLANI BLVD	W 1/2 - 1 (0.769 mi.)	75	109
HAWAII OPERA THEATER	962 KAWAIAHAO ST	WSW 1/2 - 1 (0.794 mi.)	77	111
ROGER'S REPAIR INC	1687 KALAKAUA AVE	SSE 1/2 - 1 (0.798 mi.)	78	113
HD&C, 725 KAPIOLANI	725 KAPIOLANI BLVD	W 1/2 - 1 (0.816 mi.)	79	114
K&Y AUTO SERVICE AND	902 KAWAIAHAO ST & 5	WSW 1/2 - 1 (0.820 mi.)	80	115
HECO PAD-MOUNTED #65	650 KAPIOLANI BLVD	W 1/2 - 1 (0.833 mi.)	N81	116
WALLYS GARDEN CENTER	1935 S BERETANIA ST	ESE 1/2 - 1 (0.838 mi.)	82	117
AMERICAN LINEN WAREH	837 KAWAIAHAO ST	WSW 1/2 - 1 (0.848 mi.)	O83	118
836 KAWAIAHAO STREET	836 KAWAIAHAO ST	WSW 1/2 - 1 (0.851 mi.)	O84	120
HAWAII NEWSPAPER AGE	605 KAPIOLANI BLVD	W 1/2 - 1 (0.858 mi.)	N85	120
SEARS ALA MOANA	1450 ALA MOANA BLVD	SSW 1/2 - 1 (0.878 mi.)	86	123
CONTINENTAL AUTO SER	1918 ALGAROBA ST	SE 1/2 - 1 (0.893 mi.)	87	124
ALOHA MOTORS 1777 KA	1777 KAPIOLANI BLVD	SSE 1/2 - 1 (0.909 mi.)	88	125
QUEEN'S MEDICAL CENT	1301 PUNCHBOWL ST	WNW 1/2 - 1 (0.913 mi.)	89	127
HAWAII CONVENTION CE	1801 KALAKAUA AVE	SSE 1/2 - 1 (0.928 mi.)	90	130
YACHT HARBOR TOWERS	1600 ALA MOANA BLVD	S 1/2 - 1 (0.955 mi.)	91	132
RUBBER STAMP PLANTAT	746 ILANIWAI ST	WSW 1/2 - 1 (0.959 mi.)	92	133
HAWAII INSTRUMENTATI	822 HALEKAUWILA ST	WSW 1/2 - 1 (0.968 mi.)	93	134

State and tribal leaking storage tank lists

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Health's Active Leaking Underground Storage Tank Log Listing.

A review of the LUST list, as provided by EDR, and dated 06/04/2015 has revealed that there are 16 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MID PAC PETROLEUM 25	1406 S BERETANIA ST	SE 1/4 - 1/2 (0.270 mi.)	J38	47
Release ID: 920175				
Release ID: 000082				
Facility Id: 9-100035				
Facility Status: Site Cleanup Completed (NFA)				
Facility Status: Site Cleanup Completed with EHMP				
C&CH MAKIKI FIRE STA	1202 WILDER AVE	NE 1/4 - 1/2 (0.317 mi.)	42	60
Release ID: 910029				
Facility Id: 9-100081				
Facility Status: Site Cleanup Completed (NFA)				
HONOLULU STATION - P	1455 S BERETANIA ST	SE 1/4 - 1/2 (0.328 mi.)	43	61
Release ID: 930074				
Facility Id: 9-100114				
Facility Status: Site Cleanup Completed (NFA)				
MID PAC PETROLEUM LL	882 S BERETANIA ST	WNW 1/4 - 1/2 (0.496 mi.)	54	77
Release ID: 040051				
Facility Id: 9-100040				
Facility Status: Site Cleanup Completed (NFA)				

Lower Elevation	Address	Direction / Distance	Map ID	Page
SCHUMAN CARRIAGE MOT	1234 S BERETANIA ST	SSW 0 - 1/8 (0.067 mi.)	B3	8
Release ID: 900058				
Release ID: 060001				
Facility Id: 9-101276				
Facility Status: Site Cleanup Completed (NFA)				
BERETANIA CHEVRON 04	1378 S BERETANIA ST	SE 1/8 - 1/4 (0.208 mi.)	F20	26
Release ID: 880012				
Release ID: 960076				
Release ID: 040024				
Facility Id: 9-101720				
Facility Status: Site Cleanup Completed (NFA)				
TEXACO STATION 61100	1239 S KING ST	SSW 1/8 - 1/4 (0.215 mi.)	G26	32
Release ID: 980250				
Release ID: 980194				
Facility Id: 9-100340				
Facility Status: Site Cleanup Completed (NFA)				
MARK'S PIIKOI SERVIC	1180 S KING ST	SW 1/8 - 1/4 (0.225 mi.)	29	37
Release ID: 890005				
Facility Id: 9-100038				
Facility Status: Site Cleanup Completed (NFA)				
BMW OF HONOLULU LTD	1075 S BERETANIA ST	W 1/8 - 1/4 (0.226 mi.)	H30	38

Release ID: 930009
Release ID: 000063
Facility Id: 9-100174
Facility Status: Site Cleanup Completed (NFA)

PIIKOI CHEVRON SS ***1201 S KING ST*** ***SSW 1/8 - 1/4 (0.237 mi.)*** ***I35*** ***43***
Release ID: 040021
Release ID: 980238
Facility Id: 9-101099
Facility Status: Site Cleanup Completed (NFA)

YAJIMA OIL OF USA IN ***1375 S KING ST*** ***SSE 1/4 - 1/2 (0.290 mi.)*** ***40*** ***54***
Release ID: 930001
Release ID: 030031
Facility Id: 9-100832
Facility Status: Site Cleanup Completed (NFA)

MAKIKI SHELL ***1436 S BERETANIA ST*** ***SE 1/4 - 1/2 (0.293 mi.)*** ***J41*** ***56***
Release ID: 980196
Release ID: 040039
Release ID: 930023
Facility Id: 9-100833
Facility Status: Site Cleanup Completed (NFA)

WENS LIFE CO., INC ***808 SHERIDAN ST*** ***S 1/4 - 1/2 (0.397 mi.)*** ***45*** ***65***
Release ID: 030035
Facility Id: 9-101330
Facility Status: Site Cleanup Completed (NFA)

MID PAC PETROLEUM 25 ***1505 S. KING ST.*** ***SE 1/4 - 1/2 (0.460 mi.)*** ***47*** ***67***
Release ID: 070020
Release ID: 960074
Release ID: 930032
Facility Id: 9-100041
Facility Status: Site Cleanup Completed (NFA)

GAS PLUS ***1524 S KING ST*** ***SE 1/4 - 1/2 (0.477 mi.)*** ***K52*** ***75***
Release ID: 960030
Facility Id: 9-100224
Facility Status: Site Cleanup Completed (NFA)

SUPERBLOCK PROPERTIE ***SOUTH BLOCK (BLDG S1*** ***S 1/4 - 1/2 (0.481 mi.)*** ***L53*** ***76***
Release ID: 920142
Facility Id: 9-102600
Facility Status: Site Cleanup Completed (NFA)

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Health's Listing of Underground Storage Tanks.

A review of the UST list, as provided by EDR, and dated 06/04/2015 has revealed that there are 10 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HAWAIIAN MISSION ACA	***1438 PENSACOLA ST***	***NNW 1/8 - 1/4 (0.187 mi.)***	***15***	***21***

Tank Status: Permanently Out of Use
Facility Id: 9-102409

Lower Elevation	Address	Direction / Distance	Map ID	Page
SCHUMAN CARRIAGE MOT	***1234 S BERETANIA ST***	***SSW 0 - 1/8 (0.067 mi.)***	***B3***	***8***
Tank Status: Permanently Out of Use Facility Id: 9-101276 Date Closed: 11/09/1999 Date Closed: 11/08/1999 Date Closed: 01/26/2005 Date Closed: 12/01/1990				
BRAKE SERVICE & SUPP	1318 S BERETANIA ST	SSE 1/8 - 1/4 (0.131 mi.)	C7	14
Tank Status: Permanently Out of Use Facility Id: 9-102890				
PIIKOI AND KING 76	***1206 SOUTH KING STRE***	***SSW 1/8 - 1/4 (0.191 mi.)***	***E16***	***22***
Tank Status: Currently In Use Facility Id: 9-103799				
BERETANIA CHEVRON 04	***1378 S BERETANIA ST***	***SE 1/8 - 1/4 (0.208 mi.)***	***F20***	***26***
Tank Status: Currently in Use Tank Status: Currently In Use Facility Id: 9-101720				
TEXACO STATION 61100	***1239 S KING ST***	***SSW 1/8 - 1/4 (0.215 mi.)***	***G26***	***32***
Tank Status: Permanently Out of Use Facility Id: 9-100340 Date Closed: 09/03/1998 Date Closed: 09/02/1998				
MARK'S PIIKOI SERVIC	***1180 S KING ST***	***SW 1/8 - 1/4 (0.225 mi.)***	***29***	***37***
Tank Status: Permanently Out of Use Facility Id: 9-100038 Date Closed: 11/01/1989				
BMW OF HONOLULU LTD	***1075 S BERETANIA ST***	***W 1/8 - 1/4 (0.226 mi.)***	***H30***	***38***
Tank Status: Permanently Out of Use Facility Id: 9-100174 Date Closed: 12/26/1999 Date Closed: 03/13/1993				
PIIKOI CHEVRON SS	***1201 S KING ST***	***SSW 1/8 - 1/4 (0.237 mi.)***	***I35***	***43***
Tank Status: Permanently Out of Use Tank Status: Currently in Use Tank Status: Currently In Use Facility Id: 9-101099 Date Closed: 03/09/1998				
TONY HYUNDAI HONOLUL	***1069 S BERETANIA ST***	***W 1/8 - 1/4 (0.238 mi.)***	***H36***	***46***
Tank Status: Permanently Out of Use Tank Status: Currently in Use Facility Id: 9-100184 Date Closed: 03/31/1989				

State and tribal institutional control / engineering control registries

ENG CONTROLS: A listing of sites with engineering controls in place.

A review of the ENG CONTROLS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 2 ENG CONTROLS sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
GRACE OTSUKA APARTME	***1233 YOUNG ST***	***SSW 1/8 - 1/4 (0.152 mi.)***	***9***	***15***
ALOHA/KING SELF STOR	***1414 KALAKAUA AVE***	***SE 1/4 - 1/2 (0.456 mi.)***	***K46***	***66***

Voluntary Remediation Program and Brownfields sites with institutional controls in place.

A review of the INST CONTROL list, as provided by EDR, and dated 12/02/2014 has revealed that there are 5 INST CONTROL sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SCHUMAN CARRIAGE MOT	***1234 S BERETANIA ST***	***SSW 0 - 1/8 (0.067 mi.)***	***B3***	***8***
GRACE OTSUKA APARTME	***1233 YOUNG ST***	***SSW 1/8 - 1/4 (0.152 mi.)***	***9***	***15***
ALOHA/KING SELF STOR	***1414 KALAKAUA AVE***	***SE 1/4 - 1/2 (0.456 mi.)***	***K46***	***66***
MOTOR SUPPLY	***726 SHERIDAN ST***	***S 1/4 - 1/2 (0.464 mi.)***	***L50***	***72***
HAKUYOSHA HAWAII, IN	***730 SHERIDAN ST***	***S 1/4 - 1/2 (0.464 mi.)***	***L51***	***73***

State and tribal voluntary cleanup sites

VCP: Voluntary Response Program Sites.

A review of the VCP list, as provided by EDR, and dated 12/02/2014 has revealed that there is 1 VCP site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ALOHA/KING SELF STOR	***1414 KALAKAUA AVE***	***SE 1/4 - 1/2 (0.456 mi.)***	***K46***	***66***

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 03/10/2015 has revealed that there are 3 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
UNOCAL 76 SS L 3667	***1012 PIIKOI ST***	***SW 1/8 - 1/4 (0.210 mi.)***	***E21***	***28***

Lower Elevation	Address	Direction / Distance	Map ID	Page
TEXACO STATION 61100	***1239 S KING ST***	***SSW 1/8 - 1/4 (0.215 mi.)***	***G26***	***32***
ISA O HARRIET AND JA	1075 S BERETANIA ST	W 1/8 - 1/4 (0.226 mi.)	H31	39

DRYCLEANERS: A listing of permitted drycleaner facilities in the state.

A review of the DRYCLEANERS list, as provided by EDR, and dated 12/31/2014 has revealed that there is 1 DRYCLEANERS site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CAL'S CLEANERS Permit Number: 0094-31	1234 S. KING ST.	SSW 1/8 - 1/4 (0.214 mi.)	G23	31

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Auto Stat: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there are 8 EDR US Hist Auto Stat sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	1318 S BERETANIA ST	SSE 1/8 - 1/4 (0.131 mi.)	C6	13
Not reported	1335 S BERETANIA ST	SE 1/8 - 1/4 (0.159 mi.)	D12	20
Not reported	1378 S BERETANIA ST	SE 1/8 - 1/4 (0.208 mi.)	F19	26
Not reported	1239 S KING ST	SSW 1/8 - 1/4 (0.215 mi.)	G25	32
Not reported	1251 S KING ST	SSW 1/8 - 1/4 (0.216 mi.)	G27	36
Not reported	1293 S KING ST	S 1/8 - 1/4 (0.236 mi.)	32	40
Not reported	1201 S KING ST	SSW 1/8 - 1/4 (0.237 mi.)	I33	41
Not reported	1084 YOUNG ST	WSW 1/8 - 1/4 (0.248 mi.)	37	47

EDR US Hist Cleaners: EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR US Hist Cleaners list, as provided by EDR, has revealed that there are 5 EDR US

EXECUTIVE SUMMARY

Hist Cleaners sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	1326 MATLOCK AVE	E 1/8 - 1/4 (0.127 mi.)	5	13

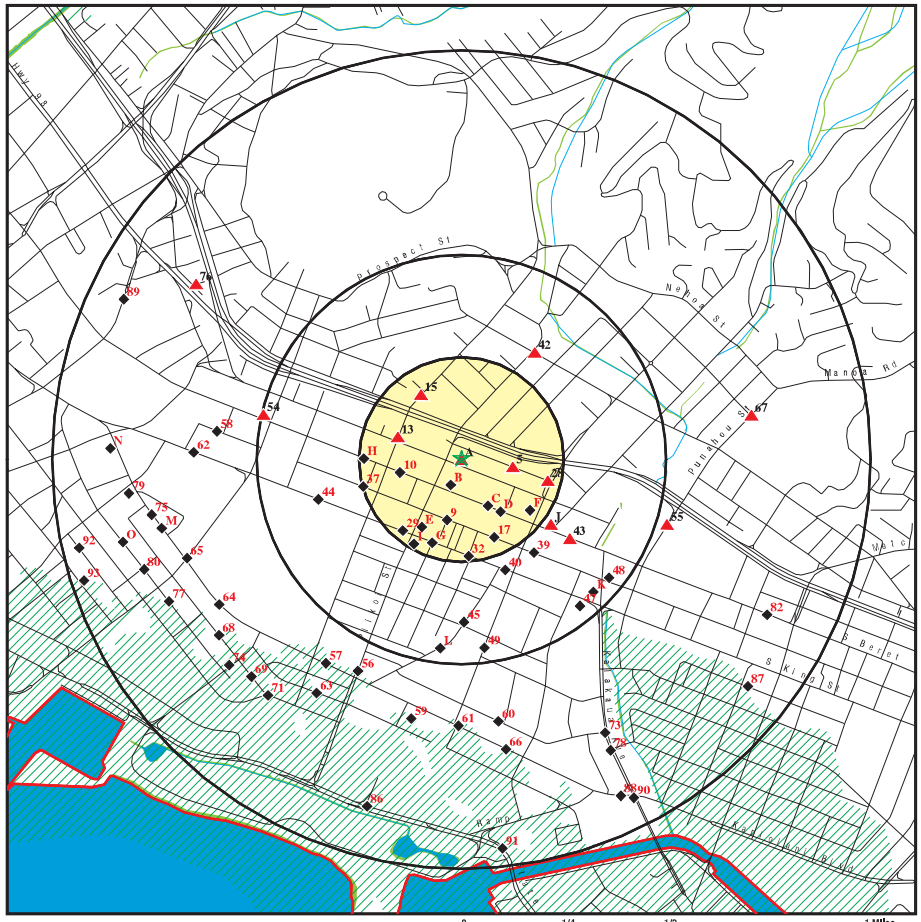
Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	1330 S BERETANIA ST	SSE 1/8 - 1/4 (0.142 mi.)	C8	15
Not reported	1357 S BERETANIA ST	SE 1/8 - 1/4 (0.186 mi.)	D14	21
Not reported	1334 YOUNG ST	SSE 1/8 - 1/4 (0.206 mi.)	17	23
Not reported	1234 S KING ST	SSW 1/8 - 1/4 (0.214 mi.)	G24	31

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 10 records.

Site Name	Database(s)
1339 SCHOOL STREET	SHWS, ENG CONTROLS, INST CONTROL
KAKAAKO BROWNFIELD PROJECT - UNIT	SHWS, ENG CONTROLS, BROWNFIELDS
KAKAAKO BROWNFIELD PROJECT - UNIT	SHWS, ENG CONTROLS, BROWNFIELDS
HONOLULU SEAWATER AIR CONDITIONING	SHWS, ENG CONTROLS, INST CONTROL
KAKAAKO BROWNFIELD PROJECT - UNIT	SHWS, ENG CONTROLS, BROWNFIELDS
KAKAAKO BROWNFIELD PROJECT - UNIT	SHWS, ENG CONTROLS, BROWNFIELDS
KAKAAKO MAKAI DISTRICT JOHN DOMINI	SHWS, INST CONTROL
ALA WAI HARBOR BOAT REPAIR YARD	SHWS
KAKAAKO MAKAI GATEWAY	SHWS
KEEAUMOKU SUPERBLOCK PROJECT	SHWS, SPILLS

OVERVIEW MAP - 4381593.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Pumehana ADDRESS: 1212 Kinau Street Honolulu HI 96814 LAT/LONG: 21.3025 / 157.8422	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Ronald Sato INQUIRY #: 4381593.2s DATE: August 13, 2015 8:46 am

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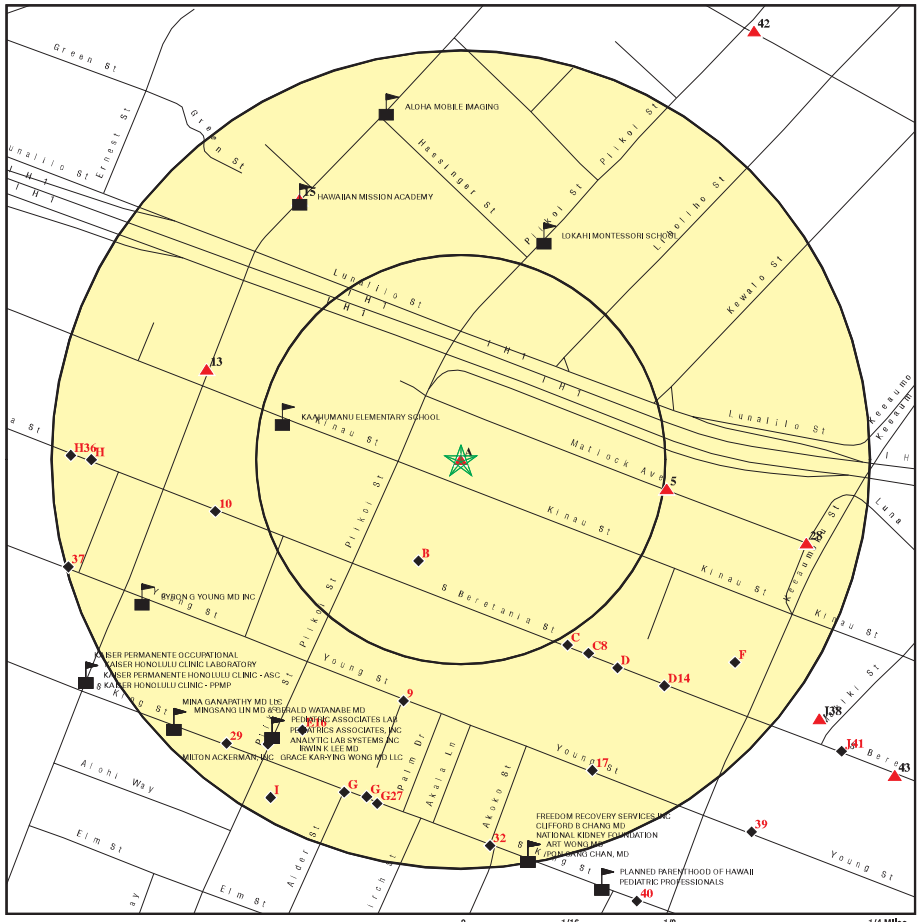
DETAIL MAP - 4381593.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- 100-year flood zone
- 500-year flood zone

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Pumehana ADDRESS: 1212 Kinau Street Honolulu HI 96814 LAT/LONG: 21.3025 / 157.8422	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Ronald Sato INQUIRY #: 4381593.2s DATE: August 13, 2015 8:47 am

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		1	4	NR	NR	NR	5
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
SHWS	1.000		1	4	7	39	NR	51
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		1	5	10	NR	NR	16
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250		1	9	NR	NR	NR	10

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		0	1	1	NR	NR	2
INST CONTROL	0.500		1	1	3	NR	NR	5
State and tribal voluntary cleanup sites								
VCP	0.500		0	0	1	NR	NR	1
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	3	NR	NR	NR	3
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP	1	NR	NR	NR	NR	NR	1
HIST FTTS	TP	1	NR	NR	NR	NR	NR	1
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP	1	NR	NR	NR	NR	NR	1
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	1	NR	NR	NR	1
AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		0	8	NR	NR	NR	8
EDR US Hist Cleaners	0.250		0	5	NR	NR	NR	5
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
RGA HWS	TP		NR	NR	NR	NR	NR	0
- Totals --		3	5	41	22	39	0	110

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
A1 Target Property	**PUMEHANA BLDG. 1212 KIHAU ST. HONOLULU, HI 96817**	**FTTS HIST FTTS**	**1008893498 N/A**

Site 1 of 2 in cluster A

Actual: 26 ft.

FTTS INSP:

Inspection Number:	20050516HI910 1
Region:	09
Inspection Date:	05/16/05
Inspector:	C. DECKER
Violation occurred:	No
Investigation Type:	Asbestos, MAP Enforcement, State
Investigation Reason:	Neutral Scheme, State
Legislation Code:	TSCA
Facility Function:	User

HIST FTTS INSP:

Inspection Number:	20050516HI910 1
Region:	09
Inspection Date:	Not reported
Inspector:	C. DECKER
Violation occurred:	No
Investigation Type:	Asbestos, MAP Enforcement, State
Investigation Reason:	Neutral Scheme, State
Legislation Code:	TSCA
Facility Function:	User

A2 Target Property	**PUMEHANA BLDG. 1212 KIHAU ST. HONOLULU, HI 96814**	**FINDS**	**1016337159 N/A**

Site 2 of 2 in cluster A

Actual: 26 ft.

FINDS:

Registry ID: 110023166401

Environmental Interest/Information System

NCDB (National Compliance Data Base) supports implementation of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Toxic Substances Control Act (TSCA). The system tracks inspections in regions and states with cooperative agreements, enforcement actions, and settlements.

B3 SCHUMAN CARRIAGE MOTORS, LTD. **SHWS** **U003221663**
SSW 1234 S BERETANIA ST **LUST** **N/A**
< 1/8 HONOLULU, HI 96814 **UST**
0.067 mi. **SPILLS**
354 ft. Site 1 of 2 in cluster B **INST CONTROL**
Financial Assurance

Relative:
Lower

Actual:
20 ft.

SHWS:

Organization:	Not reported
Supplemental Location:	Not reported
Island:	Oahu
Environmental Interest:	Safeway 1234 South Beretania Street Hydraulic Fluid
HID Number:	Not reported
Facility Registry Identifier:	110013778698
Lead Agency:	HEER
Program:	State
Project Manager:	Kelton Otsuka
Hazard Priority:	NFA
Potential Hazards And Controls:	Hazard Managed With Controls
Organization:	Not reported
Island:	Oahu
Supplemental Location Text:	Not reported
SDAR Environmental Interest Name:	Safeway 1234 South Beretania Street Hydraulic Fluid
HID Number:	Not reported
Facility Registry Identifier:	110013778698
Lead Agency:	HEER
Progran Name:	State
Potential Hazard And Controls:	Hazard Managed With Controls
Priority:	NFA
Assessment:	Response Necessary
Response:	Response Complete
Nature of Contamination:	Found: Hydraulic Fluid
Nature of Residual Contamination:	TPH-O from hydraulic lifts. NFA with IC. Contamination left at depths below 7' bgs.
Use Restrictions:	Controls Required to Manage Contamination
Engineering Control:	No Engineering Control Required
Description of Restrictions:	Not reported
Institutional Control:	Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination:	Not reported
Site Closure Type:	No Further Action Letter - Restricted Use
Document Date:	08/26/2011
Document Number:	2011-493-KO
Document Subject:	No Further Action Determination with Institutional Controls for the Safeway #2944 (former Schuman Ca
Project Manager:	Kelton Otsuka
Contact Information:	(808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

LUST:

Facility ID:	9-101276
Facility Status:	Site Cleanup Completed (NFA)
Facility Status Date:	04/19/2000
Release ID:	900058
Project Officer:	Richard Takaba

Facility ID:	9-101276
Facility Status:	Site Cleanup Completed (NFA)
Facility Status Date:	11/03/2005
Release ID:	060001
Project Officer:	Richard Takaba

SCHUMAN CARRIAGE MOTORS, LTD. (Continued) **U003221663**

UST:

Facility ID:	9-101276
Owner:	SCHUMAN CARRIAGE MOTORS, LTD.
Owner Address:	1234 S BERETANIA STP.O. BOX 2420
Owner City,St,Zip:	Honolulu, 96814 96814
Latitude:	21.301406
Longitude:	-157.842441
Horizontal Reference Datum Name:	NAD83
Horizontal Collection Method Name:	Address Matching

Tank ID:	R-1
Date Installed:	05/05/1961
Tank Status:	**Permanently Out of Use**
Date Closed:	11/09/1999
Tank Capacity:	3000
Substance:	Gasoline

Tank ID:	R-2
Date Installed:	05/05/1961
Tank Status:	**Permanently Out of Use**
Date Closed:	11/08/1999
Tank Capacity:	550
Substance:	Other

Tank ID:	R-3
Date Installed:	05/05/1961
Tank Status:	**Permanently Out of Use**
Date Closed:	11/08/1999
Tank Capacity:	550
Substance:	Other

Tank ID:	R-4
Date Installed:	05/05/1961
Tank Status:	**Permanently Out of Use**
Date Closed:	12/01/1990
Tank Capacity:	500
Substance:	Used Oil

Tank ID:	R-6
Date Installed:	05/05/1961
Tank Status:	**Permanently Out of Use**
Date Closed:	12/01/1990
Tank Capacity:	550
Substance:	Other

Tank ID:	r-5
Date Installed:	03/01/1990
Tank Status:	**Permanently Out of Use**
Date Closed:	01/26/2005
Tank Capacity:	1000
Substance:	Used Oil

SCHUMAN CARRIAGE MOTORS, LTD. (Continued) **U003221663**

HI SPILLS:

Island:	Oahu
Supplemental Loc. Text:	Not reported
Case Number:	19991210-1047
HID Number:	Not reported
Facility Registry Id:	110013778698
Lead and Program:	HEER EP&R
ER:	Referred
Units:	Schuman Carriage
Substances:	Hydraulic Fluid
Less Or Greater Than:	Not reported
Numerical Quantity:	Not reported
Units:	Not reported
Activity Type:	Response
Activity Lead:	Liz Galvez
Assignment End Date:	Not reported
Result:	Refer to ISST
File Under:	Safeway, Inc.

INST CONTROL:

Potential hazards and controls:	Hazard Managed With Controls
Supplemental Location:	Not reported
Zip Suffix:	Not reported
Island:	Oahu
Institutional Control:	Government - Hawaii Dept. of Health Letter Issued

HI Financial Assurance:

Alt Facility ID:	9-101276
Tank Id:	R-4
Tank Status:	Permanently Out of Use
FRTYPE:	Other
Expiration Date:	Not reported
Alt Facility ID:	9-101276
Tank Id:	R-6
Tank Status:	Permanently Out of Use
FRTYPE:	Other
Expiration Date:	Not reported
Alt Facility ID:	9-101276
Tank Id:	R-6
Tank Status:	Permanently Out of Use
FRTYPE:	Insurance
Expiration Date:	Not reported
Alt Facility ID:	9-101276
Tank Id:	r-5
Tank Status:	Permanently Out of Use
FRTYPE:	Insurance
Expiration Date:	Not reported
Alt Facility ID:	9-101276
Tank Id:	R-4
Tank Status:	Permanently Out of Use
FRTYPE:	Insurance
Expiration Date:	Not reported

SCHUMAN CARRIAGE MOTORS, LTD. (Continued) **U003221663**

Alt Facility ID:	9-101276
Tank Id:	R-3
Tank Status:	Permanently Out of Use
FRTYPE:	Insurance
Expiration Date:	Not reported
Alt Facility ID:	9-101276
Tank Id:	r-5
Tank Status:	Permanently Out of Use
FRTYPE:	Other
Expiration Date:	Not reported
Alt Facility ID:	9-101276
Tank Id:	R-2
Tank Status:	Permanently Out of Use
FRTYPE:	Other
Expiration Date:	Not reported
Alt Facility ID:	9-101276
Tank Id:	R-2
Tank Status:	Permanently Out of Use
FRTYPE:	Insurance
Expiration Date:	Not reported
Alt Facility ID:	9-101276
Tank Id:	R-1
Tank Status:	Permanently Out of Use
FRTYPE:	Other
Expiration Date:	Not reported
Alt Facility ID:	9-101276
Tank Id:	R-1
Tank Status:	Permanently Out of Use
FRTYPE:	Insurance
Expiration Date:	Not reported
Alt Facility ID:	9-101276
Tank Id:	R-3
Tank Status:	Permanently Out of Use
FRTYPE:	Other
Expiration Date:	Not reported

B4 **SAFEWAY STORE #2944** **RCRA-CESQG** **1000425700**
SSW **1234 SOUTH BERETANIA STREET** **HID981663750**
< 1/8 **HONOLULU, HI 96814**
0.067 mi.
354 ft. **Site 2 of 2 in cluster B**

Relative:
Lower

Actual:
20 ft.

RCRA-CESQG:

Date form received by agency:	09/08/2014
Facility name:	SAFEWAY STORE #2944
Facility address:	1234 SOUTH BERETANIA STREET HONOLULU, HI 96814
EPA ID:	HID981663750
Mailing address:	5918 STONERIDGE MALL ROAD PLEASANTON, CA 94588
Contact:	KEITH B POWERS
Contact address:	5918 STONERIDGE MALL ROAD

SAFEWAY STORE #2944 (Continued) **1000425700**

PLEASANTON, CA 94588
Contact country: US
Contact telephone: 925-226-5655
Contact email: KEITH.POWERS@SAFEWAY.COM
EPA Region: 09
Land type: Private
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:
Owner/operator name: BARBARA KEIKO HIGASHI MOSIER
Owner/operator address: P.O. BOX 22477
HONOLULU, 96823
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 01/01/2011
Owner/Op end date: Not reported

Owner/operator name: SAFEWAY
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No

SAFEWAY STORE #2944 (Continued) **1000425700**

Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: P075
. Waste name: NICOTINE, & SALTS (OR) PYRIDINE, 3-(1-METHYL-2-PYRROLIDINYL)-,(S)-, & SALTS

Historical Generators:
Date form received by agency: 10/23/1986
Site name: SCHUMAN CARRIAGE CO LTD
Classification: Conditionally Exempt Small Quantity Generator

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 04/22/2010
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 04/02/1996
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

---

5 **EDR US Hist Cleaners** **1014988631**
East **1326 MATLOCK AVE** **N/A**
1/8-1/4 **HONOLULU, HI 96814**
0.127 mi.
671 ft.

Relative:
Higher

Actual:
30 ft.

EDR Historical Cleaners:
Name: OHANA CLEANERS LLC
Year: 2005
Address: 1326 MATLOCK AVE

C6 **EDR US Hist Auto Stat** **1015206585**
SSE **1318 S BERETANIA ST** **N/A**
1/8-1/4 **HONOLULU, HI 96814**
0.131 mi.
690 ft. **Site 1 of 3 in cluster C**

Relative:
Lower

Actual:
21 ft.

EDR Historical Auto Stations:
Name: BRAKE SERVICE & SUPPLY
Year: 1999
Address: 1318 S BERETANIA ST

(Continued) **1015206585**

Name: BRAKE SERVICE & SUPPLY
Year: 2001
Address: 1318 S BERETANIA ST

Name: BRAKE SERVICE & SUPPLY
Year: 2002
Address: 1318 S BERETANIA ST

Name: BRAKE SERVICE & SUPPLY
Year: 2003
Address: 1318 S BERETANIA ST

Name: BRAKE SERVICE & SUPPLY
Year: 2004
Address: 1318 S BERETANIA ST

Name: BRAKE SERVICE & SUPPLY
Year: 2005
Address: 1318 S BERETANIA ST

Name: BRAKE SERVICE & SUPPLY
Year: 2006
Address: 1318 S BERETANIA ST

Name: BRAKE SERVICE & SUPPLY
Year: 2007
Address: 1318 S BERETANIA ST

Name: BRAKE SERVICE & SUPPLY
Year: 2008
Address: 1318 S BERETANIA ST

Name: BRAKE SERVICE & SUPPLY
Year: 2010
Address: 1318 S BERETANIA ST

Name: BRAKE SERVICE & SUPPLY
Year: 2011
Address: 1318 S BERETANIA ST

Name: BRAKE SERVICE & SUPPLY
Year: 2012
Address: 1318 S BERETANIA ST

C7 **BRAKE SERVICE & SUPPLY** **UST** **U003221860**
SSE **1318 S BERETANIA ST** **N/A**
1/8-1/4 **HONOLULU, HI 96827**
0.131 mi.
690 ft. **Site 2 of 3 in cluster C**

Relative: Lower

Actual: 21 ft.

UST:
Facility ID: 9-102890
Owner: MR. GORDON NISHIKI
Owner Address: 1318 S BERETANIA St
Owner City,St,Zip: Honolulu, 96827 96827
Latitude: Not reported
Longitude: Not reported
Horizontal Reference Datum Name: Not reported

BRAKE SERVICE & SUPPLY (Continued) **U003221860**

Horizontal Collection Method Name: Not reported

Tank ID: R-1
Date Installed: Not reported
Tank Status: **Permanently Out of Use**
Date Closed: Not reported
Tank Capacity: 550
Substance: Other

C8 **EDR US Hist Cleaners** **1014988874**
SSE **1330 S BERETANIA ST** **N/A**
1/8-1/4 **HONOLULU, HI 96814**
0.142 mi.
749 ft. **Site 3 of 3 in cluster C**

Relative: Lower

Actual: 21 ft.

EDR Historical Cleaners:
Name: CITY CLEANERS
Year: 2009
Address: 1330 S BERETANIA ST

Name: CITY CLEANERS
Year: 2010
Address: 1330 S BERETANIA ST

Name: CITY CLEANERS
Year: 2011
Address: 1330 S BERETANIA ST

Name: CITY CLEANERS
Year: 2012
Address: 1330 S BERETANIA ST

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9 **GRACE OTSUKA APARTMENT COMPLEX** **SHWS** **S110061466**
SSW **1233 YOUNG ST** **ENG CONTROLS** **N/A**
1/8-1/4 **HONOLULU, HI 96814** **INST CONTROL**
0.152 mi.
800 ft.

Relative: Lower

Actual: 17 ft.

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: Grace Otsuka Apartment Complex
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Program: State
Project Manager: Kelton Otsuka
Hazard Priority: NFA
Potential Hazards And Controls: Hazard Managed With Controls
Organization: Not reported
Island: Oahu
Supplemental Location Text: Not reported
SDAR Environmental Interest Name: Grace Otsuka Apartment Complex
HID Number: Not reported
Facility Registry Identifier: Not reported

GRACE OTSUKA APARTMENT COMPLEX (Continued) **S110061466**

Lead Agency:	HEER
Progran Name:	State
Potential Hazard And Controls:	Hazard Managed With Controls
Priority:	NFA
Assessment:	Response Necessary
Response:	Response Complete
Nature of Contamination:	Not reported
Nature of Residual Contamination:	Soil contaminated with diesel.
Use Restrictions:	Controls Required to Manage Contamination
Engineering Control:	Engineering Control Required
Description of Restrictions:	Not reported
Institutional Control:	Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination:	Not reported
Site Closure Type:	No Further Action Letter - Restricted Use
Document Date:	07/21/2008
Document Number:	2008-482-KO
Document Subject:	Underground Storage Tank Closure and Release Response Report, Apr 2008, Grace Otsuka Apartment Compl
Project Manager:	Kelton Otsuka
Contact Information:	(808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

ENG CONTROLS:

Supplemental Location Text:	Not reported
Zip Suffix:	Not reported
Island:	Oahu
Potential Hazards And Controls:	Hazard Managed With Controls
Engineering Control:	Engineering Control Required

INST CONTROL:

Potential hazards and controls:	Hazard Managed With Controls
Supplemental Location:	Not reported
Zip Suffix:	Not reported
Island:	Oahu
Institutional Control:	Government - Hawaii Dept. of Health Letter Issued

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10 WSW 1/8-1/4 0.153 mi. 809 ft.

Relative: Lower

Actual: 20 ft.

PETCO #1185 **RCRA-CESQG** **1016956260**
1121 SOUTH BERETANIA ST. **HIR000142281**
HONOLULU, HI 96814

RCRA-CESQG:

Date form received by agency:	04/02/2014
Facility name:	PETCO #1185
Facility address:	1121 SOUTH BERETANIA ST. HONOLULU, HI 96814
EPA ID:	HIR000142281
Mailing address:	RICHLAND HILLS DRIVE SAN ANTONIO, TX 78245
Contact:	AMY PATTON
Contact address:	RICHLAND HILLS DRIVE SAN ANTONIO, TX 78245
Contact country:	US
Contact telephone:	(210) 201-9241
Contact email:	AMY.PATTON@PETCO.COM
EPA Region:	09
Classification:	Conditionally Exempt Small Quantity Generator

PETCO #1185 (Continued) **1016956260**

Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	WALGREEN OF HAWAII, LLC
Owner/operator address:	WILMOT ROAD - MS 1640 DEERFIELD, 60015
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	11/27/2012
Owner/Op end date:	Not reported

Owner/operator name:	PETCO STORE # 1185
Owner/operator address:	Not reported Not reported
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	10/12/2012
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

. Waste code:	D001
. Waste name:	IGNITABLE WASTE

PETCO #1185 (Continued) **1016956260**

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D005
. Waste name: BARIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D016
. Waste name: 2,4-D (2,4-DICHLOROPHENOXYACETIC ACID)

. Waste code: D018
. Waste name: BENZENE

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

Violation Status: No violations found

D11 MIDAS **RCRA-CESQG 1000156630**
SE 1335 S BERETANIA ST **FINDS HID981638778**
1/8-1/4 HONOLULU, HI 96814
0.159 mi.
840 ft. Site 1 of 3 in cluster D

Relative: Lower
Actual: 21 ft.

RCRA-CESQG:
Date form received by agency: 01/26/1986
Facility name: MIDAS
Facility address: 1335 S BERETANIA ST
HONOLULU, HI 96814
EPA ID: HID981638778
Contact: ENVIRONMENTAL MANAGER
Contact address: 1335 S BERETANIA ST
HONOLULU, HI 96814
Contact country: US
Contact telephone: (808) 845-7851
Contact email: Not reported
EPA Region: 09
Land type: Other land type
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from

MIDAS (Continued) **1000156630**

the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:
Owner/operator name: PEREIRA OF HAWAII INC
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 01/24/1996
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

FINDS:

Registry ID: 110005724458

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource

MIDAS (Continued) **1000156630**

Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

STATE MASTER

D12
SE
1/8-1/4
0.159 mi.
840 ft.

1335 S BERETANIA ST
HONOLULU, HI 96814

EDR US Hist Auto Stat **1015210103**
N/A

Site 2 of 3 in cluster D

Relative: Lower

Actual: 21 ft.

EDR Historical Auto Stations:

Name:	MIDAS MUFFLER SHOPS OF HAWAII
Year:	1999
Address:	1335 S BERETANIA ST
Name:	MIDAS AUTO SVC EXPERTS
Year:	2010
Address:	1335 S BERETANIA ST

13
WNW
1/8-1/4
0.165 mi.
870 ft.

1310 PENSACOLA STREET
1310 PENSACOLA ST
HONOLULU, HI

SHWS **S111704658**
N/A

Relative: Higher

Actual: 27 ft.

SHWS:

Organization:	Not reported
Supplemental Location:	Not reported
Island:	Oahu
Environmental Interest:	1310 Pensacola Street
HID Number:	Not reported
Facility Registry Identifier:	Not reported
Lead Agency:	HEER
Program:	State
Project Manager:	Paul Chong
Hazard Priority:	NFA
Potential Hazards And Controls:	No Hazard
Organization:	Not reported
Island:	Oahu
Supplemental Location Text:	Not reported
SDAR Environmental Interest Name:	1310 Pensacola Street
HID Number:	Not reported
Facility Registry Identifier:	Not reported
Lead Agency:	HEER
Progran Name:	State
Potential Hazard And Controls:	No Hazard
Priority:	NFA
Assessment:	Response Necessary
Response:	Response Complete
Nature of Contamination:	Not reported
Nature of Residual Contamination:	Not reported

1310 PENSACOLA STREET (Continued) **S111704658**

Use Restrictions:	No Hazard Present For Unrestricted Residential Use
Engineering Control:	Not reported
Description of Restrictions:	Not reported
Institutional Control:	Not reported
Within Designated Areawide Contamination:	Not reported
Site Closure Type:	No Further Action Letter - Unrestricted Residential Use
Document Date:	07/26/2011
Document Number:	2011-433-PC
Document Subject:	No Further Action Determination for the Underground Storage Tank Closure and Release Report, dated M
Project Manager:	Paul Chong
Contact Information:	(808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

D14
SE
1/8-1/4
0.186 mi.
982 ft.

1357 S BERETANIA ST
HONOLULU, HI 96814

EDR US Hist Cleaners **1014989948**
N/A

Site 3 of 3 in cluster D

Relative: Lower

Actual: 22 ft.

EDR Historical Cleaners:

Name:	ABE CLEANERS
Year:	2001
Address:	1357 S BERETANIA ST
Name:	ABE CLEANERS
Year:	2002
Address:	1357 S BERETANIA ST

15
NNW
1/8-1/4
0.187 mi.
987 ft.

HAWAIIAN MISSION ACADEMY
1438 PENSACOLA ST
HONOLULU, HI 96822

UST **U001235902**
Financial Assurance **N/A**

Relative: Higher

Actual: 45 ft.

UST:

Facility ID:	9-102409
Owner:	HAWAIIAN MISSION ACADEMY
Owner Address:	1438 PENSACOLA St
Owner City,St,Zip:	Honolulu, 96822 96822
Latitude:	Not reported
Longitude:	Not reported
Horizontal Reference Datum Name:	Not reported
Horizontal Collection Method Name:	Not reported
Tank ID:	R-001
Date Installed:	12/31/1970
Tank Status:	**Permanently Out of Use**
Date Closed:	Not reported
Tank Capacity:	1000
Substance:	Gasoline
Tank ID:	R-002
Date Installed:	12/31/1970
Tank Status:	**Permanently Out of Use**
Date Closed:	Not reported

HAWAIIAN MISSION ACADEMY (Continued) **U001235902**

Tank Capacity: 500
Substance: Gasoline

HI Financial Assurance:
Alt Facility ID: 9-102409
Tank Id: R-001
Tank Status: Permanently Out of Use
FRTYPE: Trust Fund
Expiration Date: Not reported

Alt Facility ID: 9-102409
Tank Id: R-002
Tank Status: Permanently Out of Use
FRTYPE: Trust Fund
Expiration Date: Not reported

E16
SSW
1/8-1/4
0.191 mi.
1010 ft.

PIIKOI AND KING 76 **UST** **U003998221**
1206 SOUTH KING STREET **Financial Assurance** **N/A**
HONOLULU, HI 96814

Site 1 of 3 in cluster E

Relative:
Lower

Actual:
13 ft.

UST:
Facility ID: 9-103799
Owner: Mid Pac Petroleum LLC
Owner Address: 1100 Alakea Street, 8th floor
Owner City,St,Zip: Honolulu, 96814 96814
Latitude: 21.300320
Longitude: -157.843480
Horizontal Reference Datum Name: NAD83
Horizontal Collection Method Name: GPS

Tank ID: 1
Date Installed: 11/24/2006
Tank Status: **Currently In Use**
Date Closed: Not reported
Tank Capacity: 15000
Substance: Gasoline

Tank ID: 1
Date Installed: 11/24/2006
Tank Status: **Currently In Use**
Date Closed: Not reported
Tank Capacity: 15000
Substance: Gasoline

Tank ID: 2
Date Installed: 11/24/2006
Tank Status: **Currently In Use**
Date Closed: Not reported
Tank Capacity: 10000
Substance: Gasoline

Tank ID: 2

PIIKOI AND KING 76 (Continued) **U003998221**

Date Installed: 11/24/2006
Tank Status: **Currently In Use**
Date Closed: Not reported
Tank Capacity: 10000
Substance: Gasoline

Tank ID: 3
Date Installed: 11/24/2006
Tank Status: **Currently In Use**
Date Closed: Not reported
Tank Capacity: 5000
Substance: Diesel

Tank ID: 3
Date Installed: 11/24/2006
Tank Status: **Currently In Use**
Date Closed: Not reported
Tank Capacity: 5000
Substance: Diesel

HI Financial Assurance:
Alt Facility ID: 9-103799
Tank Id: 3
Tank Status: Currently In Use
FRTYPE: Insurance
Expiration Date: 03/31/2012

Alt Facility ID: 9-103799
Tank Id: 1
Tank Status: Currently In Use
FRTYPE: Insurance
Expiration Date: 03/31/2012

Alt Facility ID: 9-103799
Tank Id: 2
Tank Status: Currently In Use
FRTYPE: Insurance
Expiration Date: 03/31/2012

17
SSE
1/8-1/4
0.206 mi.
1088 ft.

1334 YOUNG ST **EDR US Hist Cleaners** **1014989060**
HONOLULU, HI 96814 **N/A**

Relative:
Lower

Actual:
18 ft.

EDR Historical Cleaners:
Name: SHERIDAN LAUNDRY SERVICE
Year: 2002
Address: 1334 YOUNG ST

Name: SHERIDAN LAUNDRY SERVICE
Year: 2003
Address: 1334 YOUNG ST

Name: SHERIDAN LAUNDRY SERVICE

(Continued) **1014989060**

Year: 2004
Address: 1334 YOUNG ST

Name: SHERIDAN LAUNDRY SERVICE
Year: 2005
Address: 1334 YOUNG ST

Name: SHERIDAN LAUNDRY SERVICE
Year: 2006
Address: 1334 YOUNG ST

Name: SHERIDAN LAUNDRY SERVICE
Year: 2007
Address: 1334 YOUNG ST

Name: SHERIDAN LAUNDRY SERVICE
Year: 2008
Address: 1334 YOUNG ST

Name: SHERIDAN LAUNDRY SERVICE
Year: 2009
Address: 1334 YOUNG ST

Name: SHERIDAN LAUNDRY CTR
Year: 2010
Address: 1334 YOUNG ST

Name: SHERIDAN LAUNDRY CENTER
Year: 2011
Address: 1334 YOUNG ST

Name: SHERIDAN LAUNDRY CENTER
Year: 2012
Address: 1334 YOUNG ST

F18 **CHEVRON 90423** **RCRA-CESQG** **1008880419**
SE **1378 S BERETANIA ST** **HIR000136960**
1/8-1/4 **HONOLULU, HI 96814**
0.208 mi.
1100 ft. **Site 1 of 3 in cluster F**

Relative:
Lower

Actual:
23 ft.

RCRA-CESQG:
Date form received by agency: 09/16/2005
Facility name: CHEVRON 90423
Facility address: 1378 S BERETANIA ST
HONOLULU, HI 96814
EPA ID: HIR000136960
Mailing address: PO BOX 6004
SAN RAMON, CA 94583
Contact: KATHY L NORRIS
Contact address: PO BOX 6004
SAN RAMON, CA 94583
Contact country: US
Contact telephone: 925-842-5931
Contact email: KNORRIS@CHEVRON.COM
EPA Region: 09
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar

CHEVRON 90423 (Continued) **1008880419**

month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:
Owner/operator name: CHEVRON USA INC
Owner/operator address: PO BOX 6004
SAN RAMON, CA 94583
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 07/01/1991
Owner/Op end date: Not reported

Owner/operator name: CHEVRON USA INC
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 07/01/1991
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D018
. Waste name: BENZENE

Violation Status: No violations found

F19 **EDR US Hist Auto Stat** **1015215961**
SE **1378 S BERETANIA ST** **N/A**
1/8-1/4 **HONOLULU, HI 96814**
0.208 mi.
1100 ft. **Site 2 of 3 in cluster F**

Relative:
Lower

Actual:
23 ft.

EDR Historical Auto Stations:

Name: CHEVRON STATIONS INC
Year: 2005
Address: 1378 S BERETANIA ST

Name: CHEVRON STATIONS INC
Year: 2007
Address: 1378 S BERETANIA ST

Name: CHEVRON STATIONS INC
Year: 2008
Address: 1378 S BERETANIA ST

Name: CHEVRON STATIONS INC
Year: 2009
Address: 1378 S BERETANIA ST

Name: CHEVRON FOOD MART
Year: 2010
Address: 1378 S BERETANIA ST

Name: CHEVRON HAWAII CHEVRON PRODUCTS CO
Year: 2011
Address: 1378 S BERETANIA ST

Name: CHEVRON
Year: 2012
Address: 1378 S BERETANIA ST

F20 **BERETANIA CHEVRON 0423** **LUST** **U003221686**
SE **1378 S BERETANIA ST** **UST** **N/A**
1/8-1/4 **HONOLULU, HI 96814** **Financial Assurance**
0.208 mi.
1100 ft. **Site 3 of 3 in cluster F**

Relative:
Lower

Actual:
23 ft.

LUST:

Facility ID: 9-101720
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 12/28/1994
Release ID: 880012
Project Officer: Haven Westerman

Facility ID: 9-101720
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 04/20/1999
Release ID: 960076
Project Officer: Haven Westerman

Facility ID: 9-101720
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 08/08/2005
Release ID: 040024
Project Officer: Haven Westerman

BERETANIA CHEVRON 0423 (Continued) **U003221686**

UST:

Facility ID: 9-101720
Owner: CHEVRON PRODUCTS COMPANY
Owner Address: Attn Permit Desk PO Box 6004
Owner City,St,Zip: Honolulu, 96814 96814
Latitude: 21.300820
Longitude: -157.839600
Horizontal Reference Datum Name: NAD83
Horizontal Collection Method Name: GPS

Tank ID: 87
Date Installed: 05/29/1987
Tank Status: **Currently in Use**
Date Closed: Not reported
Tank Capacity: 10000
Substance: Gasoline

Tank ID: 89
Date Installed: 05/29/1987
Tank Status: **Currently in Use**
Date Closed: Not reported
Tank Capacity: 10000
Substance: Gasoline

Tank ID: 92
Date Installed: 05/29/1987
Tank Status: **Currently In Use**
Date Closed: Not reported
Tank Capacity: 10000
Substance: Gasoline

HI Financial Assurance:

Alt Facility ID: 9-101720
Tank Id: 89
Tank Status: Currently in Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-101720
Tank Id: 92
Tank Status: Currently In Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-101720
Tank Id: 87
Tank Status: Currently in Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-101720
Tank Id: 92
Tank Status: Currently In Use
FRTYPE: Guarantee

BERETANIA CHEVRON 0423 (Continued) **U003221686**

Expiration Date: 04/27/2012

Alt Facility ID: 9-101720
Tank Id: 89
Tank Status: Currently in Use
FRTYPE: Guarantee
Expiration Date: 04/27/2012

Alt Facility ID: 9-101720
Tank Id: 87
Tank Status: Currently in Use
FRTYPE: Guarantee
Expiration Date: 04/27/2012

E21 SW 1/8-1/4 0.210 mi. 1109 ft. **UNOCAL 76 SS L 3667** **RCRA NonGen / NLR 1000823230**
1012 PIIKOI ST **FINDS HID984468694**
HONOLULU, HI 96814

Site 2 of 3 in cluster E

Relative: Lower

Actual: 13 ft.

RCRA NonGen / NLR:
Date form received by agency: 08/27/1993
Facility name: UNOCAL 76 SS L 3667
Facility address: 1012 PIIKOI ST
HONOLULU, HI 96814
EPA ID: HID984468694
Mailing address: PO BOX 659
HONOLULU, HI 96807
Contact: A FRITZ
Contact address: PO BOX 659
HONOLULU, HI 96807
Contact country: US
Contact telephone: (808) 522-7657
Contact email: Not reported
EPA Region: 09
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: UNOCAL 76
Owner/operator address: 911 WILSHIRE BLVD STE 1010
LOS ANGELES, CA 90017
Owner/operator country: Not reported
Owner/operator telephone: (213) 977-7600
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No

UNOCAL 76 SS L 3667 (Continued) **1000823230**

Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110005728105

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

E22 SW 1/8-1/4 0.210 mi. 1109 ft. **1012 PIIKOI STREET, ANIN-PIIKOI BUILDING** **SHWS S106815117**
1012 PIIKOI ST **SPILLS N/A**
HONOLULU, HI 96814

Site 3 of 3 in cluster E

Relative: Lower

Actual: 13 ft.

SHWS:
Organization: Not reported
Supplemental Location: Anin-Piikoi Building
Island: Oahu
Environmental Interest: Anin-Piikoi Building Site
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: Not reported
Program: State
Project Manager: Richard Palmer
Hazard Priority: NFA
Potential Hazards And Controls: No Hazard
Organization: Not reported
Island: Oahu
Supplemental Location Text: Anin-Piikoi Building
SDAR Environmental Interest Name: Anin-Piikoi Building Site
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: Not reported
Progran Name: State
Potential Hazard And Controls: No Hazard
Priority: NFA
Assessment: Response Necessary
Response: Response Complete
Nature of Contamination: Not reported
Nature of Residual Contamination: Not reported
Use Restrictions: No Hazard Present for Unrestricted Residential Use
Engineering Control: Not reported

1012 PIIKOI STREET, ANIN-PIIKOI BUILDING (Continued) **S106815117**

Description of Restrictions:	Not reported
Institutional Control:	Not reported
Within Designated Areawide Contamination:	Not reported
Site Closure Type:	No Further Action Letter - Unrestricted Residential Use
Document Date:	03/16/2004
Document Number:	2004-103-MS
Document Subject:	NFA Anin-Piikoi
Project Manager:	Richard Palmer
Contact Information:	(808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

HI SPILLS:

Island:	Oahu
Supplemental Loc. Text:	Anin-Piikoi Building
Case Number:	20020523-1051
HID Number:	Not reported
Facility Registry Id:	Not reported
Lead and Program:	HEER EP&R
ER:	Not reported
Units:	Anin-Piikoi Building Chemical Spill
Substances:	Chlordane
Less Or Greater Than:	Not reported
Numerical Quantity:	Not reported
Units:	Not reported
Activity Type:	Response
Activity Lead:	Terry Corpus
Assignment End Date:	2003-10-07 00:00:00
Result:	Refer to ISST
File Under:	SCI Noel

Island:	Oahu
Supplemental Loc. Text:	Anin-Piikoi Building
Case Number:	20020523-1051
HID Number:	Not reported
Facility Registry Id:	Not reported
Lead and Program:	HEER EP&R
ER:	Not reported
Units:	Anin-Piikoi Building Chemical Spill
Substances:	dieldrin
Less Or Greater Than:	Not reported
Numerical Quantity:	Not reported
Units:	Not reported
Activity Type:	Response
Activity Lead:	Terry Corpus
Assignment End Date:	2003-10-07 00:00:00
Result:	Refer to ISST
File Under:	SCI Noel

Island:	Oahu
Supplemental Loc. Text:	Anin-Piikoi Building
Case Number:	20020523-1051
HID Number:	Not reported
Facility Registry Id:	Not reported
Lead and Program:	HEER EP&R
ER:	Not reported
Units:	Anin-Piikoi Building Chemical Spill
Substances:	fluoranthene
Less Or Greater Than:	Not reported

1012 PIIKOI STREET, ANIN-PIIKOI BUILDING (Continued) **S106815117**

Numerical Quantity:	Not reported
Units:	Not reported
Activity Type:	Response
Activity Lead:	Terry Corpus
Assignment End Date:	2003-10-07 00:00:00
Result:	Refer to ISST
File Under:	SCI Noel

G23 **CAL'S CLEANERS** **DRYCLEANERS** **S107769083**
SSW **1234 S. KING ST.** **N/A**
1/8-1/4 **HONOLULU, HI 96814**
0.214 mi.
1129 ft. **Site 1 of 5 in cluster G**

Relative:
Lower

Actual:
13 ft.

HI DRYCLEANERS:

Pernit Number:	0094-31
Gal/Year:	385
Mach Type:	D-D
Island:	Oahu
Company:	Not reported
Application Date:	03/14/2002
Issued Date:	05/14/2002
Phone Number:	591-9710
Responsible Official Name:	Bruce Kuriyama
Responsible Official Title:	General Manager
Responsible Official Address:	1234 S. King St.
Responsible Official City,St,Zip:	Honolulu, HI 96814

G24 **EDR US Hist Cleaners** **1014983942**
SSW **1234 S KING ST** **N/A**
1/8-1/4 **HONOLULU, HI 96814**
0.214 mi.
1129 ft. **Site 2 of 5 in cluster G**

Relative:
Lower

Actual:
13 ft.

EDR Historical Cleaners:

Name:	CLYDES CLEANERS
Year:	2001
Address:	1234 S KING ST
Name:	CALS CLEANERS
Year:	2003
Address:	1234 S KING ST
Name:	CALS CLEANERS
Year:	2004
Address:	1234 S KING ST
Name:	CALS CLEANERS
Year:	2008
Address:	1234 S KING ST
Name:	CALS CLEANERS
Year:	2010
Address:	1234 S KING ST
Name:	CALS CLEANERS

(Continued) **1014983942**

Year: 2011
Address: 1234 S KING ST

Name: CALS CLEANERS
Year: 2012
Address: 1234 S KING ST

G25 **EDR US Hist Auto Stat** **1015190329**
SSW **1239 S KING ST** **N/A**
1/8-1/4 **HONOLULU, HI 96814**
0.215 mi.
1136 ft. **Site 3 of 5 in cluster G**

Relative:
Lower

Actual:
13 ft.

EDR Historical Auto Stations:
Name: SOUTH KING STREET TEXACO
Year: 1999
Address: 1239 S KING ST

G26 **TEXACO STATION 611000090** **RCRA NonGen / NLR** **1000601548**
SSW **1239 S KING ST** **LUST** **HID984467852**
1/8-1/4 **HONOLULU, HI 96814** **UST**
0.215 mi. **SPILLS**
1136 ft. **Site 4 of 5 in cluster G** **Financial Assurance**

Relative:
Lower

Actual:
13 ft.

RCRA NonGen / NLR:
Date form received by agency: 02/24/1992
Facility name: TEXACO STATION 611000090
Facility address: 1239 S KING ST
HONOLULU, HI 96814
EPA ID: HID984467852
Contact: DALE ANDERT
Contact address: 1800 SW 1ST AVE STE 180
PORTLAND, OR 97201
Contact country: US
Contact telephone: (503) 226-3575
Contact email: Not reported
EPA Region: 09
Land type: Private
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: OKAMURA BOYS AND GIRLS HOME
Owner/operator address: BUSINESS LN 98 211 PALI MOMI
AIEA, HI 96701
Owner/operator country: Not reported
Owner/operator telephone: (808) 538-4163
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No

TEXACO STATION 611000090 (Continued) **1000601548**

Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 12/11/1995
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

LUST:
Facility ID: 9-100340
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 03/08/1999
Release ID: 980250
Project Officer: Richard Takaba

Facility ID: 9-100340
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 03/08/1999
Release ID: 980194
Project Officer: Richard Takaba

UST:
Facility ID: 9-100340
Owner: TEXACO REFINING & MARKETING INC.
Owner Address: ENVIRONMENTAL SERVICES800 SW FIRST AVE., SUITE 180
Owner City,St,Zip: Honolulu, 96814 96814
Latitude: 21.299342
Longitude: -157.843259
Horizontal Reference Datum Name: NAD83
Horizontal Collection Method Name: Address Matching

Tank ID: R-1
Date Installed: 02/06/1985
Tank Status: **Permanently Out of Use**
Date Closed: 09/02/1998
Tank Capacity: 550
Substance: Used Oil

Tank ID: R-2
Date Installed: 02/06/1985
Tank Status: **Permanently Out of Use**

TEXACO STATION 611000090 (Continued) **1000601548**

Date Closed: 09/03/1998
Tank Capacity: 10000
Substance: Gasoline

Tank ID: R-3
Date Installed: 02/06/1985
Tank Status: Permanently Out of Use
Date Closed: 09/03/1998
Tank Capacity: 10000
Substance: Gasoline

Tank ID: R-4
Date Installed: 02/06/1985
Tank Status: Permanently Out of Use
Date Closed: 09/03/1998
Tank Capacity: 10000
Substance: Gasoline

Tank ID: R-5
Date Installed: 02/06/1985
Tank Status: Permanently Out of Use
Date Closed: 09/03/1998
Tank Capacity: 10000
Substance: Gasoline

HI SPILLS:
Island: Oahu
Supplemental Loc. Text: Not reported
Case Number: 19960614-1401
HID Number: Not reported
Facility Registry Id: 110005727829
Lead and Program: HEER EP&R
ER: No
Units: Texaco Station 61-100-0090 at Alder and King
Substances: Antifreeze
Less Or Greater Than: Not reported
Numerical Quantity: Not reported
Units: Not reported
Activity Type: Response
Activity Lead: Chris Takeno
Assignment End Date: Not reported
Result: SOSC NFA
File Under: Texaco, Inc.

Island: Oahu
Supplemental Loc. Text: Not reported
Case Number: 19960614-1401
HID Number: Not reported
Facility Registry Id: 110005727829
Lead and Program: HEER EP&R
ER: No
Units: Texaco Station 61-100-0090 at Alder and King
Substances: Oil
Less Or Greater Than: Not reported

TEXACO STATION 611000090 (Continued) **1000601548**

Numerical Quantity: Not reported
Units: Not reported
Activity Type: Response
Activity Lead: Chris Takeno
Assignment End Date: Not reported
Result: SOSC NFA
File Under: Texaco, Inc.

Island: Oahu
Supplemental Loc. Text: Not reported
Case Number: 19970424-1906
HID Number: Not reported
Facility Registry Id: 110005727829
Lead and Program: HEER EP&R
ER: Not reported
Units: Texaco Station Off-loading Fumes
Substances: Gasoline
Less Or Greater Than: Not reported
Numerical Quantity: Not reported
Units: Not reported
Activity Type: Response
Activity Lead: Bill Perry
Assignment End Date: Not reported
Result: SOSC NFA
File Under: Texaco, Inc.

HI Financial Assurance:
Alt Facility ID: 9-100340
Tank Id: R-1
Tank Status: Permanently Out of Use
FRTYPE: Self Insured
Expiration Date: Not reported

Alt Facility ID: 9-100340
Tank Id: R-4
Tank Status: Permanently Out of Use
FRTYPE: Self Insured
Expiration Date: Not reported

Alt Facility ID: 9-100340
Tank Id: R-3
Tank Status: Permanently Out of Use
FRTYPE: Self Insured
Expiration Date: Not reported

Alt Facility ID: 9-100340
Tank Id: R-2
Tank Status: Permanently Out of Use
FRTYPE: Self Insured
Expiration Date: Not reported

Alt Facility ID: 9-100340
Tank Id: R-5
Tank Status: Permanently Out of Use
FRTYPE: Self Insured
Expiration Date: Not reported

G27 SSW 1/8-1/4 0.216 mi. 1142 ft. — **1251 S KING ST, HONOLULU, HI 96814** — **EDR US Hist Auto Stat** — **1015193512 / N/A**

Site 5 of 5 in cluster G

Relative: Lower
Actual: 13 ft.

EDR Historical Auto Stations:

Name:	ANDYS ATMTV & BODY SHOP
Year:	2003
Address:	1251 S KING ST

---

28 ESE 1/8-1/4 0.217 mi. 1147 ft. — **CARTWRIGHT NEIGHBORHOOD PARK, KEEAUMOKU ST & MATLOCK AVE, HONOLULU, HI 96814** — **SHWS** — **1006820122 / N/A**

Relative: Higher
Actual: 30 ft.

SHWS:

Organization:	Not reported
Supplemental Location:	Not reported
Island:	Oahu
Environmental Interest:	Cartwright Neighborhood Park
HID Number:	Not reported
Facility Registry Identifier:	110013780257
Lead Agency:	HEER
Program:	State
Project Manager:	Steve Mow
Hazard Priority:	NFA
Potential Hazards And Controls:	No Hazard
Organization:	Not reported
Island:	Oahu
Supplemental Location Text:	Not reported
SDAR Environmental Interest Name:	Cartwright Neighborhood Park
HID Number:	Not reported
Facility Registry Identifier:	110013780257
Lead Agency:	HEER
Progran Name:	State
Potential Hazard And Controls:	No Hazard
Priority:	NFA
Assessment:	Response Necessary
Response:	Response Complete
Nature of Contamination:	Found: Transformer oil (no PCBs) found on site.
Nature of Residual Contamination:	Not reported
Use Restrictions:	No Hazard Present for Unrestricted Residential Use
Engineering Control:	Not reported
Description of Restrictions:	Not reported
Institutional Control:	Not reported
Within Designated Areawide Contamination:	Not reported
Site Closure Type:	No Further Action Letter - Unrestricted Residential Use
Document Date:	05/12/2005
Document Number:	2005-257-SPM
Document Subject:	No Further Action Required at Cartwright Neighborhood Park
Project Manager:	Steve Mow
Contact Information:	(808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

29 SW 1/8-1/4 0.225 mi. 1186 ft. — **MARK'S PIIKOI SERVICE L-3667, 1180 S KING ST, HONOLULU, HI 96814** — **LUST, UST** — **U001235013 / N/A**

Relative: Lower
Actual: 11 ft.

LUST:

Facility ID:	9-100038
Facility Status:	Site Cleanup Completed (NFA)
Facility Status Date:	03/02/2005
Release ID:	890005
Project Officer:	Shaobin Li

UST:

Facility ID:	9-100038
Owner:	UNOCAL CORPORATION
Owner Address:	3915 Mission Avenue #7416
Owner City,St,Zip:	Honolulu, 96814 96814
Latitude:	21.300098
Longitude:	-157.844314
Horizontal Reference Datum Name:	NAD83
Horizontal Collection Method Name:	Address Matching
Tank ID:	R-3367-4
Date Installed:	03/26/1955
Tank Status:	**Permanently Out of Use**
Date Closed:	11/01/1989
Tank Capacity:	550
Substance:	Used Oil
Tank ID:	R-3667-1
Date Installed:	03/26/1954
Tank Status:	**Permanently Out of Use**
Date Closed:	11/01/1989
Tank Capacity:	3000
Substance:	Gasoline
Tank ID:	R-3667-2
Date Installed:	03/26/1954
Tank Status:	**Permanently Out of Use**
Date Closed:	11/01/1989
Tank Capacity:	4000
Substance:	Gasoline
Tank ID:	R-3667-3
Date Installed:	03/26/1954
Tank Status:	**Permanently Out of Use**
Date Closed:	11/01/1989
Tank Capacity:	5000
Substance:	Gasoline

H30 West 1/8-1/4 0.226 mi. 1191 ft. — **BMW OF HONOLULU LTD** — **LUST** **U001235080**, **UST** **N/A**
1075 S BERETANIA ST
HONOLULU, HI 96814

Site 1 of 3 in cluster H

Relative: Lower

Actual: 22 ft.

LUST:

Facility ID:	9-100174
Facility Status:	Site Cleanup Completed (NFA)
Facility Status Date:	09/07/1995
Release ID:	930009
Project Officer:	Shaobin Li

Facility ID:	9-100174
Facility Status:	Site Cleanup Completed (NFA)
Facility Status Date:	04/26/2000
Release ID:	000063
Project Officer:	Shaobin Li

UST:

Facility ID:	9-100174
Owner:	ISAO, HARRIET AND JANIE MASUNAGA, TRUSTEES
Owner Address:	1010 S KING ST, SUITE 101
Owner City,St,Zip:	Honolulu, 96814 96814
Latitude:	21.302298
Longitude:	-157.845928
Horizontal Reference Datum Name:	NAD83
Horizontal Collection Method Name:	Address Matching

Tank ID:	R-1
Date Installed:	04/30/1980
Tank Status:	**Permanently Out of Use**
Date Closed:	03/13/1993
Tank Capacity:	500
Substance:	Used Oil

Tank ID:	R-2
Date Installed:	Not reported
Tank Status:	**Permanently Out of Use**
Date Closed:	12/26/1999
Tank Capacity:	500
Substance:	Other

Tank ID:	R-3
Date Installed:	Not reported
Tank Status:	**Permanently Out of Use**
Date Closed:	12/26/1999
Tank Capacity:	500
Substance:	Used Oil

Tank ID:	R-4
Date Installed:	Not reported
Tank Status:	**Permanently Out of Use**
Date Closed:	12/26/1999
Tank Capacity:	500
Substance:	Used Oil

BMW OF HONOLULU LTD (Continued) — **U001235080**

Tank ID:	R-5
Date Installed:	Not reported
Tank Status:	**Permanently Out of Use**
Date Closed:	12/26/1999
Tank Capacity:	1000
Substance:	Other

Tank ID:	R-6
Date Installed:	Not reported
Tank Status:	**Permanently Out of Use**
Date Closed:	12/26/1999
Tank Capacity:	1000
Substance:	Used Oil

Tank ID:	R-7
Date Installed:	Not reported
Tank Status:	**Permanently Out of Use**
Date Closed:	12/26/1999
Tank Capacity:	1000
Substance:	Gasoline

H31 West 1/8-1/4 0.226 mi. 1191 ft. — **ISA O HARRIET AND JANIE MASUNAGA TRUSTEE** — **RCRA NonGen / NLR** **1010316421**, **HIP000064063**
1075 S BERETANIA ST
HONOLULU, HI 96814

Site 2 of 3 in cluster H

Relative: Lower

Actual: 22 ft.

RCRA NonGen / NLR:

Date form received by agency:	05/29/2007
Facility name:	ISA O HARRIET AND JANIE MASUNAGA TRUSTEE
Facility address:	1075 S BERETANIA ST HONOLULU, HI 96814
EPA ID:	HIP000064063
Contact:	GLENN MASUNAGA
Contact address:	1075 S BERETANIA ST HONOLULU, HI 96814
Contact country:	US
Contact telephone:	(808) 597-1553
Contact email:	Not reported
EPA Region:	09
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	GLENN MASUNAGA
Owner/operator address:	1075 S BERETANIA ST HONOLULU, HI 96814
Owner/operator country:	Not reported
Owner/operator telephone:	(808) 597-1553
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

ISA O HARRIET AND JANIE MASUNAGA TRUSTEE (Continued) **1010316421**

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 01/10/2000
Site name: ISA O HARRIET AND JANIE MASUNAGA TRUSTEE
Classification: Large Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: F001
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLORETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

32
South
1/8-1/4
0.236 mi.
1248 ft.

1293 S KING ST
HONOLULU, HI 96814

EDR US Hist Auto Stat **1015199518**
N/A

Relative:
Lower

Actual:
13 ft.

EDR Historical Auto Stations:
Name: KENS AUTO ELECTRIC
Year: 1999
Address: 1293 S KING ST

Name: KENS AUTO ELECTRIC
Year: 2001
Address: 1293 S KING ST

Name: KENS AUTO ELECTRIC
Year: 2002
Address: 1293 S KING ST

Name: KENS AUTO ELECTRIC
Year: 2003

(Continued) **1015199518**

Address: 1293 S KING ST

Name: KENS AUTO ELECTRIC
Year: 2004
Address: 1293 S KING ST

Name: KENS AUTO ELECTRIC
Year: 2006
Address: 1293 S KING ST

Name: KENS AUTO ELECTRIC
Year: 2010
Address: 1293 S KING ST

I33
SSW
1/8-1/4
0.237 mi.
1250 ft.

1201 S KING ST
HONOLULU, HI 96814

EDR US Hist Auto Stat **1015180258**
N/A

Site 1 of 3 in cluster I

Relative:
Lower

Actual:
10 ft.

EDR Historical Auto Stations:
Name: PIIKOI CHEVRON
Year: 2001
Address: 1201 S KING ST

Name: CHEVRON HAWAII HONOLULU
Year: 2002
Address: 1201 S KING ST

Name: CHEVRON HAWAII HONOLULU
Year: 2003
Address: 1201 S KING ST

Name: BIONIC CHEVRON
Year: 2007
Address: 1201 S KING ST

Name: BIONIC CHEVRON
Year: 2010
Address: 1201 S KING ST

Name: CHEVRON HAWAII CHEVRON PRODUCTS CO
Year: 2011
Address: 1201 S KING ST

Name: BIONIC CHEVRON
Year: 2012
Address: 1201 S KING ST

I34 SSW 1/8-1/4 0.237 mi. 1250 ft. — **CHEVRON 99425**, **1201 S KING ST**, **HONOLULU, HI 96814** — **RCRA-CESQG** — **1000316240**, **HID981573652**

Site 2 of 3 in cluster I

Relative: Lower

Actual: 10 ft.

RCRA-CESQG:

Date form received by agency:	05/09/2011
Facility name:	CHEVRON 99425
Facility address:	1201 S KING ST HONOLULU, HI 96814
EPA ID:	HID981573652
Mailing address:	PO BOX 6004 SAN RAMON, CA 94583
Contact:	KATHY L NORRIS
Contact address:	PO BOX 6004 SAN RAMON, CA 94583
Contact country:	US
Contact telephone:	(877) 386-6044
Contact email:	NAWTDESK@CHEVRON.COM
EPA Region:	09
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	CHEVRON USA INC.
Owner/operator address:	PO BOX 6004 SAN RAMON, CA 94583
Owner/operator country:	US
Owner/operator telephone:	(877) 386-6044
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	12/19/1967
Owner/Op end date:	Not reported

Owner/operator name:	CHEVRON USA INC.
Owner/operator address:	PO BOX 6004 SAN RAMON, CA 94583
Owner/operator country:	US
Owner/operator telephone:	(877) 386-6044
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	12/19/1967
Owner/Op end date:	Not reported

CHEVRON 99425 (Continued) — **1000316240**

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D018
. Waste name: BENZENE

Historical Generators:

Date form received by agency:	07/21/1993
Site name:	DENNIS CHEVRON SVC
Classification:	Not a generator, verified
Violation Status:	No violations found

I35 SSW 1/8-1/4 0.237 mi. 1250 ft. — **PIIKOI CHEVRON SS**, **1201 S KING ST**, **HONOLULU, HI 96814** — **LUST**, **UST**, **SPILLS**, **Financial Assurance** — **U003402815**, **N/A**

Site 3 of 3 in cluster I

Relative: Lower

Actual: 10 ft.

LUST:

Facility ID:	9-101099
Facility Status:	Site Cleanup Completed (NFA)
Facility Status Date:	08/09/2005
Release ID:	040021
Project Officer:	Chad Pritchard

Facility ID:	9-101099
Facility Status:	Site Cleanup Completed (NFA)
Facility Status Date:	04/29/1999
Release ID:	980238
Project Officer:	Chad Pritchard

UST:

Facility ID:	9-101099
Owner:	CHEVRON PRODUCTS COMPANY
Owner Address:	Attn Permit Desk PO Box 6004
Owner City,St,Zip:	Honolulu, 96814 96814
Latitude:	21.299631
Longitude:	-157.843912
Horizontal Reference Datum Name:	NAD83

PIIKOI CHEVRON SS (Continued) **U003402815**

Horizontal Collection Method Name: GPS

Tank ID: 87
Date Installed: 07/18/1982
Tank Status: **Currently in Use**
Date Closed: Not reported
Tank Capacity: 10000
Substance: Gasoline

Tank ID: 87
Date Installed: 07/18/1982
Tank Status: **Currently in Use**
Date Closed: Not reported
Tank Capacity: 10000
Substance: Gasoline

Tank ID: 89
Date Installed: 07/18/1982
Tank Status: **Currently in Use**
Date Closed: Not reported
Tank Capacity: 10000
Substance: Gasoline

Tank ID: 89
Date Installed: 07/18/1982
Tank Status: **Currently in Use**
Date Closed: Not reported
Tank Capacity: 10000
Substance: Gasoline

Tank ID: 92
Date Installed: 07/18/1982
Tank Status: **Currently In Use**
Date Closed: Not reported
Tank Capacity: 10000
Substance: Gasoline

Tank ID: 92
Date Installed: 07/18/1982
Tank Status: **Currently In Use**
Date Closed: Not reported
Tank Capacity: 10000
Substance: Gasoline

Tank ID: R-4
Date Installed: 07/18/1982
Tank Status: **Permanently Out of Use**
Date Closed: 03/09/1998
Tank Capacity: 1000
Substance: Used Oil

PIIKOI CHEVRON SS (Continued) **U003402815**

Tank ID: R-4
Date Installed: 07/18/1982
Tank Status: **Permanently Out of Use**
Date Closed: 03/09/1998
Tank Capacity: 1000
Substance: Used Oil

HI SPILLS:
Island: Oahu
Supplemental Loc. Text: Not reported
Case Number: 20120529-1308
HID Number: Not reported
Facility Registry Id: Not reported
Lead and Program: HEER EP&R
ER: None
Units: HECO pad-mounted transformer #68679 release
Substances: Transformer Oil
Less Or Greater Than: >
Numerical Quantity: 0
Units: Unknown
Activity Type: Response
Activity Lead: Curtis Martin
Assignment End Date: Not reported
Result: Not reported
File Under: Not reported

HI Financial Assurance:
Alt Facility ID: 9-101099
Tank Id: 92
Tank Status: Currently In Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-101099
Tank Id: 87
Tank Status: Currently in Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-101099
Tank Id: 89
Tank Status: Currently in Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-101099
Tank Id: R-4
Tank Status: Permanently Out of Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-101099
Tank Id: 92
Tank Status: Currently In Use
FRTYPE: Guarantee
Expiration Date: 04/24/2014

PIIKOI CHEVRON SS (Continued) **U003402815**

Alt Facility ID: 9-101099
Tank Id: 87
Tank Status: Currently in Use
FRTYPE: Guarantee
Expiration Date: 04/24/2014

Alt Facility ID: 9-101099
Tank Id: R-4
Tank Status: Permanently Out of Use
FRTYPE: Guarantee
Expiration Date: 04/24/2014

Alt Facility ID: 9-101099
Tank Id: 89
Tank Status: Currently in Use
FRTYPE: Guarantee
Expiration Date: 04/24/2014

H36
West
1/8-1/4
0.238 mi.
1258 ft.

TONY HYUNDAI HONOLULU **UST** **U004220491**
1069 S BERETANIA ST **Financial Assurance** **N/A**
HONOLULU, HI 96814

Site 3 of 3 in cluster H

Relative:
Lower

Actual:
22 ft.

UST:
Facility ID: 9-100184
Owner: Tony Hawaii Automotive Group Ltd
Owner Address: 94-1299 Ka Uka Blvd
Owner City,St,Zip: Honolulu, 96814 96814
Latitude: 21.302422
Longitude: -157.846013
Horizontal Reference Datum Name: NAD83
Horizontal Collection Method Name: Map

Tank ID: 2
Date Installed: 03/19/1989
Tank Status: Currently in Use
Date Closed: Not reported
Tank Capacity: 550
Substance: Used Oil

Tank ID: R-1
Date Installed: 05/01/1983
Tank Status: Permanently Out of Use
Date Closed: 03/31/1989
Tank Capacity: 500
Substance: Used Oil

HI Financial Assurance:
Alt Facility ID: 9-100184
Tank Id: R-1
Tank Status: Permanently Out of Use
FRTYPE: Insurance
Expiration Date: 08/12/2014

Alt Facility ID: 9-100184

TONY HYUNDAI HONOLULU (Continued) **U004220491**

Tank Id: 2
Tank Status: Currently in Use
FRTYPE: Insurance
Expiration Date: 08/12/2014

37
WSW
1/8-1/4
0.248 mi.
1312 ft.

1084 YOUNG ST **EDR US Hist Auto Stat** **1015147523**
HONOLULU, HI 96814 **N/A**

Relative:
Lower

Actual:
16 ft.

EDR Historical Auto Stations:
Name: AIR COOLED ENGINES INC
Year: 2007
Address: 1084 YOUNG ST

Name: AIR COOLED ENGINES
Year: 2008
Address: 1084 YOUNG ST

Name: AIR COOLED ENGINES
Year: 2009
Address: 1084 YOUNG ST

Name: AIRCOOLED ENGINES INC
Year: 2010
Address: 1084 YOUNG ST

Name: AIRCOOLED ENGINES INC
Year: 2011
Address: 1084 YOUNG ST

Name: AIRCOOLED ENGINES INC
Year: 2012
Address: 1084 YOUNG ST

J38
SE
1/4-1/2
0.270 mi.
1427 ft.

MID PAC PETROLEUM 250344 (PREV: DON'S MAKIKI) **LUST** **U001235010**
1406 S BERETANIA ST **UST** **N/A**
HONOLULU, HI 96814 **Financial Assurance**

Site 1 of 2 in cluster J

Relative:
Higher

Actual:
26 ft.

LUST:
Facility ID: 9-100035
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 03/29/2010
Release ID: 920175
Project Officer: Shunsheng Fu

Facility ID: 9-100035
Facility Status: Site Cleanup Completed with EHMP
Facility Status Date: 12/21/2010
Release ID: 000082
Project Officer: Shunsheng Fu

MID PAC PETROLEUM 250344 (PREV: DON'S MAKIKI) (Continued) **U001235010**

UST:

Facility ID:	9-100035
Owner:	Mid Pac Petroleum LLC
Owner Address:	1100 Alakea Street, 8th floor
Owner City,St,Zip:	Honolulu, 96814 96814
Latitude:	21.300210
Longitude:	-157.838820
Horizontal Reference Datum Name:	NAD83
Horizontal Collection Method Name:	GPS

Tank ID:	3
Date Installed:	12/01/1996
Tank Status:	**Currently In Use**
Date Closed:	Not reported
Tank Capacity:	7500
Substance:	Diesel

Tank ID:	87
Date Installed:	12/01/1996
Tank Status:	**Currently In Use**
Date Closed:	Not reported
Tank Capacity:	15000
Substance:	Gasoline

Tank ID:	92
Date Installed:	12/01/1996
Tank Status:	**Currently In Use**
Date Closed:	Not reported
Tank Capacity:	7500
Substance:	Gasoline

Tank ID:	R-0344-2
Date Installed:	05/26/1964
Tank Status:	**Permanently Out of Use**
Date Closed:	12/30/1987
Tank Capacity:	6000
Substance:	Gasoline

Tank ID:	R-0344-3
Date Installed:	05/26/1964
Tank Status:	**Permanently Out of Use**
Date Closed:	12/30/1987
Tank Capacity:	3000
Substance:	Diesel

Tank ID:	R-0344-4
Date Installed:	05/26/1964
Tank Status:	**Permanently Out of Use**
Date Closed:	10/01/1996
Tank Capacity:	550
Substance:	Used Oil

MID PAC PETROLEUM 250344 (PREV: DON'S MAKIKI) (Continued) **U001235010**

Tank ID:	R-1
Date Installed:	12/31/1987
Tank Status:	**Permanently Out of Use**
Date Closed:	10/01/1996
Tank Capacity:	12000
Substance:	Gasoline

Tank ID:	R-1-1
Date Installed:	03/26/1964
Tank Status:	**Permanently Out of Use**
Date Closed:	12/30/1987
Tank Capacity:	6000
Substance:	Gasoline

Tank ID:	R-1-2
Date Installed:	03/26/1965
Tank Status:	**Permanently Out of Use**
Date Closed:	12/30/1987
Tank Capacity:	4000
Substance:	Gasoline

Tank ID:	R-2
Date Installed:	12/29/1987
Tank Status:	**Permanently Out of Use**
Date Closed:	10/01/1996
Tank Capacity:	12000
Substance:	Gasoline

Tank ID:	R-3
Date Installed:	12/31/1987
Tank Status:	**Permanently Out of Use**
Date Closed:	10/01/1996
Tank Capacity:	10000
Substance:	Diesel

Tank ID:	R-4
Date Installed:	12/31/1987
Tank Status:	**Permanently Out of Use**
Date Closed:	10/01/1996
Tank Capacity:	550
Substance:	Used Oil

HI Financial Assurance:

Alt Facility ID:	9-100035
Tank Id:	87
Tank Status:	Currently In Use
FRTYPE:	Other
Expiration Date:	Not reported

Alt Facility ID:	9-100035
Tank Id:	R-1
Tank Status:	Permanently Out of Use

MID PAC PETROLEUM 250344 (PREV: DON'S MAKIKI) (Continued) **U001235010**

FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-100035
Tank Id: R-0344-4
Tank Status: Permanently Out of Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-100035
Tank Id: R-0344-3
Tank Status: Permanently Out of Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-100035
Tank Id: R-2
Tank Status: Permanently Out of Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-100035
Tank Id: R-0344-2
Tank Status: Permanently Out of Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-100035
Tank Id: R-1-1
Tank Status: Permanently Out of Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-100035
Tank Id: R-3
Tank Status: Permanently Out of Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-100035
Tank Id: R-1-2
Tank Status: Permanently Out of Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-100035
Tank Id: 3
Tank Status: Currently In Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-100035
Tank Id: R-4
Tank Status: Permanently Out of Use
FRTYPE: Other
Expiration Date: Not reported

MID PAC PETROLEUM 250344 (PREV: DON'S MAKIKI) (Continued) **U001235010**

Alt Facility ID: 9-100035
Tank Id: 92
Tank Status: Currently In Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-100035
Tank Id: R-3
Tank Status: Permanently Out of Use
FRTYPE: Insurance
Expiration Date: 03/31/2015

Alt Facility ID: 9-100035
Tank Id: R-4
Tank Status: Permanently Out of Use
FRTYPE: Insurance
Expiration Date: 03/31/2015

Alt Facility ID: 9-100035
Tank Id: R-1-2
Tank Status: Permanently Out of Use
FRTYPE: Insurance
Expiration Date: 03/31/2015

Alt Facility ID: 9-100035
Tank Id: R-1
Tank Status: Permanently Out of Use
FRTYPE: Insurance
Expiration Date: 03/31/2015

Alt Facility ID: 9-100035
Tank Id: R-0344-4
Tank Status: Permanently Out of Use
FRTYPE: Insurance
Expiration Date: 03/31/2015

Alt Facility ID: 9-100035
Tank Id: R-0344-3
Tank Status: Permanently Out of Use
FRTYPE: Insurance
Expiration Date: 03/31/2015

Alt Facility ID: 9-100035
Tank Id: R-0344-2
Tank Status: Permanently Out of Use
FRTYPE: Insurance
Expiration Date: 03/31/2015

Alt Facility ID: 9-100035
Tank Id: 92
Tank Status: Currently In Use
FRTYPE: Insurance
Expiration Date: 03/31/2015

Alt Facility ID: 9-100035
Tank Id: 87
Tank Status: Currently In Use

MID PAC PETROLEUM 250344 (PREV: DON'S MAKIKI) (Continued) **U001235010**

FRTYPE: Insurance
Expiration Date: 03/31/2015

Alt Facility ID: 9-100035
Tank Id: 3
Tank Status: Currently In Use
FRTYPE: Insurance
Expiration Date: 03/31/2015

Alt Facility ID: 9-100035
Tank Id: R-2
Tank Status: Permanently Out of Use
FRTYPE: Insurance
Expiration Date: 03/31/2015

Alt Facility ID: 9-100035
Tank Id: R-1-1
Tank Status: Permanently Out of Use
FRTYPE: Insurance
Expiration Date: 03/31/2015

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39 SE 1/4-1/2 0.288 mi. 1523 ft. **MEADOW GOLD DAIRIES (ICE CREAM PLANT)** **SHWS S104657475**
1418 YOUNG ST **SPILLS N/A**
HONOLULU, HI 96814

Relative: Lower

Actual: 20 ft.

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: Meadow Gold Ice Cream Plant Fuel Oil Spill
HID Number: Not reported
Facility Registry Identifier: 110013767726
Lead Agency: HEER
Program: State
Project Manager: Cal Miyahara
Hazard Priority: NFA
Potential Hazards And Controls: No Hazard
Organization: Not reported
Island: Oahu
Supplemental Location Text: Not reported
SDAR Environmental Interest Name: Meadow Gold Ice Cream Plant Fuel Oil Spill
HID Number: Not reported
Facility Registry Identifier: 110013767726
Lead Agency: HEER
Progran Name: State
Potential Hazard And Controls: No Hazard
Priority: NFA
Assessment: Response Necessary
Response: Response Complete
Nature of Contamination: Found: Low levels of TPH diesel and oil in soil and groundwater - no EAL exceedances.
Nature of Residual Contamination: Residual TPH at GW smear zone located approximately 20 feet bgs.
Use Restrictions: No Hazard Present for Unrestricted Residential Use
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported

MEADOW GOLD DAIRIES (ICE CREAM PLANT) (Continued) **S104657475**

Within Designated Areawide Contamination: Not reported
Site Closure Type: No Further Action Letter - Unrestricted Residential Use
Document Date: 09/30/2008
Document Number: 2008-664-CMM
Document Subject: Removal Action Report, Former Meadow Gold Dairy 1418 Young St, Honolulu HI
Project Manager: Cal Miyahara
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

HI SPILLS:
Island: Oahu
Supplemental Loc. Text: Not reported
Case Number: 20071212-1530
HID Number: Not reported
Facility Registry Id: 110013767726
Lead and Program: HEER EP&R
ER: No
Units: Meadow Gold oil release from a 1000-gallon tank
Substances: Oil
Less Or Greater Than: Not reported
Numerical Quantity: Not reported
Units: Unknown
Activity Type: Response
Activity Lead: Liz Galvez
Assignment End Date: 2007-12-13 00:00:00
Result: Refer to SDAR
File Under: Meadow Gold Dairies, Division of Southern Foods Group, LP

Island: Oahu
Supplemental Loc. Text: Not reported
Case Number: 19890208
HID Number: Not reported
Facility Registry Id: 110013767726
Lead and Program: HEER EP&R
ER: Not reported
Units: KEEAUMOKU ST.
Substances: Ammonia
Less Or Greater Than: <
Numerical Quantity: 25
Units: Pounds
Activity Type: Response
Activity Lead: Not reported
Assignment End Date: Not reported
Result: SOSC NFA
File Under: Meadow Gold Dairies, Division of Southern Foods Group, LP

Island: Oahu
Supplemental Loc. Text: Not reported
Case Number: 19900120
HID Number: Not reported
Facility Registry Id: 110013767726
Lead and Program: HEER EP&R
ER: Not reported
Units: Meadow Gold Ammonia Leak
Substances: Ammonia
Less Or Greater Than: <
Numerical Quantity: 100

MEADOW GOLD DAIRIES (ICE CREAM PLANT) (Continued) **S104657475**

Units: Pounds
Activity Type: Response
Activity Lead: Not reported
Assignment End Date: Not reported
Result: SOSC NFA
File Under: Meadow Gold Dairies, Division of Southern Foods Group, LP

Island: Oahu
Supplemental Loc. Text: Not reported
Case Number: 19900904
HID Number: Not reported
Facility Registry Id: 110013767726
Lead and Program: HEER EP&R
ER: Not reported
Units: MEADOW GOLD DAIRY, YOUNG ST. 1418
Substances: Ammonia
Less Or Greater Than: Not reported
Numerical Quantity: 1200
Units: Pounds
Activity Type: Response
Activity Lead: Not reported
Assignment End Date: Not reported
Result: SOSC NFA
File Under: Meadow Gold Dairies, Division of Southern Foods Group, LP

Island: Oahu
Supplemental Loc. Text: Not reported
Case Number: 19900904-1
HID Number: Not reported
Facility Registry Id: 110013767726
Lead and Program: HEER EP&R
ER: Not reported
Units: YOUNG ST. 1418
Substances: Ammonia
Less Or Greater Than: Not reported
Numerical Quantity: 200
Units: Pounds
Activity Type: Response
Activity Lead: Not reported
Assignment End Date: Not reported
Result: SOSC NFA
File Under: Meadow Gold Dairies, Division of Southern Foods Group, LP

Click this hyperlink while viewing on your computer to access
4 additional HI SPILLS: record(s) in the EDR Site Report.

40
SSE
1/4-1/2
0.290 mi.
1533 ft.

YAJIMA OIL OF USA INC **LUST** **U001235254**
1375 S KING ST **UST** **N/A**
HONOLULU, HI 96814 **Financial Assurance**

Relative:
Lower

Actual:
15 ft.

LUST:
Facility ID: 9-100832
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 06/30/2005
Release ID: 930001
Project Officer: Shunsheng Fu

YAJIMA OIL OF USA INC (Continued) **U001235254**

Facility ID: 9-100832
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 04/25/2003
Release ID: 030031
Project Officer: Shunsheng Fu

UST:
Facility ID: 9-100832
Owner: YAJIMA OIL OF USA, INC.
Owner Address: 1375 SOUTH KING ST
Owner City,St,Zip: Honolulu, 96814 96814
Latitude: 21.298494
Longitude: -157.840690
Horizontal Reference Datum Name: NAD83
Horizontal Collection Method Name: GPS

Tank ID: 87
Date Installed: 10/01/1985
Tank Status: Currently in Use
Date Closed: Not reported
Tank Capacity: 8000
Substance: Gasoline

Tank ID: 87
Date Installed: 10/01/1985
Tank Status: Currently in Use
Date Closed: Not reported
Tank Capacity: 8000
Substance: Gasoline

Tank ID: 92
Date Installed: 10/01/1985
Tank Status: Currently in Use
Date Closed: Not reported
Tank Capacity: 8000
Substance: Gasoline

Tank ID: R-1
Date Installed: 01/01/1953
Tank Status: Permanently Out of Use
Date Closed: 04/29/1993
Tank Capacity: 350
Substance: Used Oil

HI Financial Assurance:
Alt Facility ID: 9-100832
Tank Id: R-1
Tank Status: Permanently Out of Use
FRTYPE: Insurance
Expiration Date: 04/01/2015

Alt Facility ID: 9-100832
Tank Id: 87

YAJIMA OIL OF USA INC (Continued) **U001235254**

Tank Status: Currently in Use
FRTYPE: Insurance
Expiration Date: 04/01/2015

Alt Facility ID: 9-100832
Tank Id: 92
Tank Status: Currently in Use
FRTYPE: Insurance
Expiration Date: 04/01/2015

J41 SE 1/4-1/2 0.293 mi. 1547 ft. **MAKIKI SHELL** **LUST U003188504**
1436 S BERETANIA ST **UST N/A**
HONOLULU, HI 96814 **Financial Assurance**

Site 2 of 2 in cluster J

Relative: Lower

Actual: 25 ft.

LUST:
Facility ID: 9-100833
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 10/22/2008
Release ID: 980196
Project Officer: Shunsheng Fu

Facility ID: 9-100833
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 06/22/2005
Release ID: 040039
Project Officer: Shunsheng Fu

Facility ID: 9-100833
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 10/19/1999
Release ID: 930023
Project Officer: Shunsheng Fu

UST:
Facility ID: 9-100833
Owner: EQUILON ENTERPRISES, LLC DBA SHELL OIL PRODUCTS US
Owner Address: 2555 13TH AVE, SW
Owner City,St,Zip: Honolulu, 96814 96814
Latitude: 21.300110
Longitude: -157.838525
Horizontal Reference Datum Name: NAD83
Horizontal Collection Method Name: GPS

Tank ID: R-1
Date Installed: 04/18/1960
Tank Status: Permanently Out of Use
Date Closed: 07/06/1998
Tank Capacity: 5000
Substance: Gasoline

Tank ID: R-2
Date Installed: 04/18/1960
Tank Status: Permanently Out of Use
Date Closed: 07/06/1998

MAKIKI SHELL (Continued) **U003188504**

Tank Capacity: 4000
Substance: Gasoline

Tank ID: R-3
Date Installed: 04/18/1960
Tank Status: Permanently Out of Use
Date Closed: 07/06/1998
Tank Capacity: 3000
Substance: Gasoline

Tank ID: R-4
Date Installed: 04/19/1967
Tank Status: Permanently Out of Use
Date Closed: 07/06/1998
Tank Capacity: 4000
Substance: Gasoline

Tank ID: R-5
Date Installed: 04/19/1971
Tank Status: Permanently Out of Use
Date Closed: 07/06/1998
Tank Capacity: 6000
Substance: Gasoline

Tank ID: R-6
Date Installed: 03/01/1994
Tank Status: Permanently Out of Use
Date Closed: 04/12/2004
Tank Capacity: 550
Substance: Used Oil

Tank ID: R-6
Date Installed: 04/18/1960
Tank Status: Permanently Out of Use
Date Closed: 01/24/1994
Tank Capacity: 550
Substance: Used Oil

Tank ID: r-82
Date Installed: 09/01/1998
Tank Status: Permanently Out of Use
Date Closed: 10/31/2005
Tank Capacity: 12000
Substance: Gasoline

Tank ID: r-92
Date Installed: 09/01/1998
Tank Status: Permanently Out of Use
Date Closed: 10/31/2005
Tank Capacity: 12000

MAKIKI SHELL (Continued) **U003188504**

Substance: Gasoline

HI Financial Assurance:

Alt Facility ID: 9-100833
Tank Id: R-5
Tank Status: Permanently Out of Use
FRTYPE: Insurance
Expiration Date: Not reported

Alt Facility ID: 9-100833
Tank Id: r-82
Tank Status: Permanently Out of Use
FRTYPE: Risk Retention Group
Expiration Date: Not reported

Alt Facility ID: 9-100833
Tank Id: r-92
Tank Status: Permanently Out of Use
FRTYPE: Insurance
Expiration Date: Not reported

Alt Facility ID: 9-100833
Tank Id: r-92
Tank Status: Permanently Out of Use
FRTYPE: Risk Retention Group
Expiration Date: Not reported

Alt Facility ID: 9-100833
Tank Id: r-82
Tank Status: Permanently Out of Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-100833
Tank Id: r-82
Tank Status: Permanently Out of Use
FRTYPE: Insurance
Expiration Date: Not reported

Alt Facility ID: 9-100833
Tank Id: R-6
Tank Status: Permanently Out of Use
FRTYPE: Risk Retention Group
Expiration Date: Not reported

Alt Facility ID: 9-100833
Tank Id: R-6
Tank Status: Permanently Out of Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-100833
Tank Id: R-6
Tank Status: Permanently Out of Use
FRTYPE: Insurance
Expiration Date: Not reported

MAKIKI SHELL (Continued) **U003188504**

Alt Facility ID: 9-100833
Tank Id: R-5
Tank Status: Permanently Out of Use
FRTYPE: Risk Retention Group
Expiration Date: Not reported

Alt Facility ID: 9-100833
Tank Id: R-5
Tank Status: Permanently Out of Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-100833
Tank Id: R-2
Tank Status: Permanently Out of Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-100833
Tank Id: R-4
Tank Status: Permanently Out of Use
FRTYPE: Risk Retention Group
Expiration Date: Not reported

Alt Facility ID: 9-100833
Tank Id: r-92
Tank Status: Permanently Out of Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-100833
Tank Id: R-1
Tank Status: Permanently Out of Use
FRTYPE: Insurance
Expiration Date: Not reported

Alt Facility ID: 9-100833
Tank Id: R-1
Tank Status: Permanently Out of Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-100833
Tank Id: R-2
Tank Status: Permanently Out of Use
FRTYPE: Insurance
Expiration Date: Not reported

Alt Facility ID: 9-100833
Tank Id: R-2
Tank Status: Permanently Out of Use
FRTYPE: Risk Retention Group
Expiration Date: Not reported

Alt Facility ID: 9-100833
Tank Id: R-3
Tank Status: Permanently Out of Use

MAKIKI SHELL (Continued) **U003188504**

FRTYPE: Insurance
Expiration Date: Not reported

Alt Facility ID: 9-100833
Tank Id: R-3
Tank Status: Permanently Out of Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-100833
Tank Id: R-3
Tank Status: Permanently Out of Use
FRTYPE: Risk Retention Group
Expiration Date: Not reported

Alt Facility ID: 9-100833
Tank Id: R-4
Tank Status: Permanently Out of Use
FRTYPE: Insurance
Expiration Date: Not reported

Alt Facility ID: 9-100833
Tank Id: R-4
Tank Status: Permanently Out of Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-100833
Tank Id: R-1
Tank Status: Permanently Out of Use
FRTYPE: Risk Retention Group
Expiration Date: Not reported

42
NE
1/4-1/2
0.317 mi.
1675 ft.

C&CH MAKIKI FIRE STATION **LUST** **U004223395**
1202 WILDER AVE **UST** **N/A**
HONOLULU, HI 96822 **Financial Assurance**

Relative:
Higher

Actual:
56 ft.

LUST:
Facility ID: 9-100081
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 05/11/1995
Release ID: 910029
Project Officer: Roger Brewer

UST:
Facility ID: 9-100081
Owner: C&C HNL Fire Dept
Owner Address: 636 South Street
Owner City,St,Zip: Honolulu, 96822 96822
Latitude: 21.306700
Longitude: -157.839130
Horizontal Reference Datum Name: NAD83
Horizontal Collection Method Name: GPS

Tank ID: 1

C&CH MAKIKI FIRE STATION (Continued) **U004223395**

Date Installed: 04/30/1991
Tank Status: Currently in Use
Date Closed: Not reported
Tank Capacity: 1000
Substance: Diesel

Tank ID: R-1
Date Installed: 01/30/1955
Tank Status: Permanently Out of Use
Date Closed: 05/18/1991
Tank Capacity: 500
Substance: Diesel

HI Financial Assurance:
Alt Facility ID: 9-100081
Tank Id: R-1
Tank Status: Permanently Out of Use
FRTYPE: Other
Expiration Date: 06/30/2015

Alt Facility ID: 9-100081
Tank Id: 1
Tank Status: Currently in Use
FRTYPE: Other
Expiration Date: 06/30/2015

43
SE
1/4-1/2
0.328 mi.
1731 ft.

HONOLULU STATION - PAWAA ANNEX **LUST** **U001235050**
1455 S BERETANIA ST **UST** **N/A**
HONOLULU, HI 96814 **Financial Assurance**

Relative:
Higher

Actual:
27 ft.

LUST:
Facility ID: 9-100114
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 09/05/2000
Release ID: 930074
Project Officer: Richard Takaba

UST:
Facility ID: 9-100114
Owner: C&C OF HNL - DEPT OF COMMUNITY SERVICES
Owner Address: 715 S. KING ST, SUITE 311
Owner City,St,Zip: Honolulu, 96814 96814
Latitude: 21.298620
Longitude: -157.838281
Horizontal Reference Datum Name: NAD83
Horizontal Collection Method Name: GPS

Tank ID: R-1
Date Installed: 06/01/1965
Tank Status: Permanently Out of Use
Date Closed: 04/22/1998
Tank Capacity: 5000
Substance: Gasoline

HONOLULU STATION - PAWAA ANNEX (Continued) **U001235050**

Tank ID: R-2
Date Installed: 06/01/1981
Tank Status: Permanently Out of Use
Date Closed: 04/22/1998
Tank Capacity: 5000
Substance: Gasoline

Tank ID: R-3
Date Installed: 07/15/1965
Tank Status: Permanently Out of Use
Date Closed: 04/22/1998
Tank Capacity: 5000
Substance: Gasoline

Tank ID: R-4
Date Installed: 07/15/1965
Tank Status: Permanently Out of Use
Date Closed: 04/22/1998
Tank Capacity: 1000
Substance: Used Oil

HI Financial Assurance:
Alt Facility ID: 9-100114
Tank Id: R-2
Tank Status: Permanently Out of Use
FRTYPE: Self Insured
Expiration Date: Not reported

Alt Facility ID: 9-100114
Tank Id: R-3
Tank Status: Permanently Out of Use
FRTYPE: Self Insured
Expiration Date: Not reported

Alt Facility ID: 9-100114
Tank Id: R-1
Tank Status: Permanently Out of Use
FRTYPE: Self Insured
Expiration Date: Not reported

Alt Facility ID: 9-100114
Tank Id: R-4
Tank Status: Permanently Out of Use
FRTYPE: Self Insured
Expiration Date: Not reported

44 WSW 1/4-1/2 0.363 mi. 1916 ft. **AUXILIARY SERVICES - DOE** **SHWS** **U003154583**
1039 S KING ST **UST** **N/A**
HONOLULU, HI 96814 **Financial Assurance**

Relative: Lower

Actual: 11 ft.

SHWS:
Organization: Not reported
Supplemental Location: McKinley High School Rifle Range Facility
Island: Oahu
Environmental Interest: McKinley High School Synthetic Track and Field
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Program: State
Project Manager: Cal Miyahara
Hazard Priority: High
Potential Hazards And Controls: Hazard Undetermined
Organization: Not reported
Island: Oahu
Supplemental Location Text: McKinley High School Rifle Range Facility
SDAR Environmental Interest Name: McKinley High School Synthetic Track and Field
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Progran Name: State
Potential Hazard And Controls: Hazard Undetermined
Priority: High
Assessment: Response Necessary
Response: Response Ongoing
Nature of Contamination: Found: Lead found in soil above TCLP threshold; hazardous waste determination.
Nature of Residual Contamination: Not reported
Use Restrictions: Undetermined
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Not reported
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Cal Miyahara
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

UST:
Facility ID: 9-102337
Owner: STATE DOE - AUXILIARY SERVICES SECTION
Owner Address: 1037 S BERETANIA St
Owner City,St,Zip: Honolulu, 96814 96814
Latitude: Not reported
Longitude: Not reported
Horizontal Reference Datum Name: Not reported
Horizontal Collection Method Name: Not reported

Tank ID: R-003
Date Installed: 04/01/1967
Tank Status: Permanently Out of Use
Date Closed: 07/01/1970

AUXILIARY SERVICES - DOE (Continued) **U003154583**

Tank Capacity: 250
Substance: Gasoline

Tank ID: R-1
Date Installed: 04/01/1970
Tank Status: Permanently Out of Use
Date Closed: 12/22/1997
Tank Capacity: 850
Substance: Gasoline

Tank ID: R-2
Date Installed: 04/01/1967
Tank Status: Permanently Out of Use
Date Closed: 12/01/1997
Tank Capacity: 300
Substance: Diesel

Tank ID: R-4
Date Installed: Not reported
Tank Status: Permanently Out of Use
Date Closed: 12/22/1997
Tank Capacity: 1400
Substance: Gasoline

HI Financial Assurance:
Alt Facility ID: 9-102337
Tank Id: R-003
Tank Status: Permanently Out of Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-102337
Tank Id: R-4
Tank Status: Permanently Out of Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-102337
Tank Id: R-4
Tank Status: Permanently Out of Use
FRTYPE: Letter of Credit
Expiration Date: Not reported

Alt Facility ID: 9-102337
Tank Id: R-2
Tank Status: Permanently Out of Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-102337
Tank Id: R-2
Tank Status: Permanently Out of Use
FRTYPE: Letter of Credit
Expiration Date: Not reported

AUXILIARY SERVICES - DOE (Continued) **U003154583**

Alt Facility ID: 9-102337
Tank Id: R-1
Tank Status: Permanently Out of Use
FRTYPE: Letter of Credit
Expiration Date: Not reported

Alt Facility ID: 9-102337
Tank Id: R-003
Tank Status: Permanently Out of Use
FRTYPE: Letter of Credit
Expiration Date: Not reported

Alt Facility ID: 9-102337
Tank Id: R-1
Tank Status: Permanently Out of Use
FRTYPE: Other
Expiration Date: Not reported

45
South
1/4-1/2
0.397 mi.
2097 ft.

Relative:
Lower

Actual:
9 ft.

WENS LIFE CO., INC **LUST** **U001235446**
808 SHERIDAN ST **UST** **N/A**
HONOLULU, HI 96814

LUST:
Facility ID: 9-101330
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 06/25/2003
Release ID: 030035
Project Officer: Richard Takaba

UST:
Facility ID: 9-101330
Owner: WENS LIFE CO., INC
Owner Address: 441 WALINA ST. #101
Owner City,St,Zip: Honolulu, 96814 96814
Latitude: 21.296729
Longitude: -157.842204
Horizontal Reference Datum Name: NAD83
Horizontal Collection Method Name: Address Matching

Tank ID: R-1
Date Installed: 04/22/1979
Tank Status: Permanently Out of Use
Date Closed: 01/13/1998
Tank Capacity: 4000
Substance: Gasoline

Tank ID: R-2
Date Installed: 04/22/1979
Tank Status: Permanently Out of Use
Date Closed: 01/13/1998
Tank Capacity: 2000
Substance: Gasoline

WENS LIFE CO., INC (Continued) **U001235446**

Tank ID: R-3
Date Installed: 04/22/1979
Tank Status: Permanently Out of Use
Date Closed: 01/13/1998
Tank Capacity: 500
Substance: Other

Tank ID: R-4
Date Installed: 04/22/1979
Tank Status: Permanently Out of Use
Date Closed: 01/13/1998
Tank Capacity: 500
Substance: Other

K46 SE 1/4-1/2 0.456 mi. 2410 ft. **ALOHA/KING SELF STORAGE** **SHWS** **S106816203**
1414 KALAKAUA AVE **ENG CONTROLS** **N/A**
HONOLULU, HI **INST CONTROL**
VCP

Site 1 of 2 in cluster K

Relative: Lower

Actual: 20 ft.

SHWS:
Organization: Not reported
Supplemental Location: 1524 S King St corner (property on both addresses)
Island: Oahu
Environmental Interest: 1414 Kalakaua Avenue-Aloha/King LLC
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Program: Voluntary Response Program
Project Manager: Cal Miyahara
Hazard Priority: NFA
Potential Hazards And Controls: Hazard Managed With Controls
Organization: Not reported
Island: Oahu
Supplemental Location Text: 1524 S King St corner (property on both addresses)
SDAR Environmental Interest Name: 1414 Kalakaua Avenue-Aloha/King LLC
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Progran Name: Voluntary Response Program
Potential Hazard And Controls: Hazard Managed With Controls
Priority: NFA
Assessment: Response Necessary
Response: Response Complete
Nature of Contamination: Found: TPH-GRO, Benzene, Ethylbenzene, and Xylene remain in the soil at concentrations above residential EALs. Poses Direct Exposure, Gross Contamination, and Soil Vapor hazards.
Nature of Residual Contamination: Not reported
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Engineering Control Required
Description of Restrictions: Prohibit Any Activity That May Disturb the Integrity of the Capping System
Institutional Control: Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination: Not reported
Site Closure Type: Letter of Completion - Restricted Use
Document Date: 07/27/2011
Document Number: 2011-438-CMM

ALOHA/KING SELF STORAGE (Continued) **S106816203**

Document Subject: Memo to ASO - Refund for VRP site (Aloha/King)
Project Manager: Cal Miyahara
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

ENG CONTROLS:
Supplemental Location Text: 1524 S King St corner (property on both addresses)
Zip Suffix: Not reported
Island: Oahu
Potential Hazards And Controls: Hazard Managed With Controls
Engineering Control: Engineering Control Required

INST CONTROL:
Potential hazards and controls: Hazard Managed With Controls
Supplemental Location: 1524 S King St corner (property on both addresses)
Zip Suffix: Not reported
Island: Oahu
Institutional Control: Government - Hawaii Dept. of Health Letter Issued

VCP:
Program: Voluntary Response Program
Zip Suffix: Not reported
Supplemental Location: 1524 S King St corner (property on both addresses)
Island: Oahu

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47 SE 1/4-1/2 0.460 mi. 2431 ft. **MID PAC PETROLEUM 253943 (PREV: LIONEL'S UNOCAL)** **LUST** **U001235016**
1505 S. KING ST. **UST** **N/A**
HONOLULU, HI 96826 **Financial Assurance**

Relative: Lower

Actual: 16 ft.

LUST:
Facility ID: 9-100041
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 10/01/2007
Release ID: 070020
Project Officer: Shunsheng Fu

Facility ID: 9-100041
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 12/09/1998
Release ID: 960074
Project Officer: Shunsheng Fu

Facility ID: 9-100041
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 05/20/1996
Release ID: 930032
Project Officer: Shunsheng Fu

UST:
Facility ID: 9-100041
Owner: Mid Pac Petroleum LLC
Owner Address: 677 Ala Moana Blvd Suite 625
Owner City,St,Zip: Honolulu, 96826 96826
Latitude: 21.297313
Longitude: -157.837634

MID PAC PETROLEUM 253943 (PREV: LIONEL'S UNOCAL) (Continued) **U001235016**

Horizontal Reference Datum Name: NAD83
Horizontal Collection Method Name: Address Matching

Tank ID: R-3943-1
Date Installed: 08/12/1956
Tank Status: Permanently Out of Use
Date Closed: 07/01/1996
Tank Capacity: 5000
Substance: Gasoline

Tank ID: R-3943-2
Date Installed: 08/12/1956
Tank Status: Permanently Out of Use
Date Closed: 07/01/1996
Tank Capacity: 7500
Substance: Gasoline

Tank ID: R-3943-4
Date Installed: 08/12/1956
Tank Status: Permanently Out of Use
Date Closed: 07/01/1996
Tank Capacity: 550
Substance: Used Oil

Tank ID: r-87
Date Installed: 01/01/1990
Tank Status: Permanently out of Use
Date Closed: 03/29/2007
Tank Capacity: 12000
Substance: Gasoline

Tank ID: r-92
Date Installed: 01/01/1990
Tank Status: Permanently out of Use
Date Closed: 03/29/2007
Tank Capacity: 12000
Substance: Gasoline

HI Financial Assurance:
Alt Facility ID: 9-100041
Tank Id: R-3943-1
Tank Status: Permanently Out of Use
FRTYPE: Insurance
Expiration Date: Not reported

Alt Facility ID: 9-100041
Tank Id: r-87
Tank Status: Permanently out of Use
FRTYPE: Insurance
Expiration Date: Not reported

Alt Facility ID: 9-100041
Tank Id: r-92

MID PAC PETROLEUM 253943 (PREV: LIONEL'S UNOCAL) (Continued) **U001235016**

Tank Status: Permanently out of Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-100041
Tank Id: r-92
Tank Status: Permanently out of Use
FRTYPE: Insurance
Expiration Date: Not reported

Alt Facility ID: 9-100041
Tank Id: r-87
Tank Status: Permanently out of Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-100041
Tank Id: R-3943-4
Tank Status: Permanently Out of Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-100041
Tank Id: R-3943-4
Tank Status: Permanently Out of Use
FRTYPE: Insurance
Expiration Date: Not reported

Alt Facility ID: 9-100041
Tank Id: R-3943-2
Tank Status: Permanently Out of Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-100041
Tank Id: R-3943-1
Tank Status: Permanently Out of Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-100041
Tank Id: R-3943-2
Tank Status: Permanently Out of Use
FRTYPE: Insurance
Expiration Date: Not reported

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48 **7-11 KALAKAUA** **SHWS** **U001235396**
SE **1323 KALAKAUA AVE** **UST** **N/A**
1/4-1/2 **HONOLULU, HI 96826** **Financial Assurance**
0.462 mi.
2441 ft.

Relative:
Lower

Actual:
25 ft.

SHWS:
Organization: Not reported
Supplemental Location: Kalakaua Ave & Young St
Island: Oahu
Environmental Interest: Aloha 7-Eleven Kalakaua
HID Number: Not reported

7-11 KALAKAUA (Continued) **U001235396**

Facility Registry Identifier:	110013782184
Lead Agency:	HEER
Program:	State
Project Manager:	Mark Sutterfield
Hazard Priority:	NFA
Potential Hazards And Controls:	No Hazard
Organization:	Not reported
Island:	Oahu
Supplemental Location Text:	Kalakaua Ave & Young St
SDAR Environmental Interest Name:	Aloha 7-Eleven Kalakaua
HID Number:	Not reported
Facility Registry Identifier:	110013782184
Lead Agency:	HEER
Progran Name:	State
Potential Hazard And Controls:	No Hazard
Priority:	NFA
Assessment:	Assessment Ongoing
Response:	Response Complete
Nature of Contamination:	Not reported
Nature of Residual Contamination:	Not reported
Use Restrictions:	No Hazard Present For Unrestricted Residential Use
Engineering Control:	Not reported
Description of Restrictions:	Not reported
Institutional Control:	Not reported
Within Designated Areawide Contamination:	Not reported
Site Closure Type:	No Further Action Letter - Unrestricted Residential Use
Document Date:	05/20/2004
Document Number:	Not reported
Document Subject:	Not reported
Project Manager:	Mark Sutterfield
Contact Information:	(808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

UST:

Facility ID:	9-101172
Owner:	Mid Pac Petroleum LLC
Owner Address:	1100 Alakea Street, 8th floor
Owner City,St,Zip:	Honolulu, 96826 96826
Latitude:	21.298427
Longitude:	-157.836658
Horizontal Reference Datum Name:	NAD83
Horizontal Collection Method Name:	GPS

Tank ID:	1a
Date Installed:	06/19/2009
Tank Status:	**Currently in Use**
Date Closed:	Not reported
Tank Capacity:	7000
Substance:	Gasoline

Tank ID:	1b
Date Installed:	06/19/2009
Tank Status:	**Currently In Use**
Date Closed:	Not reported
Tank Capacity:	5000
Substance:	Gasoline

7-11 KALAKAUA (Continued) **U001235396**

Tank ID:	r-87
Date Installed:	04/04/1985
Tank Status:	**Permanently out of Use**
Date Closed:	06/12/2009
Tank Capacity:	8000
Substance:	Gasoline

Tank ID:	r-89
Date Installed:	04/04/1985
Tank Status:	**Permanently out of Use**
Date Closed:	06/12/2009
Tank Capacity:	8000
Substance:	Gasoline

Tank ID:	r-92
Date Installed:	04/04/1985
Tank Status:	**Permanently out of Use**
Date Closed:	06/12/2009
Tank Capacity:	8000
Substance:	Gasoline

HI Financial Assurance:

Alt Facility ID:	9-101172
Tank Id:	r-87
Tank Status:	Permanently out of Use
FRTYPE:	Insurance
Expiration Date:	03/31/2015

Alt Facility ID:	9-101172
Tank Id:	r-89
Tank Status:	Permanently out of Use
FRTYPE:	Insurance
Expiration Date:	03/31/2015

Alt Facility ID:	9-101172
Tank Id:	1b
Tank Status:	Currently In Use
FRTYPE:	Insurance
Expiration Date:	03/31/2015

Alt Facility ID:	9-101172
Tank Id:	1a
Tank Status:	Currently in Use
FRTYPE:	Insurance
Expiration Date:	03/31/2015

Alt Facility ID:	9-101172
Tank Id:	r-92
Tank Status:	Permanently out of Use
FRTYPE:	Insurance
Expiration Date:	03/31/2015

49 South 1/4-1/2 0.463 mi. 2446 ft. — **LIKE LIKE PLAZA PETROLEUM CONTAMINATION**, **745 KEEAUMOKU ST**, **HONOLULU, HI 96814** — **SHWS** — **1006819347** / **N/A**

Relative: Lower

Actual: 7 ft.

SHWS:

Organization:	Not reported
Supplemental Location:	Not reported
Island:	Oahu
Environmental Interest:	Like Like Plaza Petroleum Contamination
HID Number:	Not reported
Facility Registry Identifier:	110013771383
Lead Agency:	HEER
Program:	State
Project Manager:	Anna Fernandez
Hazard Priority:	NFA
Potential Hazards And Controls:	No Hazard
Organization:	Not reported
Island:	Oahu
Supplemental Location Text:	Not reported
SDAR Environmental Interest Name:	Like Like Plaza Petroleum Contamination
HID Number:	Not reported
Facility Registry Identifier:	110013771383
Lead Agency:	HEER
Progran Name:	State
Potential Hazard And Controls:	No Hazard
Priority:	NFA
Assessment:	Response Necessary
Response:	Response Complete
Nature of Contamination:	Found: petroleum-impacted soils
Nature of Residual Contamination:	Petroleum impacted soil
Use Restrictions:	No Hazard Present For Unrestricted Residential Use
Engineering Control:	Not reported
Description of Restrictions:	Not reported
Institutional Control:	Not reported
Within Designated Areawide Contamination:	Not reported
Site Closure Type:	No Further Action Letter - Unrestricted Residential Use
Document Date:	05/04/2006
Document Number:	2006-266-AF
Document Subject:	NFA determination
Project Manager:	Anna Fernandez
Contact Information:	(808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

L50 South 1/4-1/2 0.464 mi. 2449 ft. — **MOTOR SUPPLY**, **726 SHERIDAN ST**, **HONOLULU, HI 96814** — **SHWS**, **INST CONTROL** — **S108008592** / **N/A**

Site 1 of 3 in cluster L

Relative: Lower

Actual: 6 ft.

SHWS:

Organization:	Not reported
Supplemental Location:	Not reported
Island:	Oahu
Environmental Interest:	Motor Supply
HID Number:	Not reported
Facility Registry Identifier:	Not reported
Lead Agency:	HEER
Program:	State
Project Manager:	Steve Mow

MOTOR SUPPLY (Continued) — **S108008592**

Hazard Priority:	NFA
Potential Hazards And Controls:	Hazard Managed With Controls
Organization:	Not reported
Island:	Oahu
Supplemental Location Text:	Not reported
SDAR Environmental Interest Name:	Motor Supply
HID Number:	Not reported
Facility Registry Identifier:	Not reported
Lead Agency:	HEER
Progran Name:	State
Potential Hazard And Controls:	Hazard Managed With Controls
Priority:	NFA
Assessment:	Response Necessary
Response:	Response Complete
Nature of Contamination:	Found: Tetrachloroethylene.
Nature of Residual Contamination:	Not reported
Use Restrictions:	Controls Required to Manage Contamination
Engineering Control:	Not reported
Description of Restrictions:	Prohibit Any Activity That May Disturb the Integrity of the Capping or Monitoring Systems
Institutional Control:	Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination:	Not reported
Site Closure Type:	No Further Action Letter - Restricted Use
Document Date:	03/30/2011
Document Number:	2011-184-SPM
Document Subject:	No Further Action with Institutional Controls Determination for Clean Living - Hakuyosha Internation
Project Manager:	Steve Mow
Contact Information:	(808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

INST CONTROL:

Potential hazards and controls:	Hazard Managed With Controls
Supplemental Location:	Not reported
Zip Suffix:	Not reported
Island:	Oahu
Institutional Control:	Government - Hawaii Dept. of Health Letter Issued

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L51 South 1/4-1/2 0.464 mi. 2449 ft. — **HAKUYOSHA HAWAII, INC**, **730 SHERIDAN ST**, **HONOLULU, HI 96814** — **SHWS**, **SPILLS**, **INST CONTROL**, **AIRS** — **S106817254** / **N/A**

Site 2 of 3 in cluster L

Relative: Lower

Actual: 6 ft.

SHWS:

Organization:	Not reported
Supplemental Location:	Not reported
Island:	Oahu
Environmental Interest:	Hakuyosha Hawaii, Inc.
HID Number:	Not reported
Facility Registry Identifier:	110005284414
Lead Agency:	HEER
Program:	State
Project Manager:	Steve Mow
Hazard Priority:	High
Potential Hazards And Controls:	Hazard Managed With Controls
Organization:	Not reported
Island:	Oahu

HAKUYOSHA HAWAII, INC (Continued) **S106817254**

Supplemental Location Text:	Not reported
SDAR Environmental Interest Name:	Hakuyosha Hawaii, Inc.
HID Number:	Not reported
Facility Registry Identifier:	110005284414
Lead Agency:	HEER
Progran Name:	State
Potential Hazard And Controls:	Hazard Managed With Controls
Priority:	High
Assessment:	Response Necessary
Response:	Response Complete
Nature of Contamination:	Found: tetrachloroethylene
Nature of Residual Contamination:	Not reported
Use Restrictions:	Controls Required to Manage Contamination
Engineering Control:	Not reported
Description of Restrictions:	Prohibit Any Activity That May Disturb the Integrity of the Capping or Monitoring System
Institutional Control:	Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination:	Not reported
Site Closure Type:	No Further Action Letter - Restricted Use
Document Date:	03/30/2011
Document Number:	2011-184-SPM
Document Subject:	No Further Action with Institutional Controls Determination for Clean Living - Hakuyosha Internation
Project Manager:	Steve Mow
Contact Information:	(808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

HI SPILLS:

Island:	Oahu
Supplemental Loc. Text:	Not reported
Case Number:	19950303
HID Number:	Not reported
Facility Registry Id:	110005284414
Lead and Program:	HEER EP&R
ER:	No
Units:	Hakuyosha Hawaii Inc.
Substances:	Diesel Fuel
Less Or Greater Than:	Not reported
Numerical Quantity:	Not reported
Units:	Not reported
Activity Type:	Response
Activity Lead:	Bryce Hataoka
Assignment End Date:	Not reported
Result:	Refer to ISST
File Under:	Hakuyosha Hawaii Inc.

INST CONTROL:

Potential hazards and controls:	Hazard Managed With Controls
Supplemental Location:	Not reported
Zip Suffix:	Not reported
Island:	Oahu
Institutional Control:	Government - Hawaii Dept. of Health Letter Issued

AIRS:

Facility ID:	0462-01-N
Island:	Oahu
Mailing Address:	1481 South King Street

HAKUYOSHA HAWAII, INC (Continued) **S106817254**

Locale:	Not reported
Business Phone:	(808) 942-9096
Mailing City,St,Zip:	Honolulu, Hawaii 96814-2506
Contact Name:	James Morrow
Contact Title:	Consultant
Description:	100 hp Steam Boiler1. This noncovered source permit encompasses the following equipment and associated appurtenances: 100 HP Cleaver Brooks Steam Boiler, model no. CB.100-100, maximum pressure 150 psi, serial no. L-78781, oil fired.
Facility ID:	0564-01-C
Island:	Oahu
Mailing Address:	1481 South King Street
Locale:	Not reported
Business Phone:	(808) 942-9096
Mailing City,St,Zip:	Honolulu, Hawaii 96814-2506
Contact Name:	James Morrow
Contact Title:	Consultant
Description:	Petroleum Solvent Dry Cleaning EquipmentThis permit encompasses the following equipment and associated appurtenances:a.Hoyt Petro-Miser Petroleum Solvent Recovery DryerModel PET-50 Serial no. 50-519-GE Maximum capacity: 50 poundsb.Hoyt Petro-Miser Petroleum Solvent Recovery DryerModel PET-50 Serial no. 50-707-GE Maximum capacity: 50 poundsc.Hoyt Petro-Miser Petroleum Solvent Recovery DryerModel PET-50RSerial no. 50R-1074GEMaximum capacity: 50 poundsd.J & T Petroleum Solvent WasherModel 40Serial no. 1024Maximum capacity: 40 poundse.J & T Petroleum Solvent WasherModel 40Serial no. 1023Maximum capacity: 40 pounds

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K52 **GAS PLUS** **LUST** **U001235103**
SE **1524 S KING ST** **UST** **N/A**
1/4-1/2 **HONOLULU, HI 96826**
0.477 mi.
2520 ft. **Site 2 of 2 in cluster K**

Relative:
Lower

Actual:
17 ft.

LUST:

Facility ID:	9-100224
Facility Status:	Site Cleanup Completed (NFA)
Facility Status Date:	06/01/2011
Release ID:	960030
Project Officer:	To VRP

UST:

Facility ID:	9-100224
Owner:	FIRST DISCOUNT AUTO LEASING CORP
Owner Address:	1580 MAKALOA ST., SUITE 880
Owner City,St,Zip:	Honolulu, 96826 96826
Latitude:	21.297626
Longitude:	-157.837237
Horizontal Reference Datum Name:	NAD83
Horizontal Collection Method Name:	Map
Tank ID:	R-001
Date Installed:	05/16/1985
Tank Status:	**Permanently Out of Use**
Date Closed:	07/20/1995
Tank Capacity:	10000

GAS PLUS (Continued) **U001235103**

Substance: Gasoline

Tank ID: R-002
Date Installed: 05/16/1985
Tank Status: Permanently Out of Use
Date Closed: 07/21/1995
Tank Capacity: 12000
Substance: Gasoline

Tank ID: R-003
Date Installed: 05/16/1985
Tank Status: Permanently Out of Use
Date Closed: 07/21/1995
Tank Capacity: 12000
Substance: Gasoline

L53 South 1/4-1/2 0.481 mi. 2539 ft. **SUPERBLOCK PROPERTIES** **LUST U001235971**
SOUTH BLOCK (BLDG S13) / MAKALOA ST **UST N/A**
HONOLULU, HI 96814

Site 3 of 3 in cluster L

Relative: Lower

Actual: 5 ft.

LUST:
Facility ID: 9-102600
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 06/28/1993
Release ID: 920142
Project Officer: Stanton Enomoto

UST:
Facility ID: 9-102600
Owner: KEEAUMOKU PARTNERS
Owner Address: 820 MILILANI ST, SUITE 820
Owner City,St,Zip: Honolulu, 96814 96814
Latitude: 21.295561
Longitude: -157.843107
Horizontal Reference Datum Name: Not reported
Horizontal Collection Method Name: Not reported

Tank ID: R-ST10
Date Installed: Not reported
Tank Status: Permanently Out of Use
Date Closed: 11/02/1991
Tank Capacity: 500
Substance: Diesel

54 WNW 1/4-1/2 0.496 mi. 2618 ft. **MID PAC PETROLEUM LLC 2705952** **LUST U003402799**
882 S BERETANIA ST **UST N/A**
HONOLULU, HI 96813 **Financial Assurance**

Relative: Higher

Actual: 29 ft.

LUST:
Facility ID: 9-100040
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 12/21/2006
Release ID: 040051
Project Officer: Darren Park

UST:
Facility ID: 9-100040
Owner: Mid Pac Petroleum LLC
Owner Address: 1100 Alakea Street, 8th floor
Owner City,St,Zip: Honolulu, 96813 96813
Latitude: 21.304105
Longitude: -157.849669
Horizontal Reference Datum Name: NAD83
Horizontal Collection Method Name: Address Matching

Tank ID: 1
Date Installed: 12/01/1995
Tank Status: Currently in Use
Date Closed: Not reported
Tank Capacity: 15000
Substance: Gasoline

Tank ID: 2
Date Installed: 12/01/1995
Tank Status: Currently in Use
Date Closed: Not reported
Tank Capacity: 15000
Substance: Gasoline

Tank ID: R-01
Date Installed: 12/23/1986
Tank Status: Permanently Out of Use
Date Closed: 07/06/1995
Tank Capacity: 12000
Substance: Gasoline

Tank ID: R-02
Date Installed: 12/23/1986
Tank Status: Permanently Out of Use
Date Closed: 07/06/1995
Tank Capacity: 12000
Substance: Gasoline

Tank ID: R-03
Date Installed: 12/23/1986
Tank Status: Permanently Out of Use
Date Closed: 07/06/1995

MID PAC PETROLEUM LLC 2705952 (Continued) **U003402799**

Tank Capacity: 550
Substance: Used Oil

Tank ID: R-1
Date Installed: 04/02/1955
Tank Status: Permanently Out of Use
Date Closed: 12/01/1986
Tank Capacity: 7500
Substance: Gasoline

Tank ID: R-2
Date Installed: 04/02/1955
Tank Status: Permanently Out of Use
Date Closed: 12/01/1986
Tank Capacity: 5000
Substance: Gasoline

Tank ID: R-4
Date Installed: 04/02/1955
Tank Status: Permanently Out of Use
Date Closed: 12/01/1986
Tank Capacity: 550
Substance: Used Oil

HI Financial Assurance:
Alt Facility ID: 9-100040
Tank Id: R-02
Tank Status: Permanently Out of Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-100040
Tank Id: R-4
Tank Status: Permanently Out of Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-100040
Tank Id: R-1
Tank Status: Permanently Out of Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-100040
Tank Id: R-2
Tank Status: Permanently Out of Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-100040
Tank Id: R-03
Tank Status: Permanently Out of Use
FRTYPE: Other
Expiration Date: Not reported

MID PAC PETROLEUM LLC 2705952 (Continued) **U003402799**

Alt Facility ID: 9-100040
Tank Id: 1
Tank Status: Currently in Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-100040
Tank Id: R-01
Tank Status: Permanently Out of Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-100040
Tank Id: 2
Tank Status: Currently in Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-100040
Tank Id: 1
Tank Status: Currently in Use
FRTYPE: Insurance
Expiration Date: 03/31/2014

Alt Facility ID: 9-100040
Tank Id: 2
Tank Status: Currently in Use
FRTYPE: Insurance
Expiration Date: 03/31/2014

Alt Facility ID: 9-100040
Tank Id: R-2
Tank Status: Permanently Out of Use
FRTYPE: Insurance
Expiration Date: 03/31/2014

Alt Facility ID: 9-100040
Tank Id: R-1
Tank Status: Permanently Out of Use
FRTYPE: Insurance
Expiration Date: 03/31/2014

Alt Facility ID: 9-100040
Tank Id: R-03
Tank Status: Permanently Out of Use
FRTYPE: Insurance
Expiration Date: 03/31/2014

Alt Facility ID: 9-100040
Tank Id: R-01
Tank Status: Permanently Out of Use
FRTYPE: Insurance
Expiration Date: 03/31/2014

Alt Facility ID: 9-100040
Tank Id: R-02
Tank Status: Permanently Out of Use

MID PAC PETROLEUM LLC 2705952 (Continued) **U003402799**

FRTYPE: Insurance
Expiration Date: 03/31/2014

Alt Facility ID: 9-100040
Tank Id: R-4
Tank Status: Permanently Out of Use
FRTYPE: Insurance
Expiration Date: 03/31/2014

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55 ESE 1/2-1 0.527 mi. 2783 ft.

Relative: Higher

Actual: 42 ft.

KAPIOLANI WOMEN'S & CHILDREN'S MEDICAL CENTER **SHWS** **U001235208**
1319 PUNAHOU ST **UST** **N/A**
HONOLULU, HI 96826 **AIRS**
Financial Assurance

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: Kapiolani Medical Center for Women and Children
HID Number: Not reported
Facility Registry Identifier: 110005730067
Lead Agency: Not reported
Program: State
Project Manager: Unassigned
Hazard Priority: NFA
Potential Hazards And Controls: No Hazard
Organization: Not reported
Island: Oahu
Supplemental Location Text: Not reported
SDAR Environmental Interest Name: Kapiolani Medical Center for Women and Children
HID Number: Not reported
Facility Registry Identifier: 110005730067
Lead Agency: Not reported
Progran Name: State
Potential Hazard And Controls: No Hazard
Priority: NFA
Assessment: Response Not Necessary
Response: Not reported
Nature of Contamination: Found: TPH as diesel below DOH EALs following removal of storage tanks
Nature of Residual Contamination: No contamination remaining
Use Restrictions: No Hazard Present For Unrestricted Residential Use
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Not reported
Site Closure Type: No Further Action Letter - Unrestricted Residential Use
Document Date: 07/17/1997
Document Number: 1997-249-RK
Document Subject: Hazardous Waste Release Response Determination for Kapiolani Medical Center for Women and Children,
Project Manager: Unassigned
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

UST:
Facility ID: 9-100740
Owner: KAPIOLANI WOMEN'S & CHILDREN'S MEDICAL CENTER

KAPIOLANI WOMEN'S & CHILDREN'S MEDICAL CENTER (Continued) **U001235208**

Owner Address: 1319 PUNAHOU ST
Owner City,St,Zip: Honolulu, 96826 96826
Latitude: 21.299429
Longitude: -157.832592
Horizontal Reference Datum Name: NAD83
Horizontal Collection Method Name: Map

Tank ID: R-001
Date Installed: 03/22/1971
Tank Status: Permanently Out of Use
Date Closed: 04/16/1996
Tank Capacity: 1000
Substance: Diesel

Tank ID: r-1
Date Installed: 10/01/1995
Tank Status: Permanently out of Use
Date Closed: 07/23/2014
Tank Capacity: 15000
Substance: Diesel

AIRS:
Facility ID: 0588-01-N
Island: Oahu
Mailing Address: 1319 Punahou Street
Locale: Not reported
Business Phone: 808-983-6941
Mailing City,St,Zip: Honolulu, Hawaii 96826
Contact Name: Francisco "Kiko" Riego De Dios
Contact Title: Facilities Management Director
Description: 125 HP Boiler and 50 HP Exempt Boiler1.Boiler No.1 - 50 HP Cleaver-Brooks boiler #1 (model no. CB 200-50, serial no. L102531, 2.09 MMBtu/hr, fired primarily on synthetic natural gas (SNG) and fuel oil no.2 as a back-up). This boiler is exempt pursuant to Director s discretion as specified in Attachment II, Special Conditions No. B.1.d.2.Boiler No.2 - 125 HP Cleaver-Brooks boiler (model no. CB 200-125-150ST, serial no. L88692, 5.23 MMBtu/hr, fired primarily on SNG and fuel oil no. 2 as back-up).

HI Financial Assurance:
Alt Facility ID: 9-100740
Tank Id: r-1
Tank Status: Permanently out of Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-100740
Tank Id: R-001
Tank Status: Permanently Out of Use
FRTYPE: Other
Expiration Date: Not reported

Alt Facility ID: 9-100740
Tank Id: r-1
Tank Status: Permanently out of Use

KAPIOLANI WOMEN'S & CHILDREN'S MEDICAL CENTER (Continued) **U001235208**

FRTYPE: Insurance
Expiration Date: 08/01/2014

Alt Facility ID: 9-100740
Tank Id: R-001
Tank Status: Permanently Out of Use
FRTYPE: Insurance
Expiration Date: 08/01/2014

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56 SSW 1/2-1 0.575 mi. 3036 ft.

Relative: Lower

Actual: 3 ft.

CENPAC PROPERTIES - OFFICE BUILDING **SHWS** **U003402842**
615 PIIKOI ST **LUST** **N/A**
HONOLULU, HI 96814 **UST**
SPILLS
Financial Assurance

SHWS:

Organization:	Not reported
Supplemental Location:	Iwilei, Honolulu Harbor
Island:	Oahu
Environmental Interest:	Honolulu Harbor Iwilei District Operating Parties
HID Number:	Not reported
Facility Registry Identifier:	110013785868
Lead Agency:	HEER
Program:	State
Project Manager:	Unassigned
Hazard Priority:	Medium
Potential Hazards And Controls:	Hazard Present
Organization:	Not reported
Island:	Oahu
Supplemental Location Text:	Iwilei, Honolulu Harbor
SDAR Environmental Interest Name:	Honolulu Harbor Iwilei District Operating Parties
HID Number:	Not reported
Facility Registry Identifier:	110013785868
Lead Agency:	HEER
Progran Name:	State
Potential Hazard And Controls:	Hazard Present
Priority:	Medium
Assessment:	Assessment Ongoing
Response:	Not reported
Nature of Contamination:	Found: Honolulu Harbor Iwilei District Operating Parties (IDOP) were taken over by the Honolulu Harbor Iwilei District Participating Parties (IDPP).
Nature of Residual Contamination:	Not reported
Use Restrictions:	Controls Required to Manage Contamination
Engineering Control:	Not reported
Description of Restrictions:	Not reported
Institutional Control:	Not reported
Within Designated Areawide Contamination:	Honolulu Harbor Iwilei Unit
Site Closure Type:	Not reported
Document Date:	Not reported
Document Number:	Not reported
Document Subject:	Not reported
Project Manager:	Unassigned
Contact Information:	(808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

LUST:
Facility ID: 9-103438

CENPAC PROPERTIES - OFFICE BUILDING (Continued) **U003402842**

Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 07/07/1999
Release ID: 990205
Project Officer: David Hodges

UST:
Facility ID: 9-103438
Owner: CENPAC PROPERTIES
Owner Address: 1150 S KING ST SUITE 1101
Owner City,St,Zip: Honolulu, 96814 96814
Latitude: 21.295272
Longitude: -157.845794
Horizontal Reference Datum Name: NAD83
Horizontal Collection Method Name: Address Matching

Tank ID: R-M-1
Date Installed: Not reported
Tank Status: Permanently Out of Use
Date Closed: 10/20/1998
Tank Capacity: 150
Substance: Diesel

HI SPILLS:
Island: Oahu
Supplemental Loc. Text: Honolulu Harbor
Case Number: 20101216-1230
HID Number: Not reported
Facility Registry Id: 110013785868
Lead and Program: HEER EP&R
ER: None
Units: Potential to release OU1C
Substances: Petroleum
Less Or Greater Than: Not reported
Numerical Quantity: 0
Units: Not reported
Activity Type: Response
Activity Lead: Liz Galvez
Assignment End Date: Not reported
Result: Pending
File Under: Iwilei District Participating Parties, LLC

HI Financial Assurance:
Alt Facility ID: 9-103438
Tank Id: R-M-1
Tank Status: Permanently Out of Use
FRTYPE: Insurance
Expiration Date: Not reported

Alt Facility ID: 9-103438
Tank Id: R-M-1
Tank Status: Permanently Out of Use
FRTYPE: Surety Bond
Expiration Date: Not reported

57 SSW 1/2-1 0.598 mi. 3155 ft. — **EVERSHINE X**, **1230 KAPIOLANI BLVD**, **HONOLULU, HI 96814** — **SHWS** **VCP** — **S105262688** **N/A**

Relative: Lower

Actual: 3 ft.

SHWS:

Organization:	Not reported
Supplemental Location:	Not reported
Island:	Oahu
Environmental Interest:	Evershine X
HID Number:	Not reported
Facility Registry Identifier:	110013780934
Lead Agency:	HEER
Program:	Voluntary Response Program
Project Manager:	Mark Sutterfield
Hazard Priority:	NFA
Potential Hazards And Controls:	No Hazard
Organization:	Not reported
Island:	Oahu
Supplemental Location Text:	Not reported
SDAR Environmental Interest Name:	Evershine X
HID Number:	Not reported
Facility Registry Identifier:	110013780934
Lead Agency:	HEER
Progran Name:	Voluntary Response Program
Potential Hazard And Controls:	No Hazard
Priority:	NFA
Assessment:	Response Necessary
Response:	Response Complete
Nature of Contamination:	Found: Petroleum products
Nature of Residual Contamination:	Petroleum contaminated soil
Use Restrictions:	No Hazard Present For Unrestricted Residential Use
Engineering Control:	Not reported
Description of Restrictions:	Not reported
Institutional Control:	Not reported
Within Designated Areawide Contamination:	Not reported
Site Closure Type:	Letter of Completion - Unrestricted Residential Use
Document Date:	08/18/2004
Document Number:	2004-338-MS
Document Subject:	LOC for Evershine X no conditions
Project Manager:	Mark Sutterfield
Contact Information:	(808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

VCP:

Program:	Voluntary Response Program
Zip Suffix:	Not reported
Supplemental Location:	Not reported
Island:	Oahu

58 West 1/2-1 0.601 mi. 3174 ft. — **801 SOUTH HOTEL STREET**, **801 S HOTEL ST**, **HONOLULU, HI 96813** — **SHWS** — **S115488669** **N/A**

Relative: Lower

Actual: 16 ft.

SHWS:

Organization:	Not reported
Supplemental Location:	Not reported
Island:	Oahu
Environmental Interest:	801 South Hotel Street
HID Number:	Not reported
Facility Registry Identifier:	Not reported
Lead Agency:	HEER
Program:	State
Project Manager:	Cal Miyahara
Hazard Priority:	Medium
Potential Hazards And Controls:	Hazard Undetermined
Organization:	Not reported
Island:	Oahu
Supplemental Location Text:	Not reported
SDAR Environmental Interest Name:	801 South Hotel Street
HID Number:	Not reported
Facility Registry Identifier:	Not reported
Lead Agency:	HEER
Progran Name:	State
Potential Hazard And Controls:	Hazard Undetermined
Priority:	Medium
Assessment:	Assessment Ongoing
Response:	Not reported
Nature of Contamination:	Not reported
Nature of Residual Contamination:	Not reported
Use Restrictions:	Undetermined
Engineering Control:	Not reported
Description of Restrictions:	Not reported
Institutional Control:	Not reported
Within Designated Areawide Contamination:	Not reported
Site Closure Type:	Not reported
Document Date:	Not reported
Document Number:	Not reported
Document Subject:	Not reported
Project Manager:	Cal Miyahara
Contact Information:	(808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

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59 South 1/2-1 0.645 mi. 3403 ft. — **CUTTER CHEVROLET**, **1391 KAPIOLANI BLVD**, **HONOLULU, HI 96814** — **SHWS** **LUST** **UST** **Financial Assurance** — **U001235085** **N/A**

Relative: Lower

Actual: 3 ft.

SHWS:

Organization:	Not reported
Supplemental Location:	2nd Driveway from Kona Iki St
Island:	Oahu
Environmental Interest:	Cutter Chevrolet Hydraulic Lift
HID Number:	Not reported
Facility Registry Identifier:	110005725028
Lead Agency:	HEER
Program:	State
Project Manager:	Steve Mow

CUTTER CHEVROLET (Continued) **U001235085**

Hazard Priority:	NFA
Potential Hazards And Controls:	No Hazard
Organization:	Not reported
Island:	Oahu
Supplemental Location Text:	2nd Driveway from Kona Iki St
SDAR Environmental Interest Name:	Cutter Chevrolet Hydraulic Lift
HID Number:	Not reported
Facility Registry Identifier:	110005725028
Lead Agency:	HEER
Program Name:	State
Potential Hazard And Controls:	No Hazard
Priority:	NFA
Assessment:	Response Necessary
Response:	Response Complete
Nature of Contamination:	Not reported
Nature of Residual Contamination:	Not reported
Use Restrictions:	No Hazard Present For Unrestricted Residential Use
Engineering Control:	Not reported
Description of Restrictions:	Not reported
Institutional Control:	Not reported
Within Designated Areawide Contamination:	Not reported
Site Closure Type:	No Further Action Letter - Unrestricted Residential Use
Document Date:	09/09/2005
Document Number:	2005-454-SPM
Document Subject:	No Further Action Required at Cutter Chevrolet at 1391 Kapiolani Blvd
Project Manager:	Steve Mow
Contact Information:	(808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

LUST:

Facility ID:	9-100185
Facility Status:	Site Cleanup Completed (NFA)
Facility Status Date:	10/26/1999
Release ID:	950131
Project Officer:	Renato Maniulit

UST:

Facility ID:	9-100185
Owner:	MOTOR SUPPLY LTD
Owner Address:	726 SHERIDAN ST
Owner City,St,Zip:	Honolulu, 96814 96814
Latitude:	21.293503
Longitude:	-157.843954
Horizontal Reference Datum Name:	NAD83
Horizontal Collection Method Name:	Address Matching
Tank ID:	R-1
Date Installed:	05/03/1971
Tank Status:	**Permanently Out of Use**
Date Closed:	09/02/1995
Tank Capacity:	500
Substance:	Used Oil

HI Financial Assurance:

Alt Facility ID:	9-100185
Tank Id:	R-1
Tank Status:	Permanently Out of Use

CUTTER CHEVROLET (Continued) **U001235085**

FRTYPE:	Not Listed
Expiration Date:	Not reported
Alt Facility ID:	9-100185
Tank Id:	R-1
Tank Status:	Permanently Out of Use
FRTYPE:	Self Insured
Expiration Date:	Not reported

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60 South 1/2-1 0.646 mi. 3411 ft.

HECO SUBSTATION: MAKALOA SUBSTATION **SHWS** **S106817457**
1544 MAKALOA ST **SPILLS** **N/A**
HONOLULU, HI 96814 **INST CONTROL**

Relative: Lower

Actual: 3 ft.

SHWS:

Organization:	Not reported
Supplemental Location:	Not reported
Island:	Oahu
Environmental Interest:	HECO Makaloa Substation
HID Number:	Not reported
Facility Registry Identifier:	110013790237
Lead Agency:	HEER
Program:	State
Project Manager:	Laura Young
Hazard Priority:	Low
Potential Hazards And Controls:	Hazard Managed With Controls
Organization:	Not reported
Island:	Oahu
Supplemental Location Text:	Not reported
SDAR Environmental Interest Name:	HECO Makaloa Substation
HID Number:	Not reported
Facility Registry Identifier:	110013790237
Lead Agency:	HEER
Program Name:	State
Potential Hazard And Controls:	Hazard Managed With Controls
Priority:	Low
Assessment:	Response Necessary
Response:	Response Complete
Nature of Contamination:	Found: COCs below DOH EALs, except arsenic in soil (20.7 mg/kg in one sample)
Nature of Residual Contamination:	Soil below the pad should be investigated if the pad is ever removed or damaged. Contaminants of concern include TPH as diesel and/or transformer oil, and possible PCB.
Use Restrictions:	Controls Required to Manage Contamination
Engineering Control:	Not reported
Description of Restrictions:	Not reported
Institutional Control:	Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination:	Not reported
Site Closure Type:	No Further Action Letter - Restricted Use
Document Date:	03/06/2007
Document Number:	2007-109-LY
Document Subject:	No Further Action Determination
Project Manager:	Laura Young
Contact Information:	(808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

HI SPILLS:

HECO SUBSTATION: MAKALOA SUBSTATION (Continued) **S106817457**

Island:	Oahu
Supplemental Loc. Text:	Not reported
Case Number:	20110620-1451
HID Number:	Not reported
Facility Registry Id:	110013790237
Lead and Program:	HEER EP&R
ER:	None
Units:	HECO substation transformer #18639 release
Substances:	Transformer Oil
Less Or Greater Than:	>
Numerical Quantity:	5
Units:	Gallons
Activity Type:	Response
Activity Lead:	Curtis Martin
Assignment End Date:	Not reported
Result:	Not reported
File Under:	Hawaiian Electric Co., Inc. (HECO)

Island:	Oahu
Supplemental Loc. Text:	Not reported
Case Number:	20020815-1119
HID Number:	Not reported
Facility Registry Id:	110013790237
Lead and Program:	HEER EP&R
ER:	Site Visit
Units:	HECO Transformer 21707
Substances:	Shell Diala Oil
Less Or Greater Than:	>
Numerical Quantity:	25
Units:	Gallons
Activity Type:	Response
Activity Lead:	Terry Corpus
Assignment End Date:	Not reported
Result:	SOSC NFA
File Under:	Hawaiian Electric Co., Inc. (HECO)

INST CONTROL:

Potential hazards and controls:	Hazard Managed With Controls
Supplemental Location:	Not reported
Zip Suffix:	Not reported
Island:	Oahu
Institutional Control:	Government - Hawaii Dept. of Health Letter Issued

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61 South 1/2-1 0.651 mi. 3435 ft.

Relative: Lower

Actual: 3 ft.

WALGREENS KEEAMOKU **SHWS S115488729**
1460 KAPIOLANI BLVD **N/A**
HONOLULU, HI 96814

SHWS:

Organization:	Not reported
Supplemental Location:	Not reported
Island:	Oahu
Environmental Interest:	Walgreens Keeamoku
HID Number:	Not reported
Facility Registry Identifier:	Not reported
Lead Agency:	HEER

WALGREENS KEEAMOKU (Continued) **S115488729**

Program:	Fast Track
Project Manager:	Jordan Nakayama
Hazard Priority:	High
Potential Hazards And Controls:	Hazard Undetermined
Organization:	Not reported
Island:	Oahu
Supplemental Location Text:	Not reported
SDAR Environmental Interest Name:	Walgreens Keeamoku
HID Number:	Not reported
Facility Registry Identifier:	Not reported
Lead Agency:	HEER
Progran Name:	Fast Track
Potential Hazard And Controls:	Hazard Undetermined
Priority:	High
Assessment:	Assessment Ongoing
Response:	Not reported
Nature of Contamination:	Found: The soil sample from SB-3-S-2.25-3.0 had a concentration of 1,400 milligrams per kilogram (mg/kg) TPH-DRO which exceeds the EAL of 100 mg/kg.
Nature of Residual Contamination:	Not reported
Use Restrictions:	Undetermined
Engineering Control:	Not reported
Description of Restrictions:	Not reported
Institutional Control:	Not reported
Within Designated Areawide Contamination:	Not reported
Site Closure Type:	Not reported
Document Date:	Not reported
Document Number:	Not reported
Document Subject:	Not reported
Project Manager:	Jordan Nakayama
Contact Information:	(808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

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62 West 1/2-1 0.655 mi. 3456 ft.

Relative: Lower

Actual: 10 ft.

ONE ARCHER LANE **SHWS 1006818981**
801 S KING ST **SPILLS N/A**
HONOLULU, HI 96813

SHWS:

Organization:	Not reported
Supplemental Location:	Not reported
Island:	Oahu
Environmental Interest:	One Archer Lane Petroleum Contamination
HID Number:	Not reported
Facility Registry Identifier:	110013767414
Lead Agency:	SHWB
Program:	State
Project Manager:	Eric Sadoyama
Hazard Priority:	NFA
Potential Hazards And Controls:	Hazard Undetermined
Organization:	Not reported
Island:	Oahu
Supplemental Location Text:	Not reported
SDAR Environmental Interest Name:	One Archer Lane Petroleum Contamination
HID Number:	Not reported
Facility Registry Identifier:	110013767414
Lead Agency:	SHWB
Progran Name:	State

ONE ARCHER LANE (Continued) **1006818981**

Potential Hazard And Controls:	Hazard Undetermined
Priority:	NFA
Assessment:	Assessment Ongoing
Response:	Not reported
Nature of Contamination:	Not reported
Nature of Residual Contamination:	Not reported
Use Restrictions:	Undetermined
Engineering Control:	Not reported
Description of Restrictions:	Not reported
Institutional Control:	Not reported
Within Designated Areawide Contamination:	Not reported
Site Closure Type:	No Further Action - Type Undetermined
Document Date:	01/10/2006
Document Number:	Not reported
Document Subject:	Not reported
Project Manager:	Eric Sadoyama
Contact Information:	(808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

HI SPILLS:

Island:	Oahu
Supplemental Loc. Text:	Not reported
Case Number:	19960724-1544
HID Number:	Not reported
Facility Registry Id:	110013767414
Lead and Program:	HEER EP&R
ER:	No
Units:	One Archer Lane, petroleum contamination
Substances:	Petroleum
Less Or Greater Than:	Not reported
Numerical Quantity:	Not reported
Units:	Not reported
Activity Type:	Response
Activity Lead:	Terry Corpus
Assignment End Date:	Not reported
Result:	Refer to ISST
File Under:	Myers King Street Partners

Island:	Oahu
Supplemental Loc. Text:	Not reported
Case Number:	19961002-1100
HID Number:	Not reported
Facility Registry Id:	110013767414
Lead and Program:	HEER EP&R
ER:	No
Units:	One Archer Lane, discovered UST
Substances:	Not reported
Less Or Greater Than:	Not reported
Numerical Quantity:	Not reported
Units:	Not reported
Activity Type:	Response
Activity Lead:	Terry Corpus
Assignment End Date:	Not reported
Result:	Refer to ISST
File Under:	Myers King Street Partners

Island:	Oahu
Supplemental Loc. Text:	Not reported

ONE ARCHER LANE (Continued) **1006818981**

Case Number:	20011013-1451
HID Number:	Not reported
Facility Registry Id:	110013767414
Lead and Program:	HEER EP&R
ER:	Site Visit
Units:	1 Archer Lane, Honolulu, White Powder-Anthrax Scare
Substances:	Unknown white powder possibily containing a bioterrorism agent anthrax
Less Or Greater Than:	Not reported
Numerical Quantity:	Not reported
Units:	Not reported
Activity Type:	Response
Activity Lead:	Bill Perry
Assignment End Date:	Not reported
Result:	SOSC NFA
File Under:	Myers King Street Partners

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63 SSW 1/2-1 0.671 mi. 3543 ft. **DURANT PROPERTIES 1235 KONA ST HONOLULU, HI** **SHWS INST CONTROL** **S109096045 N/A**

Relative: Lower

Actual: 3 ft.

SHWS:

Organization:	Not reported
Supplemental Location:	1226 Waimanu St
Island:	Oahu
Environmental Interest:	Durant Properties
HID Number:	Not reported
Facility Registry Identifier:	Not reported
Lead Agency:	HEER
Program:	State
Project Manager:	Cal Miyahara
Hazard Priority:	NFA
Potential Hazards And Controls:	Hazard Managed With Controls
Organization:	Not reported
Island:	Oahu
Supplemental Location Text:	1226 Waimanu St
SDAR Environmental Interest Name:	Durant Properties
HID Number:	Not reported
Facility Registry Identifier:	Not reported
Lead Agency:	HEER
Progran Name:	State
Potential Hazard And Controls:	Hazard Managed With Controls
Priority:	NFA
Assessment:	Response Necessary
Response:	Response Complete
Nature of Contamination:	Found: Nickel above Tier 1 EAL in GW and Cadmium above Tier 1 EAL in soil.
Nature of Residual Contamination:	Not reported
Use Restrictions:	Controls Required to Manage Contamination
Engineering Control:	Not reported
Description of Restrictions:	Not reported
Institutional Control:	Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination:	Not reported
Site Closure Type:	No Further Action Letter - Restricted Use
Document Date:	06/17/2011
Document Number:	2011-323-CMM
Document Subject:	EHE & EHMP, 1235 Kona St, Feb 2011

DURANT PROPERTIES (Continued) **S109096045**

Project Manager: Cal Miyahara
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

INST CONTROL:
Potential hazards and controls: Hazard Managed With Controls
Supplemental Location: 1226 Waimanu St
Zip Suffix: Not reported
Island: Oahu
Institutional Control: Government - Hawaii Dept. of Health Letter Issued

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64 WSW 1/2-1 0.690 mi. 3642 ft.

PACIFICA CONDOMINIUM **SHWS S110765470**
1009 KAPIOLANI BLVD **LUST N/A**
HONOLULU, HI 96814

Relative: Lower

Actual: 3 ft.

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: Pacifica Condominiums
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Program: State
Project Manager: Paul Chong
Hazard Priority: NFA
Potential Hazards And Controls: No Hazard
Organization: Not reported
Island: Oahu
Supplemental Location Text: Not reported
SDAR Environmental Interest Name: Pacifica Condominiums
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Progran Name: State
Potential Hazard And Controls: No Hazard
Priority: NFA
Assessment: Response Necessary
Response: Response Complete
Nature of Contamination: Found: Low levels of contaminated soil left in place. Area capped with multistory building
Nature of Residual Contamination: Not reported
Use Restrictions: No Hazard Present For Unrestricted Residential Use
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Not reported
Site Closure Type: No Further Action Letter - Unrestricted Residential Use
Document Date: 07/19/2011
Document Number: 2011-399-PC
Document Subject: Subsurface Soil Assessment Report, Honolulu HI, dated Oct 28, 2010
Project Manager: Paul Chong
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

LUST:
Facility ID: 9-103909

PACIFICA CONDOMINIUM (Continued) **S110765470**

Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 11/07/2011
Release ID: 110013
Project Officer: Shunsheng Fu

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65 WSW 1/2-1 0.712 mi. 3761 ft.

SYMPHONY PARK **SHWS S107022567**
850 KAPIOLANI BLVD **SPILLS N/A**
HONOLULU, HI 96807

Relative: Lower

Actual: 3 ft.

SHWS:
Organization: Not reported
Supplemental Location: Intersection with Ward Avenue
Island: Oahu
Environmental Interest: Symphony Park
HID Number: HID984467654
Facility Registry Identifier: 110013778206
Lead Agency: HEER
Program: State
Project Manager: Liz Galvez
Hazard Priority: NFA
Potential Hazards And Controls: Hazard Undetermined
Organization: Not reported
Island: Oahu
Supplemental Location Text: Intersection with Ward Avenue
SDAR Environmental Interest Name: Symphony Park
HID Number: HID984467654
Facility Registry Identifier: 110013778206
Lead Agency: HEER
Progran Name: State
Potential Hazard And Controls: Hazard Undetermined
Priority: NFA
Assessment: Assessment Ongoing
Response: Not reported
Nature of Contamination: Not reported
Nature of Residual Contamination: Not reported
Use Restrictions: Undetermined
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Not reported
Site Closure Type: No Further Action - Type Undetermined
Document Date: 08/31/1995
Document Number: Not reported
Document Subject: Not reported
Project Manager: Liz Galvez
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

HI SPILLS:
Island: Oahu
Supplemental Loc. Text: Intersection with Ward Avenue
Case Number: 20130718-0900
HID Number: HID984467654
Facility Registry Id: 110013778206
Lead and Program: HEER EP&R
ER: None

SYMPHONY PARK (Continued) **S107022567**

Units: Symphony Park petroleum odors in trenches
Substances: diesel
Less Or Greater Than: Not reported
Numerical Quantity: 0
Units: Not reported
Activity Type: Response
Activity Lead: Not reported
Assignment End Date: Not reported
Result: Not reported
File Under: Symphony Park (Myers Corporation)

Island: Oahu
Supplemental Loc. Text: Intersection with Ward Avenue
Case Number: 20130718-0900
HID Number: HID984467654
Facility Registry Id: 110013778206
Lead and Program: HEER EP&R
ER: None
Units: Symphony Park petroleum odors in trenches
Substances: gasoline
Less Or Greater Than: Not reported
Numerical Quantity: 0
Units: Not reported
Activity Type: Response
Activity Lead: Not reported
Assignment End Date: Not reported
Result: Not reported
File Under: Symphony Park (Myers Corporation)

Island: Oahu
Supplemental Loc. Text: Intersection with Ward Avenue
Case Number: 20130718-0900
HID Number: HID984467654
Facility Registry Id: 110013778206
Lead and Program: HEER EP&R
ER: None
Units: Symphony Park petroleum odors in trenches
Substances: diesel
Less Or Greater Than: Not reported
Numerical Quantity: 0
Units: Not reported
Activity Type: Response
Activity Lead: TC
Assignment End Date: Not reported
Result: SOSC NFA
File Under: Symphony Park (Myers Corporation)

Island: Oahu
Supplemental Loc. Text: Intersection with Ward Avenue
Case Number: 20130718-0900
HID Number: HID984467654
Facility Registry Id: 110013778206
Lead and Program: HEER EP&R
ER: None
Units: Symphony Park petroleum odors in trenches
Substances: gasoline
Less Or Greater Than: Not reported

SYMPHONY PARK (Continued) **S107022567**

Numerical Quantity: 0
Units: Not reported
Activity Type: Response
Activity Lead: TC
Assignment End Date: Not reported
Result: SOSC NFA
File Under: Symphony Park (Myers Corporation)

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66 South 1/2-1 0.716 mi. 3782 ft. | **NEW OFFICE LOUNGE 1551 KAPIOLANI BLVD HONOLULU, HI 96814** | **SHWS LUST UST** | **1006843573 N/A**

Relative: Lower

Actual: 3 ft.

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: New Office Lounge
HID Number: Not reported
Facility Registry Identifier: 110013783469
Lead Agency: SHWB
Program: State
Project Manager: Mark Sutterfield
Hazard Priority: Medium
Potential Hazards And Controls: No Hazard
Organization: Not reported
Island: Oahu
Supplemental Location Text: Not reported
SDAR Environmental Interest Name: New Office Lounge
HID Number: Not reported
Facility Registry Identifier: 110013783469
Lead Agency: SHWB
Progran Name: State
Potential Hazard And Controls: No Hazard
Priority: Medium
Assessment: Response Not Necessary
Response: Not reported
Nature of Contamination: Not reported
Nature of Residual Contamination: Not reported
Use Restrictions: No Hazard Present for Unrestricted Residential Use
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Not reported
Site Closure Type: No Action Letter
Document Date: 10/26/2004
Document Number: Not reported
Document Subject: Not reported
Project Manager: Mark Sutterfield
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

LUST:
Facility ID: 9-103517
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 03/10/2008
Release ID: 060033

NEW OFFICE LOUNGE (Continued) **1006843573**

Project Officer: Shunsheng Fu

Facility ID: 9-103517
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 03/10/2008
Release ID: 060012
Project Officer: Shunsheng Fu

UST:
Facility ID: 9-103517
Owner: CEC HAWAII INC
Owner Address: 1517 kapiolani blvD, SUITE 201
Owner City,St,Zip: Honolulu, 96814 96814
Latitude: 21.292276
Longitude: -157.841243
Horizontal Reference Datum Name: NAD83
Horizontal Collection Method Name: Address Matching

Tank ID: r-1
Date Installed: Not reported
Tank Status: Permanently out of Use
Date Closed: 01/15/2006
Tank Capacity: 1100
Substance: Gasoline

Tank ID: r-2
Date Installed: Not reported
Tank Status: Permanently out of Use
Date Closed: 01/15/2006
Tank Capacity: 1100
Substance: Gasoline

Tank ID: r-3
Date Installed: Not reported
Tank Status: Permanently out of Use
Date Closed: 01/15/2006
Tank Capacity: 420
Substance: Gasoline

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67 East 1/2-1 0.717 mi. 3787 ft. **PUNAHOU SCHOOL - MAINTENANCE SHOP** **SHWS U003541737**
1601 PUNAHOU ST **LUST N/A**
HONOLULU, HI 96822 **UST**
Financial Assurance

Relative: Higher

Actual: 76 ft.

SHWS:
Organization: Not reported
Supplemental Location: Punahou School Firing Range
Island: Oahu
Environmental Interest: Punahou School Firing Range
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Program: State
Project Manager: Kelton Otsuka

PUNAHOU SCHOOL - MAINTENANCE SHOP (Continued) **U003541737**

Hazard Priority: NFA
Potential Hazards And Controls: No Hazard
Organization: Not reported
Island: Oahu
Supplemental Location Text: Punahou School Firing Range
SDAR Environmental Interest Name: Punahou School Firing Range
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Progran Name: State
Potential Hazard And Controls: No Hazard
Priority: NFA
Assessment: Response Necessary
Response: Response Complete
Nature of Contamination: Found: Lead in soil.
Nature of Residual Contamination: Confirmation samples were below HDOH EALs for unrestricted use.
Use Restrictions: No Hazard Present For Unrestricted Residential Use
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Not reported
Site Closure Type: No Further Action Letter - Unrestricted Residential Use
Document Date: 04/06/2010
Document Number: 2010-228-KO
Document Subject: No Further Action Determination at the Punahou School Firing Range Site
Project Manager: Kelton Otsuka
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

LUST:
Facility ID: 9-100297
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 02/08/2007
Release ID: 900015
Project Officer: Shaobin Li

UST:
Facility ID: 9-101653
Owner: PUNAHOU SCHOOL
Owner Address: 1601 Punahou Street
Owner City,St,Zip: Honolulu, 96822 96822
Latitude: 21.300679
Longitude: -157.827892
Horizontal Reference Datum Name: NAD83
Horizontal Collection Method Name: GPS

Tank ID: 87
Date Installed: 12/01/1985
Tank Status: Currently in Use
Date Closed: Not reported
Tank Capacity: 1000
Substance: Gasoline

Tank ID: R-1
Date Installed: Not reported

PUNAHOU SCHOOL - MAINTENANCE SHOP (Continued) **U003541737**

Tank Status:	**Permanently Out of Use**
Date Closed:	12/06/1990
Tank Capacity:	Not reported
Substance:	Not Listed

Tank ID:	R-1
Date Installed:	03/13/1956
Tank Status:	**Permanently Out of Use**
Date Closed:	12/11/1989
Tank Capacity:	500
Substance:	Gasoline

Tank ID:	R-2
Date Installed:	Not reported
Tank Status:	**Permanently Out of Use**
Date Closed:	12/06/1990
Tank Capacity:	Not reported
Substance:	Not Listed

Tank ID:	diesel
Date Installed:	12/01/1985
Tank Status:	**Currently in Use**
Date Closed:	Not reported
Tank Capacity:	2000
Substance:	Diesel

HI Financial Assurance:

Alt Facility ID:	9-101653
Tank Id:	87
Tank Status:	Currently in Use
FRTYPE:	Other
Expiration Date:	10/15/2004

Alt Facility ID:	9-101653
Tank Id:	diesel
Tank Status:	Currently in Use
FRTYPE:	Other
Expiration Date:	10/15/2004

Alt Facility ID:	9-101653
Tank Id:	87
Tank Status:	Currently in Use
FRTYPE:	Insurance
Expiration Date:	10/15/2014

Alt Facility ID:	9-101653
Tank Id:	diesel
Tank Status:	Currently in Use
FRTYPE:	Insurance
Expiration Date:	10/15/2014

68 SW 1/2-1 0.731 mi. 3861 ft. | **JAS W GLOVER LTD**
1046 WAIMAMU ST
HONOLULU, HI 96814 | **RCRA NonGen / NLR FINDS SHWS LUST UST** | **1000135795 HID981637861**

Relative: Lower

Actual: 3 ft.

RCRA NonGen / NLR:

Date form received by agency:	01/09/1987
Facility name:	JAS W GLOVER LTD
Facility address:	1046 WAIMAMU ST HONOLULU, HI 96814
EPA ID:	HID981637861
Mailing address:	PO BOX 579 HONOLULU, HI 96809
Contact:	ENVIRONMENTAL MANAGER
Contact address:	1046 WAIMAMU ST HONOLULU, HI 96814
Contact country:	US
Contact telephone:	(808) 533-1777
Contact email:	Not reported
EPA Region:	09
Land type:	Other land type
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	JAS W GLOVER
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No

JAS W GLOVER LTD (Continued) **1000135795**

Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 12/21/1995
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

FINDS:

Registry ID: 110005724252

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

STATE MASTER

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: Glover Building
HID Number: Not reported
Facility Registry Identifier: 110005724252
Lead Agency: HEER
Program: State
Project Manager: Melody Calisay
Hazard Priority: NFA
Potential Hazards And Controls: Hazard Undetermined
Organization: Not reported
Island: Oahu
Supplemental Location Text: Not reported
SDAR Environmental Interest Name: Glover Building
HID Number: Not reported
Facility Registry Identifier: 110005724252
Lead Agency: HEER
Program Name: State
Potential Hazard And Controls: Hazard Undetermined
Priority: NFA
Assessment: Response Necessary
Response: Response Complete
Nature of Contamination: Found: Hydraulic fluid
Nature of Residual Contamination: unknown
Use Restrictions: Undetermined
Engineering Control: Not reported

JAS W GLOVER LTD (Continued) **1000135795**

Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Not reported
Site Closure Type: ISST NFA - No Letter
Document Date: 06/10/2004
Document Number: Not reported
Document Subject: Not reported
Project Manager: Melody Calisay
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

LUST:
Facility ID: 9-100835
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 05/26/2004
Release ID: 020019
Project Officer: Richard Takaba

UST:
Facility ID: 9-100835
Owner: JAS W. GLOVER, LTD
Owner Address: 725 KAPIOLANI BLVD, SUITE 306
Owner City,St,Zip: Honolulu, 96814 96814
Latitude: 21.296327
Longitude: -157.851284
Horizontal Reference Datum Name: NAD83
Horizontal Collection Method Name: Address Matching

Tank ID: R-1
Date Installed: 03/07/2037
Tank Status: Permanently Out of Use
Date Closed: 11/12/1990
Tank Capacity: 600
Substance: Gasoline

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69 SW 1/2-1 0.738 mi. 3896 ft. | **RESERVE HOUSING TOWER SOIL CONTAMINATION** | **SHWS SPILLS** | **1006819959 N/A**
1141 WAIMANU ST
HONOLULU, HI 96813

Relative: Lower

Actual: 3 ft.

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: Reserve Housing Tower Soil Contamination
HID Number: Not reported
Facility Registry Identifier: 110013778322
Lead Agency: Not reported
Program: State
Project Manager: Unassigned
Hazard Priority: NFA
Potential Hazards And Controls: Hazard Undetermined
Organization: Not reported
Island: Oahu
Supplemental Location Text: Not reported
SDAR Environmental Interest Name: Reserve Housing Tower Soil Contamination
HID Number: Not reported

RESERVE HOUSING TOWER SOIL CONTAMINATION (Continued) **1006819959**

Facility Registry Identifier:	110013778322
Lead Agency:	Not reported
Progran Name:	State
Potential Hazard And Controls:	Hazard Undetermined
Priority:	NFA
Assessment:	Assessment Ongoing
Response:	Not reported
Nature of Contamination:	Found: oil
Nature of Residual Contamination:	contaminants below HDOH EALs, and under a parking garage.
Use Restrictions:	Undetermined
Engineering Control:	Not reported
Description of Restrictions:	Not reported
Institutional Control:	Not reported
Within Designated Areawide Contamination:	Not reported
Site Closure Type:	No Further Action - Type Undetermined
Document Date:	10/25/1995
Document Number:	Not reported
Document Subject:	Not reported
Project Manager:	Unassigned
Contact Information:	(808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

HI SPILLS:

Island:	Oahu
Supplemental Loc. Text:	Not reported
Case Number:	19951025-2
HID Number:	Not reported
Facility Registry Id:	110013778322
Lead and Program:	HEER EP&R
ER:	No
Units:	Reserve Housing Tower
Substances:	oil/stained soil
Less Or Greater Than:	Not reported
Numerical Quantity:	Not reported
Units:	Not reported
Activity Type:	Response
Activity Lead:	Bill Perry
Assignment End Date:	Not reported
Result:	Refer to ISST
File Under:	Reserve Housing Tower

M70 WSW 1/2-1 0.742 mi. 3918 ft. **HECO SOIL CONTAMINATION CHAPIN LANE AND KAPIOLANI BOULEVARD** **SHWS** **S106817445**
CHAPIN LN & KAPIOLANI BLVD **ENG CONTROLS** **N/A**
HONOLULU, HI **INST CONTROL**

Site 1 of 2 in cluster M

Relative: Lower
Actual: 3 ft.

SHWS:

Organization:	Not reported
Supplemental Location:	Not reported
Island:	Oahu
Environmental Interest:	Kapiolani Blvd. and Chapin Ln. Soil Contamination
HID Number:	Not reported
Facility Registry Identifier:	110013791067
Lead Agency:	HEER
Program:	State
Project Manager:	Richard Palmer
Hazard Priority:	NFA

HECO SOIL CONTAMINATION CHAPIN LANE AND KAPIOLANI BOULEVARD (Continued) **S106817445**

Potential Hazards And Controls:	Hazard Managed With Controls
Organization:	Not reported
Island:	Oahu
Supplemental Location Text:	Not reported
SDAR Environmental Interest Name:	Kapiolani Blvd. and Chapin Ln. Soil Contamination
HID Number:	Not reported
Facility Registry Identifier:	110013791067
Lead Agency:	HEER
Progran Name:	State
Potential Hazard And Controls:	Hazard Managed With Controls
Priority:	NFA
Assessment:	Response Necessary
Response:	Response Complete
Nature of Contamination:	Not reported
Nature of Residual Contamination:	Residual contamination TPH-Diesel 1,960 mg/kg and TPH-Gasoline 3,580 mg/kg
Use Restrictions:	Controls Required to Manage Contamination
Engineering Control:	Engineering Control Required
Description of Restrictions:	Prohibit Any Activity That May Disturb the Integrity of the Capping System
Institutional Control:	Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination:	Not reported
Site Closure Type:	No Further Action Letter - Restricted Use
Document Date:	03/30/2010
Document Number:	2010-213-RP
Document Subject:	Soil Contamination Chapin Lane and Kapiolani Blvd, NFA Letter
Project Manager:	Richard Palmer
Contact Information:	(808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

ENG CONTROLS:

Supplemental Location Text:	Not reported
Zip Suffix:	Not reported
Island:	Oahu
Potential Hazards And Controls:	Hazard Managed With Controls
Engineering Control:	Engineering Control Required

INST CONTROL:

Potential hazards and controls:	Hazard Managed With Controls
Supplemental Location:	Not reported
Zip Suffix:	Not reported
Island:	Oahu
Institutional Control:	Government - Hawaii Dept. of Health Letter Issued

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71 SW 1/2-1 0.745 mi. 3935 ft. **KOOLANI TOWER PROJECT** **SHWS** **S106818609**
1189 WAIMANU ST **SPILLS** **N/A**
HONOLULU, HI 96814 **ENG CONTROLS**
INST CONTROL

Relative: Lower
Actual: 3 ft.

SHWS:

Organization:	Not reported
Supplemental Location:	Not reported
Island:	Oahu
Environmental Interest:	Koolani Tower Project
HID Number:	Not reported
Facility Registry Identifier:	Not reported
Lead Agency:	HEER

KOOLANI TOWER PROJECT (Continued) **S106818609**

Program:	State
Project Manager:	Mark Sutterfield
Hazard Priority:	NFA
Potential Hazards And Controls:	Hazard Managed With Controls
Organization:	Not reported
Island:	Oahu
Supplemental Location Text:	Not reported
SDAR Environmental Interest Name:	Koolani Tower Project
HID Number:	Not reported
Facility Registry Identifier:	Not reported
Lead Agency:	HEER
Progran Name:	State
Potential Hazard And Controls:	Hazard Managed With Controls
Priority:	NFA
Assessment:	Response Necessary
Response:	Response Complete
Nature of Contamination:	Found: Lead
Nature of Residual Contamination:	Thin layer of lead covered by new condominium building
Use Restrictions:	Controls Required to Manage Contamination
Engineering Control:	Engineering Control Required
Description of Restrictions:	Prohibit Any Activity That May Disturb the Integrity of the Capping System. Thin layer of lead covered by new condominium building.
Institutional Control:	Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination:	Not reported
Site Closure Type:	No Further Action Letter - Restricted Use
Document Date:	02/02/2006
Document Number:	2006-059-MS
Document Subject:	NFA for footprint of Building and parking lot in Area 2
Project Manager:	Mark Sutterfield
Contact Information:	(808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

HI SPILLS:

Island:	Oahu
Supplemental Loc. Text:	Not reported
Case Number:	20040615-1651
HID Number:	Not reported
Facility Registry Id:	Not reported
Lead and Program:	HEER EP&R
ER:	Not reported
Units:	Koolani Tower Project
Substances:	Diesel Fuel
Less Or Greater Than:	Not reported
Numerical Quantity:	Not reported
Units:	Unknown
Activity Type:	Response
Activity Lead:	Liz Galvez
Assignment End Date:	Not reported
Result:	Refer to ISST
File Under:	Cresent Heights

ENG CONTROLS:

Supplemental Location Text:	Not reported
Zip Suffix:	Not reported
Island:	Oahu
Potential Hazards And Controls:	Hazard Managed With Controls
Engineering Control:	Engineering Control Required

KOOLANI TOWER PROJECT (Continued) **S106818609**

INST CONTROL:

Potential hazards and controls:	Hazard Managed With Controls
Supplemental Location:	Not reported
Zip Suffix:	Not reported
Island:	Oahu
Institutional Control:	Government - Hawaii Dept. of Health Letter Issued

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M72 WSW 1/2-1 0.751 mi. 3966 ft. **CHUEI SHOKOH, INC.** **825 KAPIOLANI BLVD** **HONOLULU, HI 96813** **SHWS SPILLS ENG CONTROLS INST CONTROL VCP** **1006820040 N/A**

Site 2 of 2 in cluster M

Relative: Lower

Actual: 3 ft.

SHWS:

Organization:	Not reported
Supplemental Location:	Not reported
Island:	Oahu
Environmental Interest:	Chuei Shokoh, Inc. 825 Kapiolani Blvd.
HID Number:	Not reported
Facility Registry Identifier:	110013779269
Lead Agency:	HEER
Program:	Voluntary Response Program
Project Manager:	Mark Sutterfield
Hazard Priority:	NFA
Potential Hazards And Controls:	Hazard Managed With Controls
Organization:	Not reported
Island:	Oahu
Supplemental Location Text:	Not reported
SDAR Environmental Interest Name:	Chuei Shokoh, Inc. 825 Kapiolani Blvd.
HID Number:	Not reported
Facility Registry Identifier:	110013779269
Lead Agency:	HEER
Progran Name:	Voluntary Response Program
Potential Hazard And Controls:	Hazard Managed With Controls
Priority:	NFA
Assessment:	Response Necessary
Response:	Response Complete
Nature of Contamination:	Found: TPH, BTEX, PAHs, and free product in soil and groundwater.
Nature of Residual Contamination:	Not reported
Use Restrictions:	Controls Required to Manage Contamination
Engineering Control:	Engineering Control Required
Description of Restrictions:	Prohibit Excavation
Institutional Control:	Proprietary - Environmental Covenant
Within Designated Areawide Contamination:	Not reported
Site Closure Type:	Letter of Completion - Restricted Use
Document Date:	04/20/2005
Document Number:	2005-192-MS
Document Subject:	Letter accepting monitoring well closure
Project Manager:	Mark Sutterfield
Contact Information:	(808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

HI SPILLS:

Island:	Oahu
Supplemental Loc. Text:	Not reported
Case Number:	19981207-1525
HID Number:	Not reported
Facility Registry Id:	110013779269

CHUEI SHOKOH, INC. (Continued) **1006820040**

Lead and Program: HEER EP&R
ER: No
Units: Former Auto Body Shop and UST
Substances: Diesel Fuel
Less Or Greater Than: Not reported
Numerical Quantity: Not reported
Units: Not reported
Activity Type: Response
Activity Lead: Liz Galvez
Assignment End Date: Not reported
Result: Refer to ISST
File Under: Chuei Shokoh, Inc.

ENG CONTROLS:
Supplemental Location Text: Not reported
Zip Suffix: Not reported
Island: Oahu
Potential Hazards And Controls: Hazard Managed With Controls
Engineering Control: Engineering Control Required

INST CONTROL:
Potential hazards and controls: Hazard Managed With Controls
Supplemental Location: Not reported
Zip Suffix: Not reported
Island: Oahu
Institutional Control: Proprietary - Environmental Covenant

VCP:
Program: Voluntary Response Program
Zip Suffix: Not reported
Supplemental Location: Not reported
Island: Oahu

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73 SSE 1/2-1 0.754 mi. 3983 ft. **FORMER KALAKAUA TRANSMISSION INC** **SHWS** **S106817112**
1665 KALAKAUA AVE **ENG CONTROLS** **N/A**
HONOLULU, HI 96826 **INST CONTROL**

Relative: Lower
Actual: 3 ft.

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: Former Kalakaua Transmission Inc
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: Not reported
Program: State
Project Manager: Diane England
Hazard Priority: NFA
Potential Hazards And Controls: Hazard Managed With Controls
Organization: Not reported
Island: Oahu
Supplemental Location Text: Not reported
SDAR Environmental Interest Name: Former Kalakaua Transmission Inc
HID Number: Not reported

FORMER KALAKAUA TRANSMISSION INC (Continued) **S106817112**

Facility Registry Identifier: Not reported
Lead Agency: Not reported
Program Name: State
Potential Hazard And Controls: Hazard Managed With Controls
Priority: NFA
Assessment: Assessment Ongoing
Response: Not reported
Nature of Contamination: Found: Petroleum and soil in groundwater.
Nature of Residual Contamination: Not reported
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Engineering Control Required
Description of Restrictions: (Concrete Cap) Building foundation must remain in place. If the foundation is disturbed/removed, additional soil and groundwater characterization must be conducted and appropriate remedial measures employed.
Institutional Control: Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination: Not reported
Site Closure Type: No Further Action Letter - Restricted Use
Document Date: 03/28/2006
Document Number: 2006-1850-DE
Document Subject: No Further Action Determination for Oil-Range Hydrocarbons in Soil and Groundwater
Project Manager: Diane England
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

ENG CONTROLS:
Supplemental Location Text: Not reported
Zip Suffix: Not reported
Island: Oahu
Potential Hazards And Controls: Hazard Managed With Controls
Engineering Control: Engineering Control Required

INST CONTROL:
Potential hazards and controls: Hazard Managed With Controls
Supplemental Location: Not reported
Zip Suffix: Not reported
Island: Oahu
Institutional Control: Government - Hawaii Dept. of Health Letter Issued

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74 SW 1/2-1 0.758 mi. 4000 ft. **SELF STORAGE 1** **SHWS** **1006819998**
438 KAMAKEE ST **SPILLS** **N/A**
HONOLULU, HI 96814

Relative: Lower
Actual: 3 ft.

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: Honolulu Laundry
HID Number: Not reported
Facility Registry Identifier: 110013778769
Lead Agency: HEER
Program: State
Project Manager: Mark Sutterfield
Hazard Priority: NFA
Potential Hazards And Controls: No Hazard

SELF STORAGE 1 (Continued) **1006819998**

Organization:	Not reported
Island:	Oahu
Supplemental Location Text:	Not reported
SDAR Environmental Interest Name:	Honolulu Laundry
HID Number:	Not reported
Facility Registry Identifier:	110013778769
Lead Agency:	HEER
Progran Name:	State
Potential Hazard And Controls:	No Hazard
Priority:	NFA
Assessment:	Response Necessary
Response:	Response Complete
Nature of Contamination:	Not reported
Nature of Residual Contamination:	Petroleum contaminated soil. 2 tanks closed in place; suggested they be removed when site is redeveloped.
Use Restrictions:	No Hazard Present For Unrestricted Residential Use
Engineering Control:	Not reported
Description of Restrictions:	Not reported
Institutional Control:	Not reported
Within Designated Areawide Contamination:	Not reported
Site Closure Type:	No Further Action Letter - Unrestricted Residential Use
Document Date:	08/26/2004
Document Number:	2004-350-MS
Document Subject:	NFA letter for Self Storage 1at 438 Kamakee St
Project Manager:	Mark Sutterfield
Contact Information:	(808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

HI SPILLS:

Island:	Oahu
Supplemental Loc. Text:	Not reported
Case Number:	19981028-1300
HID Number:	Not reported
Facility Registry Id:	110013778769
Lead and Program:	HEER EP&R
ER:	Yes
Units:	Self Storage 1 (previously Volkswagon repair shop, Laundry Facility) 5 sand filled UST's onsite
Substances:	Oil/Hydraulic Fluid/Solvents
Less Or Greater Than:	Not reported
Numerical Quantity:	Not reported
Units:	Not reported
Activity Type:	Cost Recovery
Activity Lead:	Tricia Nagatani
Assignment End Date:	2002-11-30 00:00:00
Result:	New PM
File Under:	Self Storage 1

Island:	Oahu
Supplemental Loc. Text:	Not reported
Case Number:	19981028-1300
HID Number:	Not reported
Facility Registry Id:	110013778769
Lead and Program:	HEER EP&R
ER:	Yes
Units:	Self Storage 1 (previously Volkswagon repair shop, Laundry Facility) 5 sand filled UST's onsite
Substances:	Oil/Hydraulic Fluid/Solvents
Less Or Greater Than:	Not reported
Numerical Quantity:	Not reported

SELF STORAGE 1 (Continued) **1006819998**

Units:	Not reported
Activity Type:	Response
Activity Lead:	Bill Perry
Assignment End Date:	Not reported
Result:	Refer to ISST
File Under:	Self Storage 1

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75 West 1/2-1 0.769 mi. 4058 ft. | **BMW OF HONOLULU** **777 KAPIOLANI BLVD** **HONOLULU, HI** | **SHWS** **SPILLS** **ENG CONTROLS** **INST CONTROL** | **S106816569** **N/A**

Relative: Lower

Actual: 3 ft.

SHWS:

Organization:	Not reported
Supplemental Location:	Not reported
Island:	Oahu
Environmental Interest:	BMW Dealership
HID Number:	Not reported
Facility Registry Identifier:	110013779982
Lead Agency:	HEER
Program:	State
Project Manager:	Amy Playdon
Hazard Priority:	NFA
Potential Hazards And Controls:	Hazard Managed With Controls
Organization:	Not reported
Island:	Oahu
Supplemental Location Text:	Not reported
SDAR Environmental Interest Name:	BMW Dealership
HID Number:	Not reported
Facility Registry Identifier:	110013779982
Lead Agency:	HEER
Progran Name:	State
Potential Hazard And Controls:	Hazard Managed With Controls
Priority:	NFA
Assessment:	Response Necessary
Response:	Response Complete
Nature of Contamination:	Not reported
Nature of Residual Contamination:	Not reported
Use Restrictions:	Controls Required to Manage Contamination
Engineering Control:	Engineering Control Required
Description of Restrictions:	Additional investigation & remediation may be necessary if future demolition or excavation is conducted on site (1/24/01 HEER letter 01-031-AP).
Institutional Control:	Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination:	Not reported
Site Closure Type:	No Further Action Letter - Restricted Use
Document Date:	01/24/2001
Document Number:	2001-031-AP
Document Subject:	NFA Priority Notification Letter for the 767/777 Kapiolani Blvd Site, Honolulu HI
Project Manager:	Amy Playdon
Contact Information:	(808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

HI SPILLS:

Island:	Oahu
Supplemental Loc. Text:	Not reported

BMW OF HONOLULU (Continued) **S106816569**

Case Number:	19990401-1450
HID Number:	Not reported
Facility Registry Id:	110013779982
Lead and Program:	HEER EP&R
ER:	Referred
Units:	Free Petroleum Product Found at 777 Kapiolani Blvd.
Substances:	Petroleum product
Less Or Greater Than:	Not reported
Numerical Quantity:	Not reported
Units:	Not reported
Activity Type:	Response
Activity Lead:	Terry Corpus
Assignment End Date:	Not reported
Result:	Refer to ISST
File Under:	BMW of Honolulu

ENG CONTROLS:

Supplemental Location Text:	Not reported
Zip Suffix:	Not reported
Island:	Oahu
Potential Hazards And Controls:	Hazard Managed With Controls
Engineering Control:	Engineering Control Required

INST CONTROL:

Potential hazards and controls:	Hazard Managed With Controls
Supplemental Location:	Not reported
Zip Suffix:	Not reported
Island:	Oahu
Institutional Control:	Government - Hawaii Dept. of Health Letter Issued

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76 WNW 1/2-1 0.777 mi. 4105 ft. **1510 FREAR STREET** **1510 FREAR ST** **HONOLULU, HI 96813** **SHWS SPILLS** **S107024174 N/A**

Relative: Higher

Actual: 69 ft.

SHWS:

Organization:	Not reported
Supplemental Location:	Unit A
Island:	Oahu
Environmental Interest:	1510A Frear Street
HID Number:	Not reported
Facility Registry Identifier:	110013783478
Lead Agency:	HEER
Program:	State
Project Manager:	Eric Sadoyama
Hazard Priority:	NFA
Potential Hazards And Controls:	No Hazard
Organization:	Not reported
Island:	Oahu
Supplemental Location Text:	Unit A
SDAR Environmental Interest Name:	1510A Frear Street
HID Number:	Not reported
Facility Registry Identifier:	110013783478
Lead Agency:	HEER
Progran Name:	State
Potential Hazard And Controls:	No Hazard

1510 FREAR STREET (Continued) **S107024174**

Priority:	NFA
Assessment:	Response Not Necessary
Response:	Not reported
Nature of Contamination:	Not reported
Nature of Residual Contamination:	Appears to be a small motor oil release that has attenuated.
Use Restrictions:	No Hazard Present for Unrestricted Residential Use
Engineering Control:	Not reported
Description of Restrictions:	Not reported
Institutional Control:	Not reported
Within Designated Areawide Contamination:	Not reported
Site Closure Type:	No Further Action Letter - Unrestricted Residential Use
Document Date:	07/15/2005
Document Number:	2005-351-ES
Document Subject:	"No further action" determination
Project Manager:	Eric Sadoyama
Contact Information:	(808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

HI SPILLS:

Island:	Oahu
Supplemental Loc. Text:	Unit A
Case Number:	19950404
HID Number:	Not reported
Facility Registry Id:	110013783478
Lead and Program:	HEER EP&R
ER:	Not reported
Units:	1510A Frear Street
Substances:	Not reported
Less Or Greater Than:	Not reported
Numerical Quantity:	Not reported
Units:	Not reported
Activity Type:	Response
Activity Lead:	Chris Takeno
Assignment End Date:	Not reported
Result:	Refer to ISST
File Under:	1510A Frear Street

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77 WSW 1/2-1 0.794 mi. 4191 ft. **HAWAII OPERA THEATER SETS & PROPS WAREHOUSE** **962 KAWAIAHAO ST** **HONOLULU, HI** **SHWS SPILLS ENG CONTROLS INST CONTROL** **S115488700 N/A**

Relative: Lower

Actual: 3 ft.

SHWS:

Organization:	Not reported
Supplemental Location:	Not reported
Island:	Oahu
Environmental Interest:	Hawaii Opera Theater Sets & Props Warehouse
HID Number:	Not reported
Facility Registry Identifier:	Not reported
Lead Agency:	Not reported
Program:	State
Project Manager:	Steve Mow
Hazard Priority:	NFA
Potential Hazards And Controls:	Hazard Managed With Controls
Organization:	Not reported
Island:	Oahu
Supplemental Location Text:	Not reported

HAWAII OPERA THEATER SETS & PROPS WAREHOUSE (Continued) **S115488700**

SDAR Environmental Interest Name:	Hawaii Opera Theater Sets & Props Warehouse
HID Number:	Not reported
Facility Registry Identifier:	Not reported
Lead Agency:	Not reported
Program Name:	State
Potential Hazard And Controls:	Hazard Managed With Controls
Priority:	NFA
Assessment:	Response Necessary
Response:	Response Ongoing
Nature of Contamination:	Found: Capped petroleum and lead contamination.
Nature of Residual Contamination:	Not reported
Use Restrictions:	Controls Required to Manage Contamination
Engineering Control:	Engineering Control Required
Description of Restrictions:	Not reported
Institutional Control:	Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination:	Not reported
Site Closure Type:	No Further Action Letter - Restricted Use
Document Date:	04/26/2012
Document Number:	2012-261-SPM
Document Subject:	No Further Action Determination with Institutional Controls for Hawaii Opera Theater Sets & Props Wa
Project Manager:	Steve Mow
Contact Information:	(808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

HI SPILLS:

Island:	Oahu
Supplemental Loc. Text:	Not reported
Case Number:	20120201-1355
HID Number:	Not reported
Facility Registry Id:	Not reported
Lead and Program:	HEER EP&R
ER:	None
Units:	Hawaii Opera Theatre Prop Warehouse
Substances:	Benzopyrene
Less Or Greater Than:	Not reported
Numerical Quantity:	0
Units:	Not reported
Activity Type:	Response
Activity Lead:	Curtis Martin
Assignment End Date:	Not reported
Result:	Not reported
File Under:	Hawaii Opera Theater Sets & Props Warehouse

Island:	Oahu
Supplemental Loc. Text:	Not reported
Case Number:	20120201-1355
HID Number:	Not reported
Facility Registry Id:	Not reported
Lead and Program:	HEER EP&R
ER:	None
Units:	Hawaii Opera Theatre Prop Warehouse
Substances:	TPH
Less Or Greater Than:	Not reported
Numerical Quantity:	0
Units:	Not reported
Activity Type:	Response
Activity Lead:	Curtis Martin

HAWAII OPERA THEATER SETS & PROPS WAREHOUSE (Continued) **S115488700**

Assignment End Date:	Not reported
Result:	Not reported
File Under:	Hawaii Opera Theater Sets & Props Warehouse

ENG CONTROLS:

Supplemental Location Text:	Not reported
Zip Suffix:	Not reported
Island:	Oahu
Potential Hazards And Controls:	Hazard Managed With Controls
Engineering Control:	Engineering Control Required

INST CONTROL:

Potential hazards and controls:	Hazard Managed With Controls
Supplemental Location:	Not reported
Zip Suffix:	Not reported
Island:	Oahu
Institutional Control:	Government - Hawaii Dept. of Health Letter Issued

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78 SSE 1/2-1 0.798 mi. 4216 ft. **ROGER'S REPAIR INC** **SHWS** **S106820247**
1687 KALAKAUA AVE **N/A**
HONOLULU, HI 96826

Relative: Lower

Actual: 3 ft.

SHWS:

Organization:	Not reported
Supplemental Location:	Not reported
Island:	Oahu
Environmental Interest:	Roger's Repair Inc
HID Number:	Not reported
Facility Registry Identifier:	110005723903
Lead Agency:	Not reported
Program:	State
Project Manager:	Laura Young
Hazard Priority:	NFA
Potential Hazards And Controls:	Hazard Undetermined
Organization:	Not reported
Island:	Oahu
Supplemental Location Text:	Not reported
SDAR Environmental Interest Name:	Roger's Repair Inc
HID Number:	Not reported
Facility Registry Identifier:	110005723903
Lead Agency:	Not reported
Program Name:	State
Potential Hazard And Controls:	Hazard Undetermined
Priority:	NFA
Assessment:	Assessment Ongoing
Response:	Not reported
Nature of Contamination:	Not reported
Nature of Residual Contamination:	Not reported
Use Restrictions:	Undetermined
Engineering Control:	Not reported
Description of Restrictions:	Not reported
Institutional Control:	Not reported
Within Designated Areawide Contamination:	Not reported
Site Closure Type:	No Further Action - Type Undetermined
Document Date:	06/04/1999

ROGER'S REPAIR INC (Continued) **S106820247**

Document Number: Not reported
Document Subject: Not reported
Project Manager: Laura Young
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

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79 West 1/2-1 0.816 mi. 4311 ft.

HD&C, 725 KAPIOLANI BOULEVARD **SHWS** **S106817426**
725 KAPIOLANI BLVD **SPILLS** **N/A**
HONOLULU, HI **INST CONTROL**

Relative: Lower

Actual: 3 ft.

SHWS:
Organization: Not reported
Supplemental Location: The Imperial Plaza Cooke St & Kapiolani St
Island: Oahu
Environmental Interest: 725 Kapiolani Boulevard
HID Number: Not reported
Facility Registry Identifier: 110013791664
Lead Agency: SHWB
Program: State
Project Manager: Eric Sadoyama
Hazard Priority: NFA
Potential Hazards And Controls: Hazard Managed With Controls
Organization: Not reported
Island: Oahu
Supplemental Location Text: The Imperial Plaza Cooke St & Kapiolani St
SDAR Environmental Interest Name: 725 Kapiolani Boulevard
HID Number: Not reported
Facility Registry Identifier: 110013791664
Lead Agency: SHWB
Progran Name: State
Potential Hazard And Controls: Hazard Managed With Controls
Priority: NFA
Assessment: Response Necessary
Response: Response Complete
Nature of Contamination: Not reported
Nature of Residual Contamination: Petroleum in soil
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination: Not reported
Site Closure Type: No Further Action Letter - Restricted Use
Document Date: 02/13/1996
Document Number: Not reported
Document Subject: Imperial Plaza, 725 Kapiolani Blvd, Oahu HI
Project Manager: Eric Sadoyama
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

HI SPILLS:
Island: Oahu
Supplemental Loc. Text: The Imperial Plaza Cooke St & Kapiolani St
Case Number: 19900417-2
HID Number: Not reported
Facility Registry Id: 110013791664
Lead and Program: HEER EP&R
ER: Not reported

HD&C, 725 KAPIOLANI BOULEVARD (Continued) **S106817426**

Units: HD&C, 725 Kapiolani Boulevard
Substances: OIL, DIESEL
Less Or Greater Than: Not reported
Numerical Quantity: Not reported
Units: Not reported
Activity Type: Response
Activity Lead: Curtis Martin
Assignment End Date: Not reported
Result: SOSC NFA
File Under: Hawaiian Dredging & Construction Company

INST CONTROL:
Potential hazards and controls: Hazard Managed With Controls
Supplemental Location: The Imperial Plaza Cooke St & Kapiolani St
Zip Suffix: Not reported
Island: Oahu
Institutional Control: Government - Hawaii Dept. of Health Letter Issued

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80 WSW 1/2-1 0.820 mi. 4329 ft.

K&Y AUTO SERVICE AND WAYNE'S AUTO ELECTRIC **SHWS** **S111677440**
902 KAWAIAHAO ST & 539 KAMANI ST **SPILLS** **N/A**
HONOLULU, HI

Relative: Lower

Actual: 3 ft.

SHWS:
Organization: Not reported
Supplemental Location: TMK 1-2-1-049 parcels 058 and 059
Island: Oahu
Environmental Interest: K&Y Auto Service and Wayne's Auto Electric
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Program: State
Project Manager: Cal Miyahara
Hazard Priority: Low
Potential Hazards And Controls: Hazard Present
Organization: Not reported
Island: Oahu
Supplemental Location Text: TMK 1-2-1-049 parcels 058 and 059
SDAR Environmental Interest Name: K&Y Auto Service and Wayne's Auto Electric
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Progran Name: State
Potential Hazard And Controls: Hazard Present
Priority: Low
Assessment: Assessment Ongoing
Response: Not reported
Nature of Contamination: Found: Barium found in soil samples above Tier 1 EAL. benzo[a]pyrene found in gw above Tier 1 EAL.
Nature of Residual Contamination: Not reported
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Not reported
Site Closure Type: Not reported

K&Y AUTO SERVICE AND WAYNE'S AUTO ELECTRIC (Continued) **S111677440**

Document Date:	Not reported
Document Number:	Not reported
Document Subject:	Not reported
Project Manager:	Cal Miyahara
Contact Information:	(808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

HI SPILLS:

Island:	Oahu
Supplemental Loc. Text:	TMK 1-2-1-049 parcels 058 and 059
Case Number:	20100518-1415
HID Number:	Not reported
Facility Registry Id:	Not reported
Lead and Program:	HEER EP&R
ER:	None
Units:	902 Kawaiahao and 539 Kamani Streets
Substances:	Oil
Less Or Greater Than:	Not reported
Numerical Quantity:	0
Units:	Not reported
Activity Type:	Response
Activity Lead:	Liz Galvez
Assignment End Date:	2010-06-21 00:00:00
Result:	Refer to SDAR
File Under:	Asanoma Trust

N81 West 1/2-1 0.833 mi. 4400 ft. **HECO PAD-MOUNTED #65844 TRANSFORMER RELEASE** **SHWS 1006818926**
650 KAPIOLANI BLVD **SPILLS N/A**
HONOLULU, HI 96813 **INST CONTROL**

Site 1 of 2 in cluster N

Relative: Lower

Actual: 7 ft.

SHWS:

Organization:	Not reported
Supplemental Location:	Not reported
Island:	Oahu
Environmental Interest:	Motor Imports
HID Number:	Not reported
Facility Registry Identifier:	110013766825
Lead Agency:	HEER
Program:	State
Project Manager:	Mark Sutterfield
Hazard Priority:	NFA
Potential Hazards And Controls:	Hazard Managed With Controls
Organization:	Not reported
Island:	Oahu
Supplemental Location Text:	Not reported
SDAR Environmental Interest Name:	Motor Imports
HID Number:	Not reported
Facility Registry Identifier:	110013766825
Lead Agency:	HEER
Progran Name:	State
Potential Hazard And Controls:	Hazard Managed With Controls
Priority:	NFA
Assessment:	Response Necessary
Response:	Response Complete
Nature of Contamination:	Found: Petroleum contaminated soil and groundwater on and off the site. Cannot remove soil based on electical corridirs

HECO PAD-MOUNTED #65844 TRANSFORMER RELEASE (Continued) **1006818926**

Nature of Residual Contamination:	Free product still observed in one monitoring well
Use Restrictions:	Controls Required to Manage Contamination
Engineering Control:	Not reported
Description of Restrictions:	Prohibit Any Activity That May Disturb the Integrity of the Monitoring System
Institutional Control:	Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination:	Not reported
Site Closure Type:	No Further Action Letter - Restricted Use
Document Date:	07/13/2004
Document Number:	2004-267-MS
Document Subject:	No further Groundwater monitoring required
Project Manager:	Mark Sutterfield
Contact Information:	(808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

HI SPILLS:

Island:	Oahu
Supplemental Loc. Text:	Not reported
Case Number:	20110629-1249
HID Number:	Not reported
Facility Registry Id:	Not reported
Lead and Program:	HEER EP&R
ER:	None
Units:	HECO pad-mounted #65844 transformer release
Substances:	Transformer Oil
Less Or Greater Than:	>
Numerical Quantity:	2
Units:	Gallons
Activity Type:	Response
Activity Lead:	Curtis Martin
Assignment End Date:	Not reported
Result:	Not reported
File Under:	Not reported

INST CONTROL:

Potential hazards and controls:	Hazard Managed With Controls
Supplemental Location:	Not reported
Zip Suffix:	Not reported
Island:	Oahu
Institutional Control:	Government - Hawaii Dept. of Health Letter Issued

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82 ESE 1/2-1 0.838 mi. 4423 ft. **WALLYS GARDEN CENTER** **SHWS S111678012**
1935 S BERETANIA ST **SPILLS N/A**
HONOLULU, HI

Relative: Lower

Actual: 20 ft.

SHWS:

Organization:	Not reported
Supplemental Location:	Not reported
Island:	Oahu
Environmental Interest:	Wallys Garden Center
HID Number:	Not reported
Facility Registry Identifier:	Not reported
Lead Agency:	HEER
Program:	State
Project Manager:	Cal Miyahara
Hazard Priority:	Low

WALLYS GARDEN CENTER (Continued) **S111678012**

Potential Hazards And Controls:	Hazard Present
Organization:	Not reported
Island:	Oahu
Supplemental Location Text:	Not reported
SDAR Environmental Interest Name:	Wallys Garden Center
HID Number:	Not reported
Facility Registry Identifier:	Not reported
Lead Agency:	HEER
Progran Name:	State
Potential Hazard And Controls:	Hazard Present
Priority:	Low
Assessment:	Assessment Ongoing
Response:	Not reported
Nature of Contamination:	Found: TPH diesel (326 mg/kg) and oil (2390 mg/kg) in the parking lot at 4.5 ft bgs.
Nature of Residual Contamination:	Not reported
Use Restrictions:	Controls Required to Manage Contamination
Engineering Control:	Not reported
Description of Restrictions:	Not reported
Institutional Control:	Not reported
Within Designated Areawide Contamination:	Not reported
Site Closure Type:	Not reported
Document Date:	Not reported
Document Number:	Not reported
Document Subject:	Not reported
Project Manager:	Cal Miyahara
Contact Information:	(808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

HI SPILLS:

Island:	Oahu
Supplemental Loc. Text:	Not reported
Case Number:	20100518-1410
HID Number:	Not reported
Facility Registry Id:	Not reported
Lead and Program:	HEER EP&R
ER:	None
Units:	1935 South Beretania Street
Substances:	Oil
Less Or Greater Than:	Not reported
Numerical Quantity:	0
Units:	Unknown
Activity Type:	Response
Activity Lead:	Liz Galvez
Assignment End Date:	2010-06-21 00:00:00
Result:	Refer to SDAR
File Under:	Asanoma Trust

O83 WSW 1/2-1 0.848 mi. 4476 ft. **AMERICAN LINEN WAREHOUSE** **SHWS S106816215**
837 KAWAIAHAO ST **SPILLS N/A**
HONOLULU, HI

Site 1 of 2 in cluster O

Relative: Lower
Actual: 3 ft.

SHWS:

Organization:	Not reported
Supplemental Location:	Not reported
Island:	Oahu

AMERICAN LINEN WAREHOUSE (Continued) **S106816215**

Environmental Interest:	837 Kawaiahao Street
HID Number:	Not reported
Facility Registry Identifier:	110014053371
Lead Agency:	Not reported
Program:	State
Project Manager:	Mark Sutterfield
Hazard Priority:	NFA
Potential Hazards And Controls:	No Hazard
Organization:	Not reported
Island:	Oahu
Supplemental Location Text:	Not reported
SDAR Environmental Interest Name:	837 Kawaiahao Street
HID Number:	Not reported
Facility Registry Identifier:	110014053371
Lead Agency:	Not reported
Progran Name:	State
Potential Hazard And Controls:	No Hazard
Priority:	NFA
Assessment:	Response Necessary
Response:	Response Complete
Nature of Contamination:	Found: Diesel in soil
Nature of Residual Contamination:	benzo[a]pyrene in soil in one sample collected 3.5 feet bgs exceeded HDOH EALs.
Use Restrictions:	No Hazard Present for Unrestricted Residential Use
Engineering Control:	No Engineering Control Required
Description of Restrictions:	Not reported
Institutional Control:	Not reported
Within Designated Areawide Contamination:	Not reported
Site Closure Type:	No Further Action Letter - Unrestricted Residential Use
Document Date:	03/24/2005
Document Number:	2005-153-MS
Document Subject:	NFA letter for American Linen Warehouse
Project Manager:	Mark Sutterfield
Contact Information:	(808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

HI SPILLS:

Island:	Oahu
Supplemental Loc. Text:	Not reported
Case Number:	19970312-0000
HID Number:	Not reported
Facility Registry Id:	110014053371
Lead and Program:	HEER EP&R
ER:	Not reported
Units:	Kawaiahao Street Leaking Heating Oil Tank
Substances:	Fuel Oil #5, Fuel Oil #6, Bunker C
Less Or Greater Than:	Not reported
Numerical Quantity:	Not reported
Units:	Not reported
Activity Type:	Response
Activity Lead:	Bill Perry
Assignment End Date:	2002-10-28 00:00:00
Result:	Refer to ISST
File Under:	American Linen

O84 WSW 1/2-1 0.851 mi. 4493 ft. — **836 KAWAIAHAO STREET**, **836 KAWAIAHAO ST**, **HONOLULU, HI** — **SHWS** — **S111704659** / **N/A**

Site 2 of 2 in cluster O

Relative: Lower

Actual: 3 ft.

SHWS:

Organization:	Not reported
Supplemental Location:	Not reported
Island:	Oahu
Environmental Interest:	836 Kawaiahao Street
HID Number:	Not reported
Facility Registry Identifier:	Not reported
Lead Agency:	HEER
Program:	State
Project Manager:	Melody Calisay
Hazard Priority:	Low
Potential Hazards And Controls:	Hazard Undetermined
Organization:	Not reported
Island:	Oahu
Supplemental Location Text:	Not reported
SDAR Environmental Interest Name:	836 Kawaiahao Street
HID Number:	Not reported
Facility Registry Identifier:	Not reported
Lead Agency:	HEER
Progran Name:	State
Potential Hazard And Controls:	Hazard Undetermined
Priority:	Low
Assessment:	Response Necessary
Response:	Response Ongoing
Nature of Contamination:	Found: TPH-Oil detected in one soil sample collected in surface soil.
Nature of Residual Contamination:	Not reported
Use Restrictions:	Undetermined
Engineering Control:	Not reported
Description of Restrictions:	Not reported
Institutional Control:	Not reported
Within Designated Areawide Contamination:	Not reported
Site Closure Type:	Not reported
Document Date:	Not reported
Document Number:	Not reported
Document Subject:	Not reported
Project Manager:	Melody Calisay
Contact Information:	(808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

N85 West 1/2-1 0.858 mi. 4529 ft. — **HAWAII NEWSPAPER AGENCY INC**, **605 KAPIOLANI BLVD**, **HONOLULU, HI 96813** — **SHWS**, **LUST**, **UST**, **SPILLS**, **ENG CONTROLS**, **INST CONTROL** — **1000146678** / **N/A**

Site 2 of 2 in cluster N

Relative: Lower

Actual: 7 ft.

SHWS:

Organization:	Not reported
Supplemental Location:	Not reported
Island:	Oahu
Environmental Interest:	The Honolulu Advertiser (Hawaii Newspaper Agency)
HID Number:	Not reported
Facility Registry Identifier:	110005726330
Lead Agency:	HEER
Program:	State

HAWAII NEWSPAPER AGENCY INC (Continued) — **1000146678**

Project Manager:	Cal Miyahara
Hazard Priority:	NFA
Potential Hazards And Controls:	Hazard Managed With Controls
Organization:	Not reported
Island:	Oahu
Supplemental Location Text:	Not reported
SDAR Environmental Interest Name:	The Honolulu Advertiser (Hawaii Newspaper Agency)
HID Number:	Not reported
Facility Registry Identifier:	110005726330
Lead Agency:	HEER
Progran Name:	State
Potential Hazard And Controls:	Hazard Managed With Controls
Priority:	NFA
Assessment:	Response Necessary
Response:	Response Complete
Nature of Contamination:	Found: TPH-G found in soil near New Building loading dock. TPH-O found in soil on east side of property near Kapiolani Blvd. Lead (4050 mg/kg) found in soil in westside parking lot.
Nature of Residual Contamination:	Not reported
Use Restrictions:	Controls Required to Manage Contamination
Engineering Control:	Engineering Control Required
Description of Restrictions:	Not reported
Institutional Control:	Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination:	Not reported
Site Closure Type:	No Further Action Letter - Restricted Use
Document Date:	10/26/2011
Document Number:	2011-618-CMM
Document Subject:	Final EHMP, Honolulu Advertiser Property, 605 Kapiolani Blvd & 610 Kawaiahao St, Honolulu HI
Project Manager:	Cal Miyahara
Contact Information:	(808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

LUST:

Facility ID:	9-100938
Facility Status:	Site Cleanup Completed (NFA)
Facility Status Date:	10/27/1993
Release ID:	940008
Project Officer:	Eric Sadoyama

Facility ID:	9-100938
Facility Status:	Site Cleanup Completed (NFA)
Facility Status Date:	05/07/1999
Release ID:	930071
Project Officer:	Eric Sadoyama

UST:

Facility ID:	9-100938
Owner:	HAWAII NEWSPAPER AGENCY, INC.
Owner Address:	605 KAPIOLANI BLVD
Owner City,St,Zip:	Honolulu, 96813 96813
Latitude:	21.303079
Longitude:	-157.855681
Horizontal Reference Datum Name:	NAD83
Horizontal Collection Method Name:	Address Matching
Tank ID:	R-1

HAWAII NEWSPAPER AGENCY INC (Continued) **1000146678**

Date Installed:	05/16/1978
Tank Status:	**Permanently Out of Use**
Date Closed:	12/01/1994
Tank Capacity:	6000
Substance:	Gasoline

Tank ID:	R-2
Date Installed:	05/16/1978
Tank Status:	**Permanently Out of Use**
Date Closed:	12/01/1994
Tank Capacity:	6000
Substance:	Gasoline

Tank ID:	R-3
Date Installed:	Not reported
Tank Status:	**Permanently Out of Use**
Date Closed:	10/16/1989
Tank Capacity:	Not reported
Substance:	Not Listed

HI SPILLS:

Island:	Oahu
Supplemental Loc. Text:	Not reported
Case Number:	20100826-1115
HID Number:	Not reported
Facility Registry Id:	110005726330
Lead and Program:	HEER EP&R
ER:	None
Units:	former Honolulu Advertiser site
Substances:	Lead
Less Or Greater Than:	Not reported
Numerical Quantity:	0
Units:	Unknown
Activity Type:	Response
Activity Lead:	Liz Galvez
Assignment End Date:	2011-01-11 00:00:00
Result:	Refer to SDAR
File Under:	The Honolulu Advertiser

Island:	Oahu
Supplemental Loc. Text:	Not reported
Case Number:	20100826-1115
HID Number:	Not reported
Facility Registry Id:	110005726330
Lead and Program:	HEER EP&R
ER:	None
Units:	former Honolulu Advertiser site
Substances:	Oil
Less Or Greater Than:	Not reported
Numerical Quantity:	0
Units:	Unknown
Activity Type:	Response
Activity Lead:	Liz Galvez
Assignment End Date:	2011-01-11 00:00:00
Result:	Refer to SDAR

HAWAII NEWSPAPER AGENCY INC (Continued) **1000146678**

File Under:	The Honolulu Advertiser

ENG CONTROLS:

Supplemental Location Text:	Not reported
Zip Suffix:	Not reported
Island:	Oahu
Potential Hazards And Controls:	Hazard Managed With Controls
Engineering Control:	Engineering Control Required

INST CONTROL:

Potential hazards and controls:	Hazard Managed With Controls
Supplemental Location:	Not reported
Zip Suffix:	Not reported
Island:	Oahu
Institutional Control:	Government - Hawaii Dept. of Health Letter Issued

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86
SSW
1/2-1
0.878 mi.
4636 ft.

Relative:
Lower

Actual:
3 ft.

SEARS ALA MOANA **SHWS** **S115488724**
1450 ALA MOANA BLVD **N/A**
HONOLULU, HI 96814

SHWS:

Organization:	Not reported
Supplemental Location:	Ala Moana Center
Island:	Oahu
Environmental Interest:	Sears Ala Moana
HID Number:	Not reported
Facility Registry Identifier:	Not reported
Lead Agency:	HEER
Program:	State
Project Manager:	Cal Miyahara
Hazard Priority:	NFA
Potential Hazards And Controls:	No Hazard
Organization:	Not reported
Island:	Oahu
Supplemental Location Text:	Ala Moana Center
SDAR Environmental Interest Name:	Sears Ala Moana
HID Number:	Not reported
Facility Registry Identifier:	Not reported
Lead Agency:	HEER
Progran Name:	State
Potential Hazard And Controls:	No Hazard
Priority:	NFA
Assessment:	Response Necessary
Response:	Response Complete
Nature of Contamination:	Not reported
Nature of Residual Contamination:	TPH below Tier I EALs.
Use Restrictions:	No Hazard Present For Unrestricted Residential Use
Engineering Control:	Not reported
Description of Restrictions:	Not reported
Institutional Control:	Not reported
Within Designated Areawide Contamination:	Not reported
Site Closure Type:	No Further Action Letter - Unrestricted Residential Use
Document Date:	07/21/2014
Document Number:	2014-360-CMM
Document Subject:	NFA Letter for the Hydraulic Hoist Closure and Release Response,

SEARS ALA MOANA (Continued) **S115488724**

Former Sears Auto Care Facility, 14
Project Manager: Cal Miyahara
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

87
SE
1/2-1
0.893 mi.
4714 ft.

CONTINENTAL AUTO SERVICES **SHWS** **S104534121**
1918 ALGAROBA ST **SPILLS** **N/A**
HONOLULU, HI 96826

Relative:
Lower

Actual:
7 ft.

SHWS:

Organization:	Not reported
Supplemental Location:	Not reported
Island:	Oahu
Environmental Interest:	Continental Auto Services
HID Number:	Not reported
Facility Registry Identifier:	110005723850
Lead Agency:	Not reported
Program:	State
Project Manager:	Charley Langer
Hazard Priority:	NFA
Potential Hazards And Controls:	Hazard Undetermined
Organization:	Not reported
Island:	Oahu
Supplemental Location Text:	Not reported
SDAR Environmental Interest Name:	Continental Auto Services
HID Number:	Not reported
Facility Registry Identifier:	110005723850
Lead Agency:	Not reported
Progran Name:	State
Potential Hazard And Controls:	Hazard Undetermined
Priority:	NFA
Assessment:	Assessment Ongoing
Response:	Not reported
Nature of Contamination:	Not reported
Nature of Residual Contamination:	Not reported
Use Restrictions:	Undetermined
Engineering Control:	Not reported
Description of Restrictions:	Not reported
Institutional Control:	Not reported
Within Designated Areawide Contamination:	Not reported
Site Closure Type:	No Further Action - Type Undetermined
Document Date:	10/08/1999
Document Number:	Not reported
Document Subject:	Not reported
Project Manager:	Charley Langer
Contact Information:	(808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

HI SPILLS:

Island:	Oahu
Supplemental Loc. Text:	Not reported
Case Number:	19990119-1030
HID Number:	Not reported
Facility Registry Id:	110005723850
Lead and Program:	HEER EP&R
ER:	No
Units:	Continental Auto Service

CONTINENTAL AUTO SERVICES (Continued) **S104534121**

Substances:	Hydraulic Fluid
Less Or Greater Than:	Not reported
Numerical Quantity:	Not reported
Units:	Not reported
Activity Type:	Response
Activity Lead:	Liz Galvez
Assignment End Date:	Not reported
Result:	Refer to ISST
File Under:	Continental Auto Services

88
SSE
1/2-1
0.909 mi.
4802 ft.

ALOHA MOTORS 1777 KAPIOLANI BLVD **SHWS** **1006820308**
1777 KAPIOLANI BLVD **SPILLS** **N/A**
HONOLULU, HI 96813

Relative:
Lower

Actual:
3 ft.

SHWS:

Organization:	Not reported
Supplemental Location:	Not reported
Island:	Oahu
Environmental Interest:	Aloha Motors
HID Number:	HID984466060
Facility Registry Identifier:	110013782479
Lead Agency:	Not reported
Program:	State
Project Manager:	Unassigned
Hazard Priority:	NFA
Potential Hazards And Controls:	Hazard Undetermined
Organization:	Not reported
Island:	Oahu
Supplemental Location Text:	Not reported
SDAR Environmental Interest Name:	Aloha Motors
HID Number:	HID984466060
Facility Registry Identifier:	110013782479
Lead Agency:	Not reported
Progran Name:	State
Potential Hazard And Controls:	Hazard Undetermined
Priority:	NFA
Assessment:	Assessment Ongoing
Response:	Not reported
Nature of Contamination:	Found: Petroleum products
Nature of Residual Contamination:	Not reported
Use Restrictions:	Undetermined
Engineering Control:	Not reported
Description of Restrictions:	Not reported
Institutional Control:	Not reported
Within Designated Areawide Contamination:	Not reported
Site Closure Type:	ISST NFA - No Letter
Document Date:	01/19/1995
Document Number:	Not reported
Document Subject:	Not reported
Project Manager:	Unassigned
Contact Information:	(808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

HI SPILLS:

Island:	Oahu
Supplemental Loc. Text:	Not reported

ALOHA MOTORS 1777 KAPIOLANI BLVD (Continued) **1006820308**

Case Number:	19900411-1
HID Number:	HID984466060
Facility Registry Id:	110013782479
Lead and Program:	HEER EP&R
ER:	Not reported
Units:	Aloha Motors, First Development Inc.
Substances:	Not reported
Less Or Greater Than:	Not reported
Numerical Quantity:	Not reported
Units:	Not reported
Activity Type:	Response
Activity Lead:	Sheila Mackenzie
Assignment End Date:	Not reported
Result:	SOSC NFA
File Under:	Aloha Motors

Island:	Oahu
Supplemental Loc. Text:	Not reported
Case Number:	19900821-5
HID Number:	HID984466060
Facility Registry Id:	110013782479
Lead and Program:	HEER EP&R
ER:	Not reported
Units:	ALOHA MOTORS, KALAKAUA AVE.
Substances:	Unknown
Less Or Greater Than:	Not reported
Numerical Quantity:	15
Units:	Gallons
Activity Type:	Response
Activity Lead:	Not reported
Assignment End Date:	Not reported
Result:	SOSC NFA
File Under:	Aloha Motors

Island:	Oahu
Supplemental Loc. Text:	Not reported
Case Number:	19920128
HID Number:	HID984466060
Facility Registry Id:	110013782479
Lead and Program:	HEER EP&R
ER:	Not reported
Units:	Aloha Motors - Kapiolani & Kalakaua Avenues
Substances:	Petroleum HyrocarbonsSpent solvents & thinners
Less Or Greater Than:	Not reported
Numerical Quantity:	Not reported
Units:	Not reported
Activity Type:	Response
Activity Lead:	Not reported
Assignment End Date:	Not reported
Result:	SOSC NFA
File Under:	Aloha Motors

89 **QUEEN'S MEDICAL CENTER** **SHWS** **1000490311**
WNW **1301 PUNCHBOWL ST** **LUST** **N/A**
1/2-1 **HONOLULU, HI 96813** **UST**
0.913 mi. **AIRS**
4823 ft. **Financial Assurance**

Relative:
Lower

Actual:
20 ft.

SHWS:

Organization:	Not reported
Supplemental Location:	Not reported
Island:	Oahu
Environmental Interest:	Queen's Medical Center UST
HID Number:	Not reported
Facility Registry Identifier:	Not reported
Lead Agency:	HEER
Program:	State
Project Manager:	Eric Sadoyama
Hazard Priority:	NFA
Potential Hazards And Controls:	Hazard Undetermined
Organization:	Not reported
Island:	Oahu
Supplemental Location Text:	Not reported
SDAR Environmental Interest Name:	Queen's Medical Center UST
HID Number:	Not reported
Facility Registry Identifier:	Not reported
Lead Agency:	HEER
Progran Name:	State
Potential Hazard And Controls:	Hazard Undetermined
Priority:	NFA
Assessment:	Assessment Ongoing
Response:	Not reported
Nature of Contamination:	Found: Petroleum in soil
Nature of Residual Contamination:	No (petroleum in soil) contamination left on site is above EALs.
Use Restrictions:	Undetermined
Engineering Control:	Not reported
Description of Restrictions:	Not reported
Institutional Control:	Not reported
Within Designated Areawide Contamination:	Not reported
Site Closure Type:	No Further Action - Type Undetermined
Document Date:	08/11/2006
Document Number:	Not reported
Document Subject:	Not reported
Project Manager:	Eric Sadoyama
Contact Information:	(808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

LUST:

Facility ID:	9-100901
Facility Status:	Site Cleanup Completed (NFA)
Facility Status Date:	09/24/1999
Release ID:	990096
Project Officer:	Richard Takaba

UST:

Facility ID:	9-100901
Owner:	THE QUEEN'S MEDICAL CENTER
Owner Address:	1301 Punchbowl Street
Owner City,St,Zip:	Honolulu, 96813 96813
Latitude:	21.309010
Longitude:	-157.853940

QUEEN'S MEDICAL CENTER (Continued) **1000490311**

Horizontal Reference Datum Name: NAD83
Horizontal Collection Method Name: GPS

Tank ID: M-1
Date Installed: 04/09/1985
Tank Status: **Currently In Use**
Date Closed: Not reported
Tank Capacity: 14000
Substance: Diesel

Tank ID: M-1
Date Installed: 04/09/1985
Tank Status: **Currently In Use**
Date Closed: Not reported
Tank Capacity: 14000
Substance: Diesel

Tank ID: R-4
Date Installed: Not reported
Tank Status: **Permanently Out of Use**
Date Closed: 12/17/1998
Tank Capacity: 1000
Substance: Not Listed

Tank ID: R-4
Date Installed: Not reported
Tank Status: **Permanently Out of Use**
Date Closed: 12/17/1998
Tank Capacity: 1000
Substance: Not Listed

Tank ID: m-2-Mauka
Date Installed: 12/22/2006
Tank Status: **Currently In Use**
Date Closed: Not reported
Tank Capacity: 20000
Substance: Diesel

Tank ID: m-2-Mauka
Date Installed: 12/22/2006
Tank Status: **Currently In Use**
Date Closed: Not reported
Tank Capacity: 20000
Substance: Diesel

Tank ID: m-3-Makai
Date Installed: 12/22/2006
Tank Status: **Currently In Use**
Date Closed: Not reported
Tank Capacity: 20000
Substance: Diesel

QUEEN'S MEDICAL CENTER (Continued) **1000490311**

Tank ID: m-3-Makai
Date Installed: 12/22/2006
Tank Status: **Currently In Use**
Date Closed: Not reported
Tank Capacity: 20000
Substance: Diesel

AIRS:
Facility ID: 0353-02-C
Island: Oahu
Mailing Address: 1301 Punchbowl Street
Locale: Not reported
Business Phone: 808-691-4426
Mailing City,St,Zip: Honolulu, Hawaii 96813
Contact Name: Bob Laube
Contact Title: Facility Engineer
Description: Four (4) 3,286 bhp Diesel Engine Generators and Two (2) 8.2 MMBtu/hr Steam BoilersAttachment IIAThis attachment encompasses the following equipment and associated appurtenances:a. One (1) 3,286 bhp Caterpillar Diesel Engine Generator set, model no. 3516B, serial no. PBR00266, manufactured in November 2006, unit no. U-1;b. One (1) 3,286 bhp Caterpillar Diesel Engine Generator set, model no. 3516B, serial no. PBR00267, manufactured in November 2006, unit no. U-2;c. One (1) 3,286 bhp Caterpillar Diesel Engine Generator set, model no. 3516B, serial no. PBR00268, manufactured in November 2006, unit no. U-3; andd. One (1) 3,286 bhp Caterpillar Diesel Engine Generator set, model no. 3516B, serial no. PBR00269, manufactured in November 2006, unit no. U-4.Attachment IIBThis attachment encompasses the following equipment and associated appurtenances:a. One (1) 8.2 MMBtu/hr fire tube steam boilers, Cleaver Brooks model no. CB200-200-150, serial nos. OL103324; andb. One (1) 8.2 MMBtu/hr fire tube steam boilers, Cleaver Brooks model no. CB200-200-150, serial nos. OL103325.

HI Financial Assurance:
Alt Facility ID: 9-100901
Tank Id: M-1
Tank Status: Currently In Use
FRTYPE: Insurance
Expiration Date: 06/20/2015

Alt Facility ID: 9-100901
Tank Id: m-2-Mauka
Tank Status: Currently In Use
FRTYPE: Insurance
Expiration Date: 06/20/2015

Alt Facility ID: 9-100901
Tank Id: m-3-Makai
Tank Status: Currently In Use
FRTYPE: Insurance
Expiration Date: 06/20/2015

Alt Facility ID: 9-100901
Tank Id: R-4
Tank Status: Permanently Out of Use
FRTYPE: Insurance

QUEEN'S MEDICAL CENTER (Continued) **1000490311**

Expiration Date: 06/20/2015

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90 SSE 1/2-1 0.928 mi. 4899 ft. | **HAWAII CONVENTION CENTER** | **SHWS** | **1006820847**
1801 KALAKAUA AVE | **SPILLS** | **N/A**
HONOLULU, HI 96814

Relative: Lower

Actual: 3 ft.

SHWS:

Organization:	Not reported
Supplemental Location:	Kalakaua Ave & Kapiolani Blvd
Island:	Oahu
Environmental Interest:	Hawaii Convention Center
HID Number:	Not reported
Facility Registry Identifier:	110013788641
Lead Agency:	SHWB
Program:	State
Project Manager:	Not reported
Hazard Priority:	NFA
Potential Hazards And Controls:	Hazard Undetermined
Organization:	Not reported
Island:	Oahu
Supplemental Location Text:	Kalakaua Ave & Kapiolani Blvd
SDAR Environmental Interest Name:	Hawaii Convention Center
HID Number:	Not reported
Facility Registry Identifier:	110013788641
Lead Agency:	SHWB
Progran Name:	State
Potential Hazard And Controls:	Hazard Undetermined
Priority:	NFA
Assessment:	Response Necessary
Response:	Response Complete
Nature of Contamination:	Not reported
Nature of Residual Contamination:	Not reported
Use Restrictions:	Undetermined
Engineering Control:	Not reported
Description of Restrictions:	Not reported
Institutional Control:	Not reported
Within Designated Areawide Contamination:	Not reported
Site Closure Type:	No Further Action - Type Undetermined
Document Date:	09/03/1997
Document Number:	Not reported
Document Subject:	Letter Report Removal and Disposal of Transite Pipes, Hawaii Convention Center, Honolulu HI
Project Manager:	Not reported
Contact Information:	(808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

HI SPILLS:

Island:	Oahu
Supplemental Loc. Text:	Kalakaua Ave & Kapiolani Blvd
Case Number:	19960207-1016
HID Number:	Not reported
Facility Registry Id:	110013788641
Lead and Program:	HEER EP&R
ER:	No
Units:	Convention Center
Substances:	Oil

HAWAII CONVENTION CENTER (Continued) **1006820847**

Less Or Greater Than:	Not reported
Numerical Quantity:	Not reported
Units:	Not reported
Activity Type:	Response
Activity Lead:	Terry Corpus
Assignment End Date:	Not reported
Result:	SOSC NFA
File Under:	State of Hawaii, Department of Business, Economic Development & Tourism, Convention Center Authority

Island:	Oahu
Supplemental Loc. Text:	Kalakaua Ave & Kapiolani Blvd
Case Number:	19960314-0000
HID Number:	Not reported
Facility Registry Id:	110013788641
Lead and Program:	HEER EP&R
ER:	Not reported
Units:	Hawaii Convention Center
Substances:	Lubricating Oil.
Less Or Greater Than:	Not reported
Numerical Quantity:	1
Units:	Gallons
Activity Type:	Response
Activity Lead:	Not reported
Assignment End Date:	Not reported
Result:	SOSC NFA
File Under:	State of Hawaii, Department of Business, Economic Development & Tourism, Convention Center Authority

Island:	Oahu
Supplemental Loc. Text:	Kalakaua Ave & Kapiolani Blvd
Case Number:	19970301-1010
HID Number:	Not reported
Facility Registry Id:	110013788641
Lead and Program:	HEER EP&R
ER:	No
Units:	Convention Center White Liquid Emptying Into Ala Wai
Substances:	UNKN white liquid
Less Or Greater Than:	Not reported
Numerical Quantity:	Not reported
Units:	Not reported
Activity Type:	Response
Activity Lead:	Terry Corpus
Assignment End Date:	Not reported
Result:	SOSC NFA
File Under:	State of Hawaii, Department of Business, Economic Development & Tourism, Convention Center Authority

Island:	Oahu
Supplemental Loc. Text:	Kalakaua Ave & Kapiolani Blvd
Case Number:	19980426-1349
HID Number:	Not reported
Facility Registry Id:	110013788641
Lead and Program:	HEER EP&R
ER:	Not reported
Units:	Hawaii Convention Center Brick Sealer Odor
Substances:	Not reported

HAWAII CONVENTION CENTER (Continued) **1006820847**

Less Or Greater Than:	Not reported
Numerical Quantity:	Not reported
Units:	Not reported
Activity Type:	Response
Activity Lead:	Liz Galvez
Assignment End Date:	Not reported
Result:	Not reported
File Under:	State of Hawaii, Department of Business, Economic Development & Tourism, Convention Center Authority

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91 South 1/2-1 0.955 mi. 5043 ft. **YACHT HARBOR TOWERS** **SHWS** **S106821166**
1600 ALA MOANA BLVD **SPILLS** **N/A**
HONOLULU, HI 96815 **ENG CONTROLS**
INST CONTROL

Relative: Lower

Actual: 3 ft.

SHWS:

Organization:	Not reported
Supplemental Location:	Yacht Harbor Towers
Island:	Oahu
Environmental Interest:	Yacht Harbor Towers Generator
HID Number:	Not reported
Facility Registry Identifier:	110013774629
Lead Agency:	HEER
Program:	State
Project Manager:	Anna Fernandez
Hazard Priority:	NFA
Potential Hazards And Controls:	Hazard Managed With Controls
Organization:	Not reported
Island:	Oahu
Supplemental Location Text:	Yacht Harbor Towers
SDAR Environmental Interest Name:	Yacht Harbor Towers Generator
HID Number:	Not reported
Facility Registry Identifier:	110013774629
Lead Agency:	HEER
Progran Name:	State
Potential Hazard And Controls:	Hazard Managed With Controls
Priority:	NFA
Assessment:	Response Necessary
Response:	Response Complete
Nature of Contamination:	Found: TPH-D
Nature of Residual Contamination:	Soil exceeding Tier 1 levels near the generator.
Use Restrictions:	Controls Required to Manage Contamination
Engineering Control:	Engineering Control Required
Description of Restrictions:	The No Further Action with Institutional Controls determination is in effect only as long as the generator and associated concrete pad remain in place. When they are removed, appropriate response action will be required.
Institutional Control:	Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination:	Not reported
Site Closure Type:	No Further Action Letter - Restricted Use
Document Date:	01/08/2009
Document Number:	2009-009-SPM
Document Subject:	No Further Action (NFA) with Institutional Controls Determination, for the Yacht Harbor Towers Gener
Project Manager:	Anna Fernandez
Contact Information:	(808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

YACHT HARBOR TOWERS (Continued) **S106821166**

HI SPILLS:

Island:	Oahu
Supplemental Loc. Text:	Yacht Harbor Towers
Case Number:	19990301-1550
HID Number:	Not reported
Facility Registry Id:	110013774629
Lead and Program:	HEER EP&R
ER:	Referred
Units:	Yacht Harbor Tower Generator
Substances:	Unknown
Less Or Greater Than:	Not reported
Numerical Quantity:	60
Units:	Gallons
Activity Type:	Response
Activity Lead:	Mike Cripps
Assignment End Date:	Not reported
Result:	Refer to ISST
File Under:	Yacht Harbor Towers

ENG CONTROLS:

Supplemental Location Text:	Yacht Harbor Towers
Zip Suffix:	Not reported
Island:	Oahu
Potential Hazards And Controls:	Hazard Managed With Controls
Engineering Control:	Engineering Control Required

INST CONTROL:

Potential hazards and controls:	Hazard Managed With Controls
Supplemental Location:	Yacht Harbor Towers
Zip Suffix:	Not reported
Island:	Oahu
Institutional Control:	Government - Hawaii Dept. of Health Letter Issued

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92 WSW 1/2-1 0.959 mi. 5061 ft. **RUBBER STAMP PLANTATION** **SHWS** **S111704854**
746 ILANIWAI ST **N/A**
HONOLULU, HI

Relative: Lower

Actual: 3 ft.

SHWS:

Organization:	Not reported
Supplemental Location:	Not reported
Island:	Oahu
Environmental Interest:	Rubber Stamp Plantation
HID Number:	Not reported
Facility Registry Identifier:	Not reported
Lead Agency:	HEER
Program:	Preliminary Assessment/Site Inspection
Project Manager:	Paul Chong
Hazard Priority:	NFA
Potential Hazards And Controls:	No Hazard
Organization:	Not reported
Island:	Oahu
Supplemental Location Text:	Not reported
SDAR Environmental Interest Name:	Rubber Stamp Plantation
HID Number:	Not reported

RUBBER STAMP PLANTATION (Continued) **S111704854**

Facility Registry Identifier:	Not reported
Lead Agency:	HEER
Program Name:	Preliminary Assessment/Site Inspection
Potential Hazard And Controls:	No Hazard
Priority:	NFA
Assessment:	Response Not Necessary
Response:	Response Complete
Nature of Contamination:	Not reported
Nature of Residual Contamination:	Not reported
Use Restrictions:	No Hazard Present For Unrestricted Residential Use
Engineering Control:	Not reported
Description of Restrictions:	Not reported
Institutional Control:	Not reported
Within Designated Areawide Contamination:	Not reported
Site Closure Type:	No Further Action Letter - Unrestricted Residential Use
Document Date:	07/08/2011
Document Number:	2011-378-PC
Document Subject:	Closure and Removal of Underground Fuel Tank at 746 Ilaniwai St
Project Manager:	Paul Chong
Contact Information:	(808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

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93 WSW 1/2-1 0.968 mi. 5111 ft. **HAWAII INSTRUMENTATION & CONTROLS, INC** **822 HALEKAUWILA ST** **HONOLULU, HI** **SHWS SPILLS ENG CONTROLS INST CONTROL** **S106817350 N/A**

Relative: Lower

Actual: 3 ft.

SHWS:

Organization:	Not reported
Supplemental Location:	Not reported
Island:	Oahu
Environmental Interest:	Hawaii Instrumentation & Controls, Inc
HID Number:	Not reported
Facility Registry Identifier:	110013789604
Lead Agency:	HEER
Program:	State
Project Manager:	Richard Palmer
Hazard Priority:	Medium
Potential Hazards And Controls:	Hazard Managed With Controls
Organization:	Not reported
Island:	Oahu
Supplemental Location Text:	Not reported
SDAR Environmental Interest Name:	Hawaii Instrumentation & Controls, Inc
HID Number:	Not reported
Facility Registry Identifier:	110013789604
Lead Agency:	HEER
Program Name:	State
Potential Hazard And Controls:	Hazard Managed With Controls
Priority:	Medium
Assessment:	Response Necessary
Response:	Response Ongoing
Nature of Contamination:	Presumed: Solvent vapors encountered inside and around 822 Halekauwila St. Restroom renovation, and capping/sealing of grounds, alleviated the vapor intrusion problem.
Nature of Residual Contamination:	Not reported
Use Restrictions:	Controls Required to Manage Contamination
Engineering Control:	Engineering Control Required
Description of Restrictions:	Not reported

HAWAII INSTRUMENTATION & CONTROLS, INC (Continued) **S106817350**

Institutional Control:	Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination:	Not reported
Site Closure Type:	Not reported
Document Date:	Not reported
Document Number:	Not reported
Document Subject:	Not reported
Project Manager:	Richard Palmer
Contact Information:	(808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

HI SPILLS:

Island:	Oahu
Supplemental Loc. Text:	Not reported
Case Number:	19910620-3
HID Number:	Not reported
Facility Registry Id:	110013789604
Lead and Program:	HEER EP&R
ER:	Not reported
Units:	HAWAII INSTRUMENTATION & CONTROLS, INC., HALEKAUWILA ST. 822
Substances:	UNKNOWN CHEMICAL
Less Or Greater Than:	Not reported
Numerical Quantity:	Not reported
Units:	Not reported
Activity Type:	Response
Activity Lead:	Not reported
Assignment End Date:	Not reported
Result:	SOSC NFA
File Under:	Hawaii Instrumentation & Controls Inc.

Island:	Oahu
Supplemental Loc. Text:	Not reported
Case Number:	19941216-4
HID Number:	Not reported
Facility Registry Id:	110013789604
Lead and Program:	HEER EP&R
ER:	Not reported
Units:	HCDA Site/Hawaii Instrumentaion & Controls Inc.
Substances:	unknown odor
Less Or Greater Than:	Not reported
Numerical Quantity:	Not reported
Units:	Odor
Activity Type:	Response
Activity Lead:	Mike Cripps
Assignment End Date:	Not reported
Result:	SOSC NFA
File Under:	Hawaii Instrumentation & Controls Inc.

ENG CONTROLS:

Supplemental Location Text:	Not reported
Zip Suffix:	Not reported
Island:	Oahu
Potential Hazards And Controls:	Hazard Managed With Controls
Engineering Control:	Engineering Control Required

INST CONTROL:

Potential hazards and controls:	Hazard Managed With Controls
Supplemental Location:	Not reported

HAWAII INSTRUMENTATION & CONTROLS, INC (Continued) **S106817350**

Zip Suffix: Not reported
Island: Oahu
Institutional Control: Government - Hawaii Dept. of Health Letter Issued

Count: 10 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
HONOLULU	S117391417	1339 SCHOOL STREET	1339, 1341, 1343 N SCHOOL ST		SHWS, ENG CONTROLS, INST CONT
HONOLULU	S108008546	KAKAAKO BROWNFIELD PROJECT - UNIT	AHUI ST	96814	SHWS, ENG CONTROLS, BROWNFIE
HONOLULU	S111704760	KAKAAKO MAKAI DISTRICT JOHN DOMINI	AHUI ST		SHWS, INST CONTROL
HONOLULU	S110061573	KAKAAKO BROWNFIELD PROJECT - UNIT	AHUI ST	96814	SHWS, ENG CONTROLS, BROWNFIE
HONOLULU	S111704669	ALA WAI HARBOR BOAT REPAIR YARD	ALA MOANA BLVD		SHWS
HONOLULU	1006820751	KAKAAKO MAKAI GATEWAY	COOKE ST & ILALO ST	96814	SHWS
HONOLULU	S111704745	HONOLULU SEAWATER AIR CONDITIONING	KEAWE ST		SHWS, ENG CONTROLS, INST CONT
HONOLULU	S106818337	KEEAUMOKU SUPERBLOCK PROJECT	KEEAUMOKU ST		SHWS, SPILLS
HONOLULU	S108859943	KAKAAKO BROWNFIELD PROJECT - UNIT	KOULA ST	96814	SHWS, ENG CONTROLS, BROWNFIE
HONOLULU	S110061572	KAKAAKO BROWNFIELD PROJECT - UNIT	KOULA ST	96814	SHWS, ENG CONTROLS, BROWNFIE

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List
National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 03/26/2015
Date Data Arrived at EDR: 04/08/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 75

Source: EPA
Telephone: N/A
Last EDR Contact: 07/09/2015
Next Scheduled EDR Contact: 10/19/2015
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites
A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 03/26/2015
Date Data Arrived at EDR: 04/08/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 75

Source: EPA
Telephone: N/A
Last EDR Contact: 07/09/2015
Next Scheduled EDR Contact: 10/19/2015
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens
Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions
The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 03/26/2015
Date Data Arrived at EDR: 04/08/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 75

Source: EPA
Telephone: N/A
Last EDR Contact: 07/09/2015
Next Scheduled EDR Contact: 10/19/2015
Data Release Frequency: Quarterly

Federal CERCLIS list

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System
CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 11/11/2013
Date Made Active in Reports: 02/13/2014
Number of Days to Update: 94

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 05/29/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Quarterly

FEDERAL FACILITY: Federal Facility Site Information listing
A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 03/26/2015
Date Data Arrived at EDR: 04/08/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 64

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 07/10/2015
Next Scheduled EDR Contact: 10/19/2015
Data Release Frequency: Varies

Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned
Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 11/11/2013
Date Made Active in Reports: 02/13/2014
Number of Days to Update: 94

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 05/29/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report
CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/10/2015
Date Data Arrived at EDR: 03/31/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 72

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 06/26/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/10/2015
Date Data Arrived at EDR: 03/31/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 72

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/26/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/10/2015
Date Data Arrived at EDR: 03/31/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 72

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/26/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/10/2015
Date Data Arrived at EDR: 03/31/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 72

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/26/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/10/2015
Date Data Arrived at EDR: 03/31/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 72

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/26/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 03/16/2015
Date Data Arrived at EDR: 03/17/2015
Date Made Active in Reports: 06/02/2015
Number of Days to Update: 77

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 06/01/2015
Next Scheduled EDR Contact: 09/14/2015
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 03/16/2015
Date Data Arrived at EDR: 03/17/2015
Date Made Active in Reports: 06/02/2015
Number of Days to Update: 77

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 06/01/2015
Next Scheduled EDR Contact: 09/14/2015
Data Release Frequency: Varies

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/28/2015
Date Data Arrived at EDR: 05/29/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 13

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 08/12/2015
Next Scheduled EDR Contact: 11/30/2015
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 03/30/2015
Date Data Arrived at EDR: 03/31/2015
Date Made Active in Reports: 06/02/2015
Number of Days to Update: 63

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 06/26/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Annually

State- and tribal - equivalent CERCLIS

SHWS: Sites List

Facilities, sites or areas in which the Office of Hazard Evaluation and Emergency Response has an interest, has investigated or may investigate under HRS 128D (includes CERCLIS sites).

Date of Government Version: 12/02/2014
Date Data Arrived at EDR: 12/22/2014
Date Made Active in Reports: 01/27/2015
Number of Days to Update: 36

Source: Department of Health
Telephone: 808-586-4249
Last EDR Contact: 05/29/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Semi-Annually

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: Permitted Landfills in the State of Hawaii
Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 09/17/2012
Date Data Arrived at EDR: 04/03/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 37
Source: Department of Health
Telephone: 808-586-4245
Last EDR Contact: 06/26/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Varies

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 06/04/2015
Date Data Arrived at EDR: 06/05/2015
Date Made Active in Reports: 07/02/2015
Number of Days to Update: 27
Source: Department of Health
Telephone: 808-586-4228
Last EDR Contact: 06/01/2015
Next Scheduled EDR Contact: 09/14/2015
Data Release Frequency: Semi-Annually

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 03/30/2015
Date Data Arrived at EDR: 04/28/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 55
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 03/17/2015
Date Data Arrived at EDR: 05/01/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 52
Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 01/08/2015
Date Data Arrived at EDR: 01/08/2015
Date Made Active in Reports: 02/09/2015
Number of Days to Update: 32
Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 07/31/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Quarterly

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 02/03/2015
Date Data Arrived at EDR: 02/12/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 29
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Quarterly

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 04/30/2015
Date Data Arrived at EDR: 05/05/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 48
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Quarterly

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/30/2015
Date Data Arrived at EDR: 05/29/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 24
Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 02/03/2015
Date Data Arrived at EDR: 04/30/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 53
Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/31/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 09/30/2014
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 10
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Semi-Annually

State and tribal registered storage tank lists

UST: Underground Storage Tank Database
Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 06/04/2015
Date Data Arrived at EDR: 06/05/2015
Date Made Active in Reports: 07/02/2015
Number of Days to Update: 27
Source: Department of Health
Telephone: 808-586-4228
Last EDR Contact: 06/01/2015
Next Scheduled EDR Contact: 09/14/2015
Data Release Frequency: Semi-Annually

INDIAN UST R1: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 02/03/2015
Date Data Arrived at EDR: 04/30/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 53
Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/31/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 09/30/2014
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 10

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/30/2015
Date Data Arrived at EDR: 05/26/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 27

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 03/17/2015
Date Data Arrived at EDR: 05/01/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 52

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Semi-Annually

INDIAN UST R7: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/23/2014
Date Data Arrived at EDR: 11/25/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 65

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 04/30/2015
Date Data Arrived at EDR: 05/05/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 48

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 12/14/2014
Date Data Arrived at EDR: 02/13/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 28

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 07/31/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Quarterly

INDIAN UST R10: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 05/06/2015
Date Data Arrived at EDR: 05/19/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 34

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Quarterly

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 07/10/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

ENG CONTROLS: Engineering Control Sites
A listing of sites with engineering controls in place.

Date of Government Version: 12/02/2014
Date Data Arrived at EDR: 12/22/2014
Date Made Active in Reports: 01/27/2015
Number of Days to Update: 36

Source: Department of Health
Telephone: 404-586-4249
Last EDR Contact: 05/29/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Varies

INST CONTROL: Sites with Institutional Controls
Voluntary Remediation Program and Brownfields sites with institutional controls in place.

Date of Government Version: 12/02/2014
Date Data Arrived at EDR: 12/22/2014
Date Made Active in Reports: 01/27/2015
Number of Days to Update: 36

Source: Department of Health
Telephone: 808-586-4249
Last EDR Contact: 05/29/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

VCP: Voluntary Response Program Sites
Sites participating in the Voluntary Response Program. The purpose of the VRP is to streamline the cleanup process in a way that will encourage prospective developers, lenders, and purchasers to voluntarily cleanup properties.

Date of Government Version: 12/02/2014
Date Data Arrived at EDR: 12/22/2014
Date Made Active in Reports: 01/27/2015
Number of Days to Update: 36

Source: Department of Health
Telephone: 808-586-4249
Last EDR Contact: 05/29/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 09/29/2014
Date Data Arrived at EDR: 10/01/2014
Date Made Active in Reports: 11/06/2014
Number of Days to Update: 36

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 06/26/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Brownfields Sites
With certain legal exclusions and additions, the term 'brownfield site' means real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.

Date of Government Version: 12/02/2014
Date Data Arrived at EDR: 12/22/2014
Date Made Active in Reports: 01/27/2015
Number of Days to Update: 36

Source: Department of Health
Telephone: 808-586-4249
Last EDR Contact: 05/29/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 03/23/2015
Date Data Arrived at EDR: 03/24/2015
Date Made Active in Reports: 06/02/2015
Number of Days to Update: 70

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 06/24/2015
Next Scheduled EDR Contact: 10/05/2015
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: No Update Planned

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 05/01/2015
Next Scheduled EDR Contact: 08/17/2015
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US CDL: Clandestine Drug Labs
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 02/25/2015
Date Data Arrived at EDR: 03/10/2015
Date Made Active in Reports: 03/25/2015
Number of Days to Update: 15

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/29/2015
Next Scheduled EDR Contact: 09/14/2015
Data Release Frequency: Quarterly

CDL: Clandestine Drug Lab Listing
A listing of clandestine drug lab site locations.

Date of Government Version: 08/04/2010
Date Data Arrived at EDR: 09/10/2010
Date Made Active in Reports: 10/22/2010
Number of Days to Update: 42

Source: Department of Health
Telephone: 808-586-4249
Last EDR Contact: 06/01/2015
Next Scheduled EDR Contact: 09/14/2015
Data Release Frequency: Varies

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 02/25/2015
Date Data Arrived at EDR: 03/10/2015
Date Made Active in Reports: 03/25/2015
Number of Days to Update: 15

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/29/2015
Next Scheduled EDR Contact: 09/14/2015
Data Release Frequency: No Update Planned

Local Land Records

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014
Date Data Arrived at EDR: 03/18/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 37

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 03/30/2015
Date Data Arrived at EDR: 03/31/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 72

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 06/26/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Annually

SPILLS: Release Notifications
Releases of hazardous substances to the environment reported to the Office of Hazard Evaluation and Emergency Response since 1988.

Date of Government Version: 12/02/2014
Date Data Arrived at EDR: 12/22/2014
Date Made Active in Reports: 01/28/2015
Number of Days to Update: 37

Source: Department of Health
Telephone: 808-586-4249
Last EDR Contact: 05/29/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Varies

SPILLS 90: SPILLS90 data from FirstSearch
Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 03/10/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/11/2013
Number of Days to Update: 39

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 03/10/2015
Date Data Arrived at EDR: 03/31/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 72

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/26/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Varies

DOT OPS: Incident and Accident Data
Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 08/04/2015
Next Scheduled EDR Contact: 11/16/2015
Data Release Frequency: Varies

DOD: Department of Defense Sites
This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 07/14/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites
The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 06/06/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 09/18/2014
Number of Days to Update: 8

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 07/08/2015
Next Scheduled EDR Contact: 09/21/2015
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees
Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 04/17/2015
Date Made Active in Reports: 06/02/2015
Number of Days to Update: 46

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 06/22/2015
Next Scheduled EDR Contact: 10/12/2015
Data Release Frequency: Varies

ROD: Records Of Decision
Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 74

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 06/12/2015
Next Scheduled EDR Contact: 09/21/2015
Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites
Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/26/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Varies

US MINES: Mines Master Index File
Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 12/30/2014
Date Data Arrived at EDR: 12/31/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 29

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 06/03/2015
Next Scheduled EDR Contact: 09/14/2015
Data Release Frequency: Semi-Annually

TRIS: Toxic Chemical Release Inventory System
Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 02/12/2015
Date Made Active in Reports: 06/02/2015
Number of Days to Update: 110

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 01/29/2015
Next Scheduled EDR Contact: 06/08/2015
Data Release Frequency: Annually

TSCA: Toxic Substances Control Act
Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/15/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 14

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 06/25/2015
Next Scheduled EDR Contact: 10/05/2015
Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 05/20/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 05/20/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

SSTS: Section 7 Tracking Systems
Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 01/23/2015
Date Data Arrived at EDR: 02/06/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 07/09/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: Quarterly

PADS: PCB Activity Database System
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 10/15/2014
Date Made Active in Reports: 11/17/2014
Number of Days to Update: 33

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 07/17/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: Annually

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 03/31/2015
Date Data Arrived at EDR: 04/09/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 63

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 06/04/2015
Next Scheduled EDR Contact: 09/21/2015
Data Release Frequency: Quarterly

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 04/07/2015
Date Data Arrived at EDR: 04/09/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 07/09/2015
Next Scheduled EDR Contact: 10/19/2015
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System
Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 01/18/2015
Date Data Arrived at EDR: 02/27/2015
Date Made Active in Reports: 03/25/2015
Number of Days to Update: 26

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 06/10/2015
Next Scheduled EDR Contact: 09/21/2015
Data Release Frequency: Quarterly

RAATS: RCRA Administrative Action Tracking System
RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

RMP: Risk Management Plans
When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 02/01/2015
Date Data Arrived at EDR: 02/13/2015
Date Made Active in Reports: 03/25/2015
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 07/22/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

BRS: Biennial Reporting System
The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 04/19/2013
Number of Days to Update: 52

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 05/29/2015
Next Scheduled EDR Contact: 09/07/2015
Data Release Frequency: Biennially

UIC: Underground Injection Wells Listing
A listing of underground injection well locations.

Date of Government Version: 02/07/2013
Date Data Arrived at EDR: 02/12/2013
Date Made Active in Reports: 04/09/2013
Number of Days to Update: 56

Source: Department of Health
Telephone: 808-586-4258
Last EDR Contact: 06/01/2015
Next Scheduled EDR Contact: 09/14/2015
Data Release Frequency: Varies

DRYCLEANERS: Permitted Drycleaner Facility Listing
A listing of permitted drycleaner facilities in the state.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 01/09/2015
Date Made Active in Reports: 02/11/2015
Number of Days to Update: 33

Source: Department of Health
Telephone: 808-586-4200
Last EDR Contact: 07/29/2015
Next Scheduled EDR Contact: 10/19/2015
Data Release Frequency: Varies

AIRS: List of Permitted Facilities
A listing of permitted facilities in the state.

Date of Government Version: 06/30/2015
Date Data Arrived at EDR: 07/22/2015
Date Made Active in Reports: 08/05/2015
Number of Days to Update: 14

Source: Department of Health
Telephone: 808-586-4200
Last EDR Contact: 07/20/2015
Next Scheduled EDR Contact: 10/19/2015
Data Release Frequency: Varies

INDIAN RESERV: Indian Reservations
This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 07/14/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: Semi-Annually

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing
The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011
Date Data Arrived at EDR: 03/09/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 05/21/2015
Next Scheduled EDR Contact: 08/31/2015
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites
A listing of former lead smelter site locations.

Date of Government Version: 11/25/2014
Date Data Arrived at EDR: 11/26/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 64

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 07/07/2015
Next Scheduled EDR Contact: 10/19/2015
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites
A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

2020 COR ACTION: 2020 Corrective Action Program List
The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 6
Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 05/14/2015
Next Scheduled EDR Contact: 08/24/2015
Data Release Frequency: Varies

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 10/17/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 3
Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 05/14/2015
Next Scheduled EDR Contact: 08/24/2015
Data Release Frequency: Quarterly

FEDLAND: Federal and Indian Lands
Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339
Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 07/14/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: N/A

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)
The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/16/2014
Date Data Arrived at EDR: 10/31/2014
Date Made Active in Reports: 11/17/2014
Number of Days to Update: 17
Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 06/22/2015
Next Scheduled EDR Contact: 10/05/2015
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data
A listing of minor source facilities.

Date of Government Version: 10/16/2014
Date Data Arrived at EDR: 10/31/2014
Date Made Active in Reports: 11/17/2014
Number of Days to Update: 17
Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 06/22/2015
Next Scheduled EDR Contact: 10/22/2015
Data Release Frequency: Annually

Financial Assurance: Financial Assurance Information Listing
A listing of financial assurance information for underground storage tank facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 06/10/2015
Date Data Arrived at EDR: 06/16/2015
Date Made Active in Reports: 07/02/2015
Number of Days to Update: 16
Source: Department of Health
Telephone: 808-586-4226
Last EDR Contact: 06/10/2015
Next Scheduled EDR Contact: 09/28/2015
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information
All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 03/09/2015
Date Data Arrived at EDR: 03/10/2015
Date Made Active in Reports: 03/25/2015
Number of Days to Update: 15
Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 08/12/2015
Next Scheduled EDR Contact: 11/30/2015
Data Release Frequency: Quarterly

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 06/12/2015
Next Scheduled EDR Contact: 09/21/2015
Data Release Frequency: Varies

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 07/13/2015
Next Scheduled EDR Contact: 10/28/2015
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 07/31/2015
Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: Varies

EPA WATCH LIST: EPA WATCH LIST
EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88
Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 08/04/2015
Next Scheduled EDR Contact: 11/23/2015
Data Release Frequency: Quarterly

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR US Hist Auto Stat: EDR Exclusive Historic Gas Stations
EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Exclusive Historic Dry Cleaners
EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List
The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Health in Hawaii.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/17/2014
Number of Days to Update: 200

Source: Department of Health
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List
The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Health in Hawaii.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/08/2014
Number of Days to Update: 191

Source: Department of Health
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank
The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Health in Hawaii.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/03/2014
Number of Days to Update: 186

Source: Department of Health
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

Oil/Gas Pipelines
Source: PennWell Corporation
Telephone: 281-546-1505
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data
Source: PennWell Corporation
Telephone: 800-823-6277
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

PUMEHANA
1212 KINAU STREET
HONOLULU, HI 96814

TARGET PROPERTY COORDINATES

Latitude (North):	21.3025 - 21˚ 18' 9.00''
Longitude (West):	157.8422 - 157˚ 50' 31.92''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	620092.6
UTM Y (Meters):	2355928.8
Elevation:	26 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5941635 HONOLULU, HI
Version Date:	2013

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

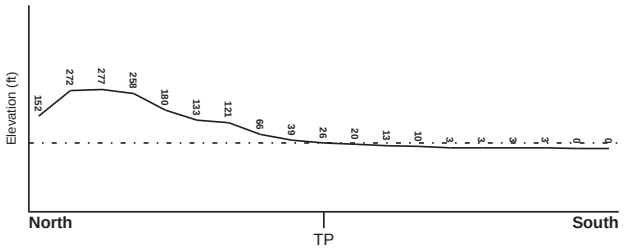
TOPOGRAPHIC INFORMATION

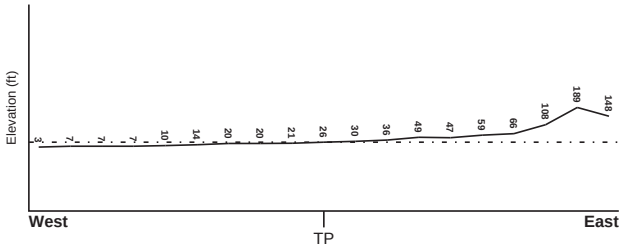
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SSW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 26 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
HONOLULU, HI	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 15003C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
HONOLULU	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

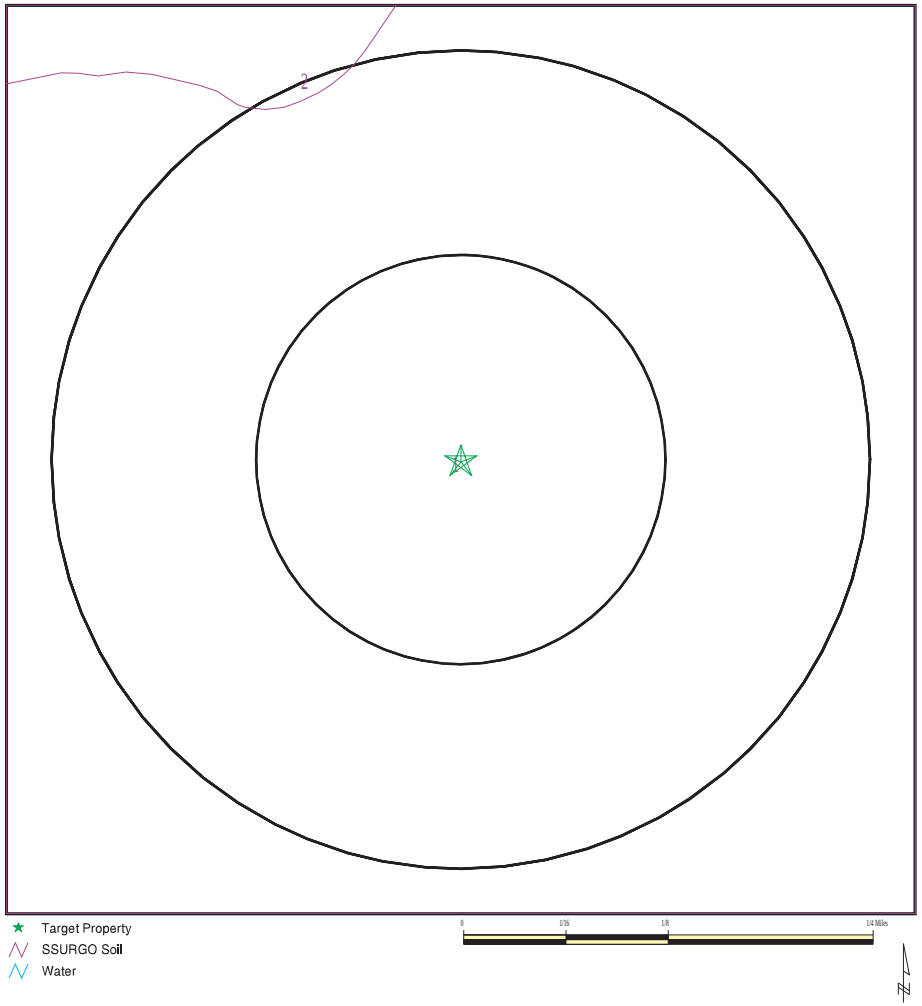
Era: -
System: -
Series: -
Code: N/A *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: -

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4381593.2s



★ Target Property
SSURGO Soil
Water

SITE NAME: Pumehana ADDRESS: 1212 Kinau Street Honolulu HI 96814 LAT/LONG: 21.3025 / 157.8422	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Ronald Sato INQUIRY #: 4381593.2s DATE: August 13, 2015 8:47 am

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DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Makiki

Soil Surface Texture: clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	20 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	MH-A (proposed)	Max: 42 Min: 4.23	Max: 5.5 Min: 5.1
2	20 inches	29 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	MH-A (proposed)	Max: 14.11 Min: 4.23	Max: 6 Min: 5.6
3	29 inches	59 inches	paragravelly clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.14 Min: 14.11	Max: 6 Min: 5.6

Soil Map ID: 2

Soil Component Name: Tantalus

Soil Surface Texture: silty clay loam

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	18 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.14 Min: 14.11	Max: 7.3 Min: 6.1
2	18 inches	29 inches	gravelly very fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.14 Min: 14.11	Max: 7.3 Min: 6.1
3	29 inches	59 inches	gravel	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Clean gravels, Poorly Graded Gravel.	Max: 705 Min: 141.14	Max: 7.3 Min: 6.1

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	USGS40000269632	0 - 1/8 Mile East
B3	USGS40000269642	1/8 - 1/4 Mile NE
C6	USGS40000269615	1/8 - 1/4 Mile WSW
D9	USGS40000269584	1/8 - 1/4 Mile South
E10	USGS40000269603	1/8 - 1/4 Mile SE
E11	USGS40000269592	1/4 - 1/2 Mile SE
G15	USGS40000269619	1/4 - 1/2 Mile West
H16	USGS40000269569	1/4 - 1/2 Mile South
F20	USGS40000269585	1/4 - 1/2 Mile SW
I21	USGS40000269572	1/4 - 1/2 Mile SSE
G23	USGS40000269620	1/4 - 1/2 Mile West
J24	USGS40000269614	1/4 - 1/2 Mile East
K26	USGS40000269644	1/4 - 1/2 Mile WNW
I29	USGS40000269568	1/4 - 1/2 Mile SE
I30	USGS40000269571	1/4 - 1/2 Mile SE
K32	USGS40000269637	1/4 - 1/2 Mile West
L33	USGS40000269561	1/4 - 1/2 Mile SSE
M35	USGS40000269580	1/4 - 1/2 Mile ESE
O38	USGS40000269616	1/4 - 1/2 Mile West
N41	USGS40000269567	1/4 - 1/2 Mile SE
P42	USGS40000269607	1/2 - 1 Mile ESE
Q44	USGS40000269702	1/2 - 1 Mile NE
O48	USGS40000269622	1/2 - 1 Mile West
R49	USGS40000269604	1/2 - 1 Mile WSW
R50	USGS40000269605	1/2 - 1 Mile WSW
S53	USGS40000269578	1/2 - 1 Mile ESE
U56	USGS40000269591	1/2 - 1 Mile ESE
T57	USGS40000269556	1/2 - 1 Mile SSE
V58	USGS40000269720	1/2 - 1 Mile NNE
X62	USGS40000269638	1/2 - 1 Mile West
X65	USGS40000269639	1/2 - 1 Mile West
Y67	USGS40000269570	1/2 - 1 Mile ESE
Z70	USGS40000269645	1/2 - 1 Mile WNW
AA73	USGS40000269583	1/2 - 1 Mile ESE
AB74	USGS40000269623	1/2 - 1 Mile West
AA75	USGS40000269590	1/2 - 1 Mile ESE
Z77	USGS40000269657	1/2 - 1 Mile WNW
Z78	USGS40000269658	1/2 - 1 Mile WNW
Z79	USGS40000269656	1/2 - 1 Mile WNW
Z80	USGS40000269654	1/2 - 1 Mile WNW
Z81	USGS40000269655	1/2 - 1 Mile WNW

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
Z82	USGS40000269662	1/2 - 1 Mile WNW
Z83	USGS40000269663	1/2 - 1 Mile WNW
Z84	USGS40000269661	1/2 - 1 Mile WNW
Z85	USGS40000269659	1/2 - 1 Mile WNW
Z86	USGS40000269660	1/2 - 1 Mile WNW
AB98	USGS40000269633	1/2 - 1 Mile West
AC101	USGS40000269562	1/2 - 1 Mile SE
AB102	USGS40000269608	1/2 - 1 Mile West
Z104	USGS40000269664	1/2 - 1 Mile WNW
AC106	USGS40000269559	1/2 - 1 Mile SE
AD107	USGS40000269698	1/2 - 1 Mile ENE
AE108	USGS40000269677	1/2 - 1 Mile ENE
AF111	USGS40000269670	1/2 - 1 Mile WNW
AF112	USGS40000269671	1/2 - 1 Mile WNW
Y115	USGS40000269575	1/2 - 1 Mile ESE
AG116	USGS40000269589	1/2 - 1 Mile ESE
AF118	USGS40000269672	1/2 - 1 Mile WNW
AF120	USGS40000269678	1/2 - 1 Mile WNW
AH121	USGS40000269611	1/2 - 1 Mile East
AF123	USGS40000269687	1/2 - 1 Mile WNW
AJ126	USGS40000269574	1/2 - 1 Mile ESE
AG128	USGS40000269587	1/2 - 1 Mile ESE
AK132	USGS40000269627	1/2 - 1 Mile West
AJ133	USGS40000269573	1/2 - 1 Mile ESE
AL134	USGS40000269609	1/2 - 1 Mile West
AM137	USGS40000269709	1/2 - 1 Mile ENE
140	USGS40000269710	1/2 - 1 Mile WNW
AJ144	USGS40000269566	1/2 - 1 Mile ESE
AO145	USGS40000269555	1/2 - 1 Mile SE
AP147	USGS40000269680	1/2 - 1 Mile ENE
AQ148	USGS40000269602	1/2 - 1 Mile East
AS154	USGS40000269565	1/2 - 1 Mile ESE
AS156	USGS40000269564	1/2 - 1 Mile ESE
AQ157	USGS40000269593	1/2 - 1 Mile East
AT160	USGS40000269673	1/2 - 1 Mile WNW
AU162	USGS40000269621	1/2 - 1 Mile West
AV163	USGS40000269721	1/2 - 1 Mile NW
AW165	USGS40000269676	1/2 - 1 Mile ENE
AX167	USGS40000269597	1/2 - 1 Mile East
AX168	USGS40000269596	1/2 - 1 Mile East
AX169	USGS40000269595	1/2 - 1 Mile East
AX170	USGS40000269598	1/2 - 1 Mile East
AX171	USGS40000269600	1/2 - 1 Mile East
AX172	USGS40000269599	1/2 - 1 Mile East
AX176	USGS40000269601	1/2 - 1 Mile East

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
X66	HI0000308	1/2 - 1 Mile West

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP

Note: PWS System location is not always the same as well location.

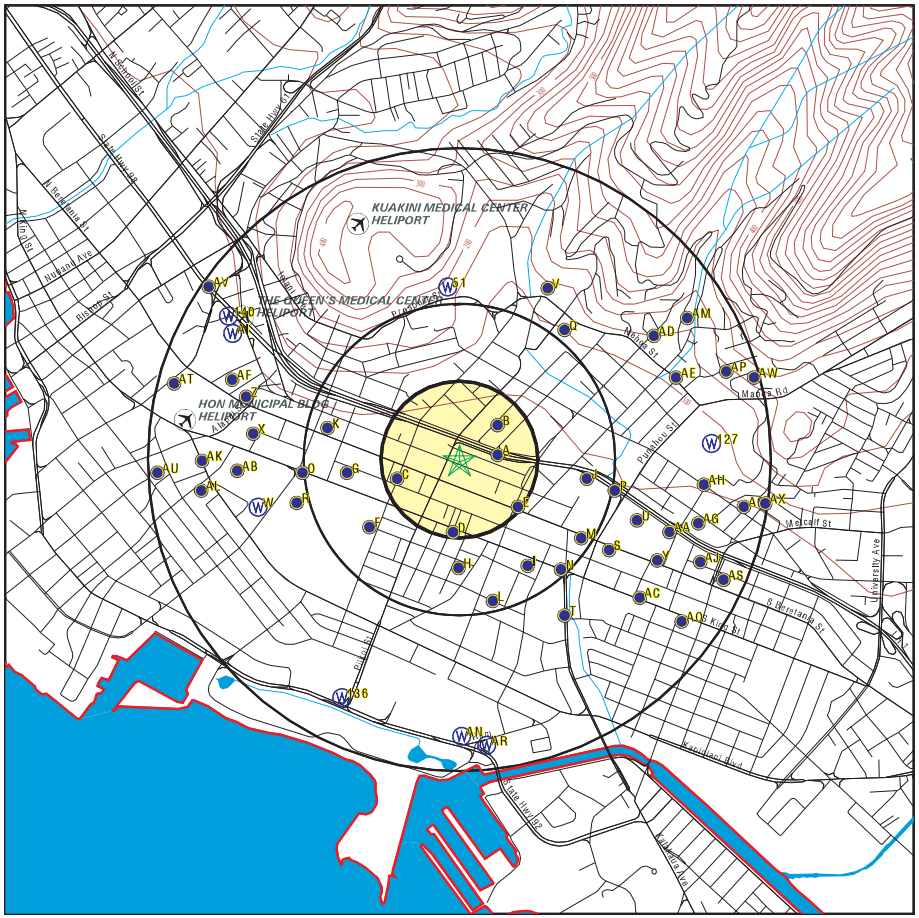
STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A2	HI9000000000714	1/8 - 1/4 Mile East
B4	HI9000000000713	1/8 - 1/4 Mile NE
C5	HI9000000000723	1/8 - 1/4 Mile WSW
D7	HI9000000000721	1/8 - 1/4 Mile South
E8	HI9000000000722	1/8 - 1/4 Mile SE
F12	HI9000000000735	1/4 - 1/2 Mile SW
G13	HI9000000000742	1/4 - 1/2 Mile West
H14	HI9000000000733	1/4 - 1/2 Mile South
F17	HI9000000000734	1/4 - 1/2 Mile WSW
F18	HI9000000000715	1/4 - 1/2 Mile SW
I19	HI9000000000726	1/4 - 1/2 Mile SSE
G22	HI9000000000764	1/4 - 1/2 Mile West
J25	HI9000000000725	1/4 - 1/2 Mile East
K27	HI9000000000746	1/4 - 1/2 Mile WNW
I28	HI9000000000728	1/4 - 1/2 Mile SE
K31	HI9000000000738	1/4 - 1/2 Mile West
M34	HI9000000000711	1/4 - 1/2 Mile ESE
N36	HI9000000000727	1/4 - 1/2 Mile SE
O37	HI9000000000737	1/4 - 1/2 Mile West
L39	HI9000000000611	1/4 - 1/2 Mile SSE
N40	HI9000000000732	1/4 - 1/2 Mile SE
P43	HI9000000000712	1/2 - 1 Mile East
R45	HI9000000000798	1/2 - 1 Mile WSW
O46	HI9000000000796	1/2 - 1 Mile West
Q47	HI9000000000731	1/2 - 1 Mile NE
51	HI9000000000736	1/2 - 1 Mile North
S52	HI9000000000724	1/2 - 1 Mile ESE
T54	HI9000000000603	1/2 - 1 Mile SE
U55	HI9000000000710	1/2 - 1 Mile ESE
V59	HI9000000000707	1/2 - 1 Mile NNE
W60	HI9000000000799	1/2 - 1 Mile WSW
X61	HI9000000000772	1/2 - 1 Mile West
X63	HI9000000000744	1/2 - 1 Mile West
Y64	HI9000000000708	1/2 - 1 Mile ESE
W68	HI9000000000794	1/2 - 1 Mile WSW
Z69	HI9000000000756	1/2 - 1 Mile WNW
AA71	HI9000000000717	1/2 - 1 Mile ESE
AB72	HI9000000000795	1/2 - 1 Mile West
AA76	HI9000000000720	1/2 - 1 Mile ESE
Z87	HI9000000000760	1/2 - 1 Mile WNW
Z88	HI9000000000761	1/2 - 1 Mile WNW
Z89	HI9000000000768	1/2 - 1 Mile WNW
Z90	HI9000000000767	1/2 - 1 Mile WNW
Z91	HI9000000000749	1/2 - 1 Mile WNW

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
Z92	HI9000000000748	1/2 - 1 Mile WNW
Z93	HI9000000000771	1/2 - 1 Mile WNW
Z94	HI9000000000803	1/2 - 1 Mile WNW
Z95	HI9000000000769	1/2 - 1 Mile WNW
Z96	HI9000000000770	1/2 - 1 Mile WNW
AB97	HI9000000000800	1/2 - 1 Mile West
AB99	HI9000000000751	1/2 - 1 Mile West
AC100	HI9000000000607	1/2 - 1 Mile SE
Z103	HI9000000000811	1/2 - 1 Mile WNW
AC105	HI9000000000605	1/2 - 1 Mile SE
AD109	HI9000000000730	1/2 - 1 Mile ENE
AE110	HI9000000000729	1/2 - 1 Mile ENE
AF113	HI9000000000793	1/2 - 1 Mile WNW
AA114	HI9000000000716	1/2 - 1 Mile ESE
AG117	HI9000000000719	1/2 - 1 Mile ESE
AF119	HI9000000000810	1/2 - 1 Mile WNW
AH122	HI9000000000695	1/2 - 1 Mile East
AI124	HI9000000000747	1/2 - 1 Mile WNW
AJ125	HI9000000000718	1/2 - 1 Mile ESE
127	HI9000000000705	1/2 - 1 Mile East
AG129	HI9000000000694	1/2 - 1 Mile ESE
AK130	HI9000000000750	1/2 - 1 Mile West
AJ131	HI9000000000692	1/2 - 1 Mile ESE
AL135	HI9000000000762	1/2 - 1 Mile West
136	HI9000000000627	1/2 - 1 Mile SSW
AI138	HI9000000000790	1/2 - 1 Mile WNW
AM139	HI9000000000709	1/2 - 1 Mile ENE
AN141	HI9000000000613	1/2 - 1 Mile South
AO142	HI9000000000604	1/2 - 1 Mile SE
AJ143	HI9000000000698	1/2 - 1 Mile ESE
AN146	HI9000000000612	1/2 - 1 Mile South
AP149	HI9000000000699	1/2 - 1 Mile ENE
AQ150	HI9000000000700	1/2 - 1 Mile East
AR151	HI9000000000614	1/2 - 1 Mile South
AR152	HI9000000000615	1/2 - 1 Mile South
AS153	HI9000000000697	1/2 - 1 Mile ESE
AS155	HI9000000000696	1/2 - 1 Mile ESE
AQ158	HI9000000000691	1/2 - 1 Mile East
AT159	HI9000000000780	1/2 - 1 Mile WNW
AU161	HI9000000000757	1/2 - 1 Mile West
AV164	HI9000000000743	1/2 - 1 Mile NW
AW166	HI9000000000693	1/2 - 1 Mile ENE
AX173	HI9000000000702	1/2 - 1 Mile East
AX174	HI9000000000701	1/2 - 1 Mile East
AX175	HI9000000000706	1/2 - 1 Mile East

PHYSICAL SETTING SOURCE MAP - 4381593.2s



- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location

SITE NAME: Pumehana ADDRESS: 1212 Kinau Street Honolulu HI 96814 LAT/LONG: 21.3025 / 157.8422	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Ronald Sato INQUIRY #: 4381593.2s DATE: August 13, 2015 8:47 am

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation	Database	EDR ID Number
A1 **East** **0 - 1/8 Mile** **Higher**	**FED USGS**	**USGS40000269632**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211821157503501		
Monloc name:	3-1850-08 W73 MAKIKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3026689
Longitude:	-157.8403128	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	34.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	18820101	Welldepth:	358
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

A2 **East** **1/8 - 1/4 Mile** **Higher**	**HI WELLS**	**HI9000000000714**

Wid:	3-1850-008	Island:	Oahu
Well name:	Makiki	Old name:	Not Reported
Yr drilled:	1882		
Driller:	L. McCandless		
Quad map:	13		
Long83dd:	-157.840278		
Lat83dd:	21.302778		
Gps:	0	Utm:	-1
Owner user:	Bank of Hawaii		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	73-	Well type:	Not Reported
Casing dia:	7	Ground el:	34
Well depth:	358		
Solid case:	Not Reported	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	11.8	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported

Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-324
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000714

B3
NE
1/8 - 1/4 Mile
Higher

FED USGS **USGS40000269642**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211826157503501		
Monloc name:	3-1850-07 W72 MAKIKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3040577
Longitude:	-157.8403128	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	37.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	18820101	Welldepth:	375
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

B4
NE
1/8 - 1/4 Mile
Higher

HI WELLS **HI9000000000713**

Wid:	3-1850-007	Island:	Oahu
Well name:	Makiki	Old name:	Not Reported
Yr drilled:	1882		
Driller:	Fessler		
Quad map:	13		
Long83dd:	-157.840278		
Lat83dd:	21.304167		
Gps:	0	Utm:	-1
Owner user:	Babcock		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	72-	Well type:	Not Reported
Casing dia:	7	Ground el:	37
Well depth:	375		
Solid case:	Not Reported	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	42	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-338
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 3-9-010:001
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000713

C5
WSW
1/8 - 1/4 Mile
Lower

HI WELLS **HI9000000000723**

Wid:	3-1850-017	Island:	Oahu
Well name:	Makiki	Old name:	Not Reported
Yr drilled:	1887		
Driller:	Not Reported		
Quad map:	13		
Long83dd:	-157.845278		
Lat83dd:	21.301667		
Gps:	0	Utm:	-1
Owner user:	Hawaiian Electric Company, Inc., HECO		
Land owner:	Not Reported		

Pump insta:	Not Reported		
Old number:	78-	Well type:	Not Reported
Casing dia:	8	Ground el:	16
Well depth:	510		
Solid case:	Not Reported	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	27.6	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	63		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-494
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000723

C6
WSW **FED USGS** **USGS40000269615**
1/8 - 1/4 Mile
Lower

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211817157505301		
Monloc name:	3-1850-17 W78 MAKIKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3015579
Longitude:	-157.8453129	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	16.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	18870101	Welldepth:	510
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

D7
South **HI WELLS** **HI9000000000721**
1/8 - 1/4 Mile
Lower

Wid:	3-1850-015	Island:	Oahu
Well name:	Makiki	Old name:	Not Reported
Yr drilled:	1884		
Driller:	L. McCandless		
Quad map:	13		
Long83dd:	-157.8425		
Lat83dd:	21.299167		
Gps:	0	Utm:	-1
Owner user:	G. Wilcox 1		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	76-	Well type:	Not Reported
Casing dia:	6	Ground el:	17
Well depth:	656		
Solid case:	455	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	19	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-639
Bot solid:	-438	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000721

E8
SE **HI WELLS** **HI9000000000722**
1/8 - 1/4 Mile
Lower

Wid:	3-1850-016	Island:	Oahu
Well name:	Makiki	Old name:	Not Reported
Yr drilled:	1886		
Driller:	Not Reported		
Quad map:	13		
Long83dd:	-157.839167		
Lat83dd:	21.300556		
Gps:	0	Utm:	-1
Owner user:	C&C of Honolulu		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	74-	Well type:	Not Reported
Casing dia:	6	Ground el:	22
Well depth:	442		
Solid case:	400	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	25.8	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	53		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-420
Bot solid:	-378	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000722

D9
South
1/8 - 1/4 Mile
Lower

FED USGS **USGS40000269584**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211808157504301		
Monloc name:	3-1850-15 W76 MAKIKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.299058
Longitude:	-157.8425352	Sourcemap scale:	24000

Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	17.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	18840101	Welldepth:	656
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

E10
SE
1/8 - 1/4 Mile
Lower

FED USGS **USGS40000269603**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211813157503101		
Monloc name:	3-1850-16 W74 MAKIKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3004467
Longitude:	-157.8392018	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	22.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	18860101	Welldepth:	442
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

E11
SE
1/4 - 1/2 Mile
Lower

FED USGS **USGS40000269592**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211811157503201		
Monloc name:	3-1850-28 W74-1 MAKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.2998912
Longitude:	-157.8394796	Sourcemap scale:	24000

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	20.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19380101	Welldepth:	71
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

F12
SW
1/4 - 1/2 Mile
Lower

HI WELLS **HI9000000000735**

Wid:	3-1850-029	Island:	Oahu
Well name:	Mckinley Aqua 2	Old name:	Not Reported
Yr drilled:	1993		
Driller:	Roscoe Moss Hawaii Inc		
Quad map:	13		
Long83dd:	-157.846389		
Lat83dd:	21.299444		
Gps:	0	Utm:	-1
Owner user:	McKinley High School		
Land owner:	Hawaii State Department of Education DOE		
Pump insta:	Not Reported		
Old number:	Not Reported	Well type:	Not Reported
Casing dia:	8	Ground el:	10
Well depth:	65		
Solid case:	45	Perf case:	65
Use:	AGR - Aquatic Plants and Animals		
Use year:	Not Reported		
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-55
Bot solid:	-35	Bot perf:	-55
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 2-3-009:001
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	17-AUG-93
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000735

Map ID Direction Distance Elevation	Database	EDR ID Number
G13 **West** **1/4 - 1/2 Mile** **Lower**	**HI WELLS**	**HI9000000000742**

Wid:	3-1851-006	Island:	Oahu
Well name:	Young St	Old name:	Not Reported
Yr drilled:	1883		
Driller:	Not Reported		
Quad map:	13		
Long83dd:	-157.8475		
Lat83dd:	21.301944		
Gps:	0	Utm:	-1
Owner user:	Vida Villa		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	79-	Well type:	Not Reported
Casing dia:	6	Ground el:	17
Well depth:	503		
Solid case:	234	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	19.2	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-486
Bot solid:	-217	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000742

H14
South
1/4 - 1/2 Mile
Lower

HI WELLS **HI9000000000733**

Wid:	3-1850-027	Island:	Oahu
Well name:	Makiki	Old name:	Not Reported
Yr drilled:	1914		
Driller:	Not Reported		
Quad map:	13		
Long83dd:	-157.842222		
Lat83dd:	21.2975		
Gps:	0	Utm:	-1
Owner user:	Meadow Gold		
Land owner:	Not Reported		

Pump insta:	Not Reported		
Old number:	75-	Well type:	Not Reported
Casing dia:	10	Ground el:	8
Well depth:	552		
Solid case:	486	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	27	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	75		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-544
Bot solid:	-478	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	01-JAN-14
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000733

G15
West
1/4 - 1/2 Mile
Lower

FED USGS **USGS40000269619**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211818157510101		
Monloc name:	3-1851-06 W79 DWNTN		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3018357
Longitude:	-157.847535	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	17.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	18840101	Welldepth:	503
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

H16
South
1/4 - 1/2 Mile
Lower

FED USGS **USGS40000269569**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211802157504201		
Monloc name:	3-1850-27 W75 MAKIKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.2973914
Longitude:	-157.8422574	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	8.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19140101	Welldepth:	552
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

F17
WSW
1/4 - 1/2 Mile
Lower

HI WELLS **HI9000000000734**

Wid:	3-1850-028	Island:	Oahu
Well name:	Mckinley Aqua 1	Old name:	Not Reported
Yr drilled:	1990		
Driller:	PR Drilling Co., Inc.		
Quad map:	13		
Long83dd:	-157.846944		
Lat83dd:	21.299722		
Gps:	0	Utm:	-1
Owner user:	McKinley High School		
Land owner:	Hawaii State Department of Education DOE		
Pump insta:	Not Reported		
Old number:	Not Reported	Well type:	ROT
Casing dia:	4	Ground el:	Not Reported
Well depth:	35		
Solid case:	10	Perf case:	20
Use:	AGR - Aquatic Plants and Animals		
Use year:	Not Reported		
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	7/9/1990	Test gpm:	50

Test ddown:	4.5	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	Not Reported
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	11		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 2-3-009:001
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	10-JUL-90
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000734

F18
SW
1/4 - 1/2 Mile
Lower

HI WELLS **HI9000000000715**

Wid:	3-1850-009	Island:	Oahu
Well name:	Makiki	Old name:	Not Reported
Yr drilled:	1882		
Driller:	Cooke-Peddler		
Quad map:	13		
Long83dd:	-157.846667		
Lat83dd:	21.299167		
Gps:	0	Utm:	-1
Owner user:	Not Reported		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	77-	Well type:	Not Reported
Casing dia:	6	Ground el:	6
Well depth:	620		
Solid case:	Not Reported	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	29.6	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	62		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-614
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		

Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000715

I19
SSE
1/4 - 1/2 Mile
Lower

HI WELLS **HI9000000000726**

Wid:	3-1850-020	Island:	Oahu
Well name:	Makiki	Old name:	Not Reported
Yr drilled:	1891		
Driller:	L. McCandless		
Quad map:	13		
Long83dd:	-157.839444		
Lat83dd:	21.297778		
Gps:	0	Utm:	-1
Owner user:	Plews & Wichman		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	63-	Well type:	Not Reported
Casing dia:	8	Ground el:	16
Well depth:	437		
Solid case:	377	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	31	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	56		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-421
Bot solid:	-361	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000726

Map ID Direction Distance Elevation	Database	EDR ID Number
F20 **SW** **1/4 - 1/2 Mile** **Lower**	**FED USGS**	**USGS40000269585**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211808157505801		
Monloc name:	3-1850-09 W77 MAKIKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.2990581
Longitude:	-157.8467019	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	6.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	18820101	Welldepth:	620
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

I21 **SSE** **1/4 - 1/2 Mile** **Lower**	**FED USGS**	**USGS40000269572**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211803157503201		
Monloc name:	3-1850-20 W63 MAKIKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.2976691
Longitude:	-157.8394796	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	16.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	18910101	Welldepth:	437
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

G22 **West** **1/4 - 1/2 Mile** **Lower**	**HI WELLS**	**HI9000000000764**

Wid:	3-1851-028	Island:	Oahu
Well name:	Young St	Old name:	Not Reported
Yr drilled:	1913		
Driller:	L. McCandless		
Quad map:	13		
Long83dd:	-157.848056		
Lat83dd:	21.301944		
Gps:	0	Utm:	-1
Owner user:	Medical Arts Bldg., Ltd.		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	Not Reported	Well type:	Not Reported
Casing dia:	8	Ground el:	18
Well depth:	505		
Solid case:	476	Perf case:	Not Reported
Use:	UNU - Unused		
Use year:	Not Reported		
Init head:	30.3	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	41		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	36	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-487
Bot solid:	-458	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 2-4-002:006
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	01-JAN-13
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000764

G23 **West** **1/4 - 1/2 Mile** **Lower**	**FED USGS**	**USGS40000269620**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211818157510301		
Monloc name:	3-1851-28 W81 DWNTN		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3018358
Longitude:	-157.8480907	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	18.00
Vert measure units:	feet	Vertacc measure val:	.5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19130101	Welldepth:	505
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1916-09-18	-12.26	

J24
East
1/4 - 1/2 Mile
Higher

FED USGS **USGS40000269614**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211817157501901		
Monloc name:	3-1850-19 W65 MAKIKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3015577
Longitude:	-157.8358684	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	41.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	18900101	Welldepth:	277
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

J25
East
1/4 - 1/2 Mile
Higher

HI WELLS **HI9000000000725**

Wid:	3-1850-019	Island:	Oahu
Well name:	Makiki	Old name:	Not Reported
Yr drilled:	1890		
Driller:	Not Reported		
Quad map:	13		
Long83dd:	-157.835833		
Lat83dd:	21.301667		
Gps:	0	Utm:	-1
Owner user:	Jodo Mission		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	65-	Well type:	Not Reported
Casing dia:	10	Ground el:	41
Well depth:	277		
Solid case:	220	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	30.6	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-236
Bot solid:	-179	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000725

K26
WNW
1/4 - 1/2 Mile
Higher

FED USGS **USGS40000269644**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211827157510401		
Monloc name:	3-1851-10 W84 DWNTN		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3043356
Longitude:	-157.8483684	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	30.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	18940101	Welldepth:	486
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

K27
WNW
1/4 - 1/2 Mile
Higher

HI WELLS **HI9000000000746**

Wid:	3-1851-010	Island:	Oahu
Well name:	Acadamy Of Arts	Old name:	Not Reported
Yr drilled:	1894		
Driller:	L. McCandless		
Quad map:	13		
Long83dd:	-157.848333		
Lat83dd:	21.304444		
Gps:	0	Utm:	-1
Owner user:	C. Cooke		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	84-	Well type:	Not Reported
Casing dia:	8	Ground el:	30
Well depth:	486		
Solid case:	422	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	31	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-456
Bot solid:	-392	Bot perf:	Not Reported
Spec capac:	Not Reported		

Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000746

I28
SE
1/4 - 1/2 Mile
Lower

HI WELLS **HI9000000000728**

Wid:	3-1850-022	Island:	Oahu
Well name:	Makiki	Old name:	Not Reported
Yr drilled:	1894		
Driller:	Not Reported		
Quad map:	13		
Long83dd:	-157.838333		
Lat83dd:	21.2975		
Gps:	0	Utm:	-1
Owner user:	Kamehameha Schools		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	62-	Well type:	Not Reported
Casing dia:	8	Ground el:	16
Well depth:	521		
Solid case:	419	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	27.6	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	61		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-505
Bot solid:	-403	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000728

Map ID Direction Distance Elevation	Database	EDR ID Number
I29 **SE** **1/4 - 1/2 Mile** **Lower**	**FED USGS**	**USGS40000269568**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211802157502801		
Monloc name:	3-1850-22 W62 MAKIKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.2973913
Longitude:	-157.8383685	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	16.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	18940101	Welldepth:	521
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

I30 **SE** **1/4 - 1/2 Mile** **Lower**	**FED USGS**	**USGS40000269571**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211803157502801		
Monloc name:	3-1850-21 W58 MAKIKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.2973913
Longitude:	-157.8383685	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	20.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	18940101	Welldepth:	409
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

K31 **West** **1/4 - 1/2 Mile** **Higher**	**HI WELLS**	**HI9000000000738**

Wid:	3-1851-002	Island:	Oahu
Well name:	Thomas Square	Old name:	Not Reported
Yr drilled:	1882		
Driller:	Not Reported		
Quad map:	13		
Long83dd:	-157.849167		
Lat83dd:	21.303611		
Gps:	0	Utm:	-1
Owner user:	Board of Water Supply, BWS		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	83-	Well type:	Not Reported
Casing dia:	2	Ground el:	27
Well depth:	470		
Solid case:	458	Perf case:	Not Reported
Use:	OBS - Water Level		
Use year:	Not Reported		
Init head:	27.2	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-443
Bot solid:	-431	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 2-4-001:001
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000738

K32 **West** **1/4 - 1/2 Mile** **Lower**	**FED USGS**	**USGS40000269637**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211824157510701		
Monloc name:	3-1851-02 W83 DWNTN		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3035024
Longitude:	-157.8492017	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	27.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	18820101	Welldepth:	474
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

L33
SSE
1/4 - 1/2 Mile
Lower

FED USGS **USGS40000269561**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211757157503601		
Monloc name:	3-1750-09 W63-1 KAPI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.2960026
Longitude:	-157.8405908	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	7.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19640101	Welldepth:	53
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID Direction Distance Elevation	Database	EDR ID Number
M34 **ESE** **1/4 - 1/2 Mile** **Higher**	**HI WELLS**	**HI9000000000711**

Wid:	3-1850-005	Island:	Oahu
Well name:	Makiki	Old name:	Not Reported
Yr drilled:	1882		
Driller:	Fessler		
Quad map:	13		
Long83dd:	-157.836111		
Lat83dd:	21.298889		
Gps:	0	Utm:	-1
Owner user:	M. Rawlins		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	57-	Well type:	Not Reported
Casing dia:	5	Ground el:	28
Well depth:	310		
Solid case:	237	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	29.7	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	61		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-282
Bot solid:	-209	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 3-9-010:001
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000711

M35
ESE
1/4 - 1/2 Mile
Higher

FED USGS **USGS40000269580**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211807157502001		
Monloc name:	3-1850-05 W57 MAKIKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.2987801
Longitude:	-157.8361462	Sourcemap scale:	24000

Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	28.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	18820101	Welldepth:	310
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

N36
SE
1/4 - 1/2 Mile
Lower

HI WELLS **HI9000000000727**

Wid:	3-1850-021	Island:	Oahu
Well name:	Makiki	Old name:	Not Reported
Yr drilled:	1894		
Driller:	L. McCandless		
Quad map:	13		
Long83dd:	-157.836944		
Lat83dd:	21.297778		
Gps:	0	Utm:	-1
Owner user:	Board of Water Supply, BWS		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	58-	Well type:	Not Reported
Casing dia:	8	Ground el:	20
Well depth:	409		
Solid case:	312	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	29.8	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	62		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-389
Bot solid:	-292	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000727

Map ID Direction Distance Elevation	Database	EDR ID Number
O37 **West** **1/4 - 1/2 Mile** **Lower**	**HI WELLS**	**HI9000000000737**

Wid:	3-1851-001	Island:	Oahu
Well name:	H I C	Old name:	Not Reported
Yr drilled:	1881		
Driller:	Not Reported		
Quad map:	13		
Long83dd:	-157.849444		
Lat83dd:	21.301667		
Gps:	0	Utm:	-1
Owner user:	C. Ward		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	82-	Well type:	Not Reported
Casing dia:	6	Ground el:	16
Well depth:	540		
Solid case:	Not Reported	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	30.8	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	65		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-524
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000737

O38
West
1/4 - 1/2 Mile
Lower

FED USGS **USGS40000269616**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211817157510801		
Monloc name:	3-1851-01 W82 DWNTN		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.301558
Longitude:	-157.8494795	Sourcemap scale:	24000

Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	16.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	18810101	Welldepth:	540
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

L39
SSE
1/4 - 1/2 Mile
Lower

HI WELLS **HI9000000000611**

Wid:	3-1750-009	Island:	Oahu
Well name:	Ala Moana	Old name:	Not Reported
Yr drilled:	1964		
Driller:	Layne International		
Quad map:	13		
Long83dd:	-157.840472		
Lat83dd:	21.295806		
Gps:	0	Utm:	-1
Owner user:	HIH Pagoda Operating Company LLC		
Land owner:	Kamehameha Schools		
Pump insta:	Not Reported		
Old number:	63-1	Well type:	Not Reported
Casing dia:	16	Ground el:	7
Well depth:	53		
Solid case:	21	Perf case:	Not Reported
Use:	IRR - Landscape/Water Features		
Use year:	Not Reported		
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	550
Test ddown:	2.9	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-46
Bot solid:	-14	Bot perf:	Not Reported
Spec capac:	190		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 2-3-017:016
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	01-MAR-64
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000611

Map ID Direction Distance Elevation	Database	EDR ID Number
N40 **SE** **1/4 - 1/2 Mile** **Lower**	**HI WELLS**	**HI9000000000732**

Wid:	3-1850-026	Island:	Oahu
Well name:	Makiki	Old name:	Not Reported
Yr drilled:	1910		
Driller:	L. McCandless		
Quad map:	13		
Long83dd:	-157.837222		
Lat83dd:	21.297222		
Gps:	0	Utm:	-1
Owner user:	II Estate		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	59-	Well type:	Not Reported
Casing dia:	10	Ground el:	15
Well depth:	450		
Solid case:	356	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	27.7	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	57		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-435
Bot solid:	-341	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	01-JAN-10
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000732

N41
SE
1/4 - 1/2 Mile
Lower

FED USGS **USGS40000269567**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211801157502401		
Monloc name:	3-1850-26 W59 MAKIKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.2971135
Longitude:	-157.8372574	Sourcemap scale:	24000

Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	15.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19100101	Welldepth:	450
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

P42
ESE
1/2 - 1 Mile
Higher

FED USGS **USGS40000269607**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211815157501401		
Monloc name:	3-1850-06 W64 MAKIKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3010021
Longitude:	-157.8344795	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	47.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	18820101	Welldepth:	419
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

P43
East
1/2 - 1 Mile
Higher

HI WELLS **HI9000000000712**

Wid:	3-1850-006	Island:	Oahu
Well name:	Makiki	Old name:	Not Reported
Yr drilled:	1882		
Driller:	Not Reported		
Quad map:	13		
Long83dd:	-157.834444		
Lat83dd:	21.301111		
Gps:	0	Utm:	-1
Owner user:	James Dowsett (Mokuleia Land Co.)		
Land owner:	Not Reported		

Pump insta:	Not Reported		
Old number:	64-	Well type:	Not Reported
Casing dia:	4	Ground el:	47
Well depth:	419		
Solid case:	177	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	27.5	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-372
Bot solid:	-130	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 3-9-010:001
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000712

Q44
NE
1/2 - 1 Mile
Higher

FED USGS **USGS40000269702**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211842157502301		
Monloc name:	3-1850-25 W69 MAKIKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3085018
Longitude:	-157.8369793	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	150.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	19070101	Welldepth:	123
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

R45
WSW
1/2 - 1 Mile
Lower

HI WELLS **HI9000000000798**

Wid:	3-1851-062	Island:	Oahu
Well name:	Nbc	Old name:	Not Reported
Yr drilled:	1967		
Driller:	Layne International		
Quad map:	13		
Long83dd:	-157.850278		
Lat83dd:	21.300556		
Gps:	0	Utm:	-1
Owner user:	Department of Parks and Recreation, Honolulu, DPR		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	Not Reported	Well type:	Not Reported
Casing dia:	16	Ground el:	Not Reported
Well depth:	65		
Solid case:	14	Perf case:	Not Reported
Use:	IRR - Landscape/Water Features		
Use year:	Not Reported		
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	376		
Test date:	Not Reported	Test gpm:	600
Test ddown:	1.9	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	700		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	Not Reported
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	316		
Pump mgd:	1.008		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 2-3-008:001
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	14-JUL-67
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000798

O46
West
1/2 - 1 Mile
Lower

HI WELLS **HI9000000000796**

Wid:	3-1851-060	Island:	Oahu
Well name:	Ward Ave	Old name:	Not Reported
Yr drilled:	1962		
Driller:	Samson & Zerbe		
Quad map:	13		
Long83dd:	-157.850556		
Lat83dd:	21.302222		
Gps:	0	Utm:	-1
Owner user:	Straub Clinic		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	82-1	Well type:	Not Reported
Casing dia:	6	Ground el:	16
Well depth:	180		
Solid case:	160	Perf case:	180
Use:	Other		
Use year:	Not Reported		
Init head:	6	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	470		
Test date:	Not Reported	Test gpm:	115
Test ddown:	4	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	RTSP		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-164
Bot solid:	-144	Bot perf:	-164
Spec capac:	29		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 2-1-043:011
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	01-JAN-62
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000796

Q47
NE
1/2 - 1 Mile
Higher

HI WELLS **HI9000000000731**

Wid:	3-1850-025	Island:	Oahu
Well name:	Makiki	Old name:	Not Reported
Yr drilled:	1907		
Driller:	Not Reported		
Quad map:	13		
Long83dd:	-157.836944		
Lat83dd:	21.308611		
Gps:	0	Utm:	-1
Owner user:	C. Kim		
Land owner:	Not Reported		

Pump insta:	Not Reported		
Old number:	69-	Well type:	Not Reported
Casing dia:	12	Ground el:	150
Well depth:	123		
Solid case:	86	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	65		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	27
Bot solid:	64	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	01-JAN-07
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000731

O48
West
1/2 - 1 Mile
Lower

FED USGS **USGS40000269622**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211819157511201		
Monloc name:	3-1851-60 W82-1 DWNT		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3021136
Longitude:	-157.8505905	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	16.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	19620401	Welldepth:	180
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

R49
WSW
1/2 - 1 Mile
Lower

FED USGS **USGS40000269604**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211813157511101		
Monloc name:	3-1851-63 W82-2B DWN		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.300447
Longitude:	-157.8503128	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	5.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19670701	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

R50
WSW
1/2 - 1 Mile
Lower

FED USGS **USGS40000269605**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211813157511102		
Monloc name:	3-1851-62 W82-2A DWN		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.300447
Longitude:	-157.8503128	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	5.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	19670714	Welldepth:	65
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

51
North
1/2 - 1 Mile
Higher

HI WELLS **HI9000000000736**

Wid:	3-1850-030	Island:	Oahu
Well name:	Punchbowl Deep Mon	Old name:	Not Reported
Yr drilled:	2001		
Driller:	Beylik Drilling & Pump Service Inc.		
Quad map:	13		
Long83dd:	-157.842778		
Lat83dd:	21.310556		
Gps:	0	Utm:	-1
Owner user:	Board of Water Supply, BWS		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	Not Reported	Well type:	ROT
Casing dia:	8	Ground el:	175
Well depth:	1500		
Solid case:	250	Perf case:	Not Reported
Use:	OBS - Deep (through transition zone)		
Use year:	Not Reported		
Init head:	20.34	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-1325
Bot solid:	-75	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 2-2-005:005
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Board of Water Supply, BWS		
T:	Not Reported	Site id:	HI9000000000736

S52
ESE
1/2 - 1 Mile
Higher

HI WELLS **HI9000000000724**

Wid:	3-1850-018	Island:	Oahu
Well name:	Makiki	Old name:	Not Reported
Yr drilled:	1890		
Driller:	Not Reported		
Quad map:	13		
Long83dd:	-157.834722		
Lat83dd:	21.298333		
Gps:	0	Utm:	-1
Owner user:	J. Tanner		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	56-	Well type:	Not Reported
Casing dia:	8	Ground el:	29
Well depth:	383		
Solid case:	Not Reported	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	26.4	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-354
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000724

S53
ESE
1/2 - 1 Mile
Higher

FED USGS **USGS40000269578**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211805157501501		
Monloc name:	3-1850-18 W56 MAKIKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.2982245
Longitude:	-157.8347573	Sourcemap scale:	24000

Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	29.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	18900101	Welldepth:	383
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

T54
SE
1/2 - 1 Mile
Lower

HI WELLS **HI9000000000603**

Wid:	3-1750-001	Island:	Oahu
Well name:	McCully	Old name:	Not Reported
Yr drilled:	1881		
Driller:	Not Reported		
Quad map:	13		
Long83dd:	-157.836944		
Lat83dd:	21.295278		
Gps:	0	Utm:	-1
Owner user:	C&C of Honolulu		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	61-	Well type:	Not Reported
Casing dia:	8	Ground el:	14
Well depth:	475		
Solid case:	Not Reported	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	29.9	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	42		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-461
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000603

Map ID
Direction
Distance
Elevation

Database EDR ID Number

U55
ESE
1/2 - 1 Mile
Higher

HI WELLS **HI9000000000710**

Wid:	3-1850-004	Island:	Oahu
Well name:	Makiki	Old name:	Not Reported
Yr drilled:	1882		
Driller:	Pierce		
Quad map:	13		
Long83dd:	-157.833333		
Lat83dd:	21.299722		
Gps:	0	Utm:	-1
Owner user:	B. Dillingham		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	55-	Well type:	Not Reported
Casing dia:	6	Ground el:	36
Well depth:	300		
Solid case:	Not Reported	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	30	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-264
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 3-9-010:001
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000710

U56
ESE
1/2 - 1 Mile
Higher

FED USGS **USGS40000269591**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211810157501001		
Monloc name:	3-1850-04 W55 MAKIKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.2996133
Longitude:	-157.8333684	Sourcemap scale:	24000

Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	36.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	18820101	Welldepth:	300
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

T57
SSE **FED USGS** **USGS40000269556**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211754157502301		
Monloc name:	3-1750-01 W61 MCCULY		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.2951692
Longitude:	-157.8369797	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	14.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	18810101	Welldepth:	475
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

V58
NNE **FED USGS** **USGS40000269720**
1/2 - 1 Mile
Higher

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211849157502601		
Monloc name:	3-1850-01 W71 MAKIKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3104462
Longitude:	-157.8378126	Sourcemap scale:	24000

Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	144.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

V59
NNE **HI WELLS** **HI9000000000707**
1/2 - 1 Mile
Higher

Wid:	3-1850-001	Island:	Oahu
Well name:	Roosevelt Highschool	Old name:	Not Reported
Yr drilled:	0		
Driller:	Not Reported		
Quad map:	13		
Long83dd:	-157.837778		
Lat83dd:	21.310556		
Gps:	0	Utm:	-1
Owner user:	Not Reported		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	71-	Well type:	Not Reported
Casing dia:	7	Ground el:	144
Well depth:	0		
Solid case:	Not Reported	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	Not Reported
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 3-9-010:001
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000707

Map ID Direction Distance Elevation			Database	EDR ID Number
W60 **WSW** **1/2 - 1 Mile** **Lower**			**HI WELLS**	**HI9000000000799**

Wid:	3-1851-063	Island:	Oahu
Well name:	Blaisdell Center	Old name:	Not Reported
Yr drilled:	1967		
Driller:	Layne International		
Quad map:	13		
Long83dd:	-157.851667		
Lat83dd:	21.300278		
Gps:	0	Utm:	-1
Owner user:	C&C Dept. of Enterprise Services		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	Not Reported	Well type:	Not Reported
Casing dia:	16	Ground el:	Not Reported
Well depth:	80		
Solid case:	28	Perf case:	Not Reported
Use:	IRR - Landscape/Water Features		
Use year:	Not Reported		
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	2350		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	700		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	QA		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	Not Reported
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	1.008		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 2-3-008:001
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	01-JAN-67
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000799

X61 **West** **1/2 - 1 Mile** **Lower**		**HI WELLS**	**HI9000000000772**

Wid:	3-1851-036	Island:	Oahu
Well name:	Hotel St	Old name:	Not Reported
Yr drilled:	1936		
Driller:	W. Mullin		
Quad map:	13		
Long83dd:	-157.851944		
Lat83dd:	21.303611		
Gps:	0	Utm:	-1
Owner user:	Hawaiian Juice Industries		
Land owner:	Not Reported		

Pump insta:	Not Reported		
Old number:	80-	Well type:	Not Reported
Casing dia:	6	Ground el:	15
Well depth:	700		
Solid case:	603	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	29	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	38		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-685
Bot solid:	-588	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	01-JAN-36
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000772

X62 **West** **1/2 - 1 Mile** **Lower**		**FED USGS**	**USGS40000269638**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211824157511701		
Monloc name:	3-1851-36 W80 DWNTN		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3035024
Longitude:	-157.8519793	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	15.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	19360101	Welldepth:	700
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

X63
West
1/2 - 1 Mile
Lower

HI WELLS **HI9000000000744**

Wid:	3-1851-008	Island:	Oahu
Well name:	Hotel St	Old name:	Not Reported
Yr drilled:	1889		
Driller:	L. McCandless		
Quad map:	13		
Long83dd:	-157.852778		
Lat83dd:	21.303889		
Gps:	0	Utm:	-1
Owner user:	Not Reported		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	86-	Well type:	Not Reported
Casing dia:	8	Ground el:	19
Well depth:	648		
Solid case:	584	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	27.2	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	56		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-629
Bot solid:	-565	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000744

Y64
ESE
1/2 - 1 Mile
Lower

HI WELLS **HI9000000000708**

Wid:	3-1850-002	Island:	Oahu
Well name:	Makiki	Old name:	Not Reported
Yr drilled:	1880		
Driller:	Pierce		
Quad map:	13		
Long83dd:	-157.832778		
Lat83dd:	21.297778		
Gps:	0	Utm:	-1
Owner user:	Kamehameha Schools		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	51-	Well type:	Not Reported
Casing dia:	5	Ground el:	25
Well depth:	475		
Solid case:	347	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	29.8	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	51		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-450
Bot solid:	-322	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 3-9-010:001
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000708

X65
West
1/2 - 1 Mile
Lower

FED USGS **USGS40000269639**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211825157512001		
Monloc name:	3-1851-08 W86 DWNTN		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3037802
Longitude:	-157.8528126	Sourcemap scale:	24000

Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	19.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	18890101	Welldepth:	648
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

X66
West
1/2 - 1 Mile
Lower

FRDS PWS **HI0000308**

Epa region:	09	State:	HI
Pwsid:	HI0000308		
Pwsname:	MASS TRANSIT LINES		
City served:	Not Reported	State served:	HI
Zip served:	Not Reported	Fips county:	15003
Status:	Closed	Pop srvd:	400
Pwssvcconn:	1	Source:	Groundwater
Pws type:	CWS	Owner:	Private
Contact:	Not Reported		
Contactor gname:	Not Reported		
Contact phone:	Not Reported	Contact address1:	Not Reported
Contact address2:	Not Reported	Contact city:	Not Reported
Contact state:	Not Reported	Contact zip:	Not Reported
Activity code:	N		

Location Information:

Name:	MASS TRANSIT LINES		
Pwstypcd:	CWS	Primsrccd:	GW
Popserved:	400		
Add1:	Not Reported		
Add2:	Not Reported		
City:	Not Reported	State:	Not Reported
Zip:	Not Reported	Phone:	Not Reported
Cityserv:	Not Reported	Cntyserv:	Not Reported
Stateserv:	HI	Zipserv:	Not Reported

PWS ID:	HI0000308		
Date Initiated:	7706	Date Deactivated:	Not Reported
PWS Name:	MASS TRANSIT LINES 1140 ALAPAI HONOLULU, HI 96813		
Addressee / Facility:	Not Reported		

Facility Latitude:	21 18 25	Facility Longitude:	157 51 20
City Served:	Not Reported		
Treatment Class:	Untreated	Population:	00000400

Violations information not reported.

Y67
ESE
1/2 - 1 Mile
Lower

FED USGS **USGS40000269570**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211803157500801		
Monloc name:	3-1850-02 W51 MAKIKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.2976689
Longitude:	-157.8328129	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	25.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	18800101	Welldepth:	475
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

W68
WSW
1/2 - 1 Mile
Lower

HI WELLS **HI9000000000794**

Wid:	3-1851-058	Island:	Oahu
Well name:	Kapiolani Myers	Old name:	Not Reported
Yr drilled:	1960		
Driller:	Goodfellow Construction, Inc. Corporate		
Quad map:	13		
Long83dd:	-157.852778		
Lat83dd:	21.300278		
Gps:	0	Utm:	-1
Owner user:	Myers/Daiichi Midtown Par		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	86-1	Well type:	Not Reported
Casing dia:	6	Ground el:	6
Well depth:	710		
Solid case:	640	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported

Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-704
Bot solid:	-634	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 2-1-044:008
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	01-JAN-60
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000794

Z69
WNW
1/2 - 1 Mile
Lower

HI WELLS **HI9000000000756**

Wid:	3-1851-020	Island:	Oahu
Well name:	Beretania St.	Old name:	Not Reported
Yr drilled:	1901		
Driller:	L. McCandless		
Quad map:	13		
Long83dd:	-157.852778		
Lat83dd:	21.304722		
Gps:	0	Utm:	-1
Owner user:	Mas Transit, Ltd.		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	87-	Well type:	Not Reported
Casing dia:	8	Ground el:	19
Well depth:	576		
Solid case:	532	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	31.2	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	75		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	36	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	RTSP		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-557
Bot solid:	-513	Bot perf:	Not Reported
Spec capac:	Not Reported		

Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 2-1-042:011
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	01-JAN-01
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000756

Z70
WNW
1/2 - 1 Mile
Lower

FED USGS **USGS40000269645**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211828157512001		
Monloc name:	3-1851-20 W87 DWNTN		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3046135
Longitude:	-157.8528126	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	19.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19010901	Welldepth:	574
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

AA71
ESE
1/2 - 1 Mile
Higher

HI WELLS **HI9000000000717**

Wid:	3-1850-011	Island:	Oahu
Well name:	Makiki	Old name:	Not Reported
Yr drilled:	1882		
Driller:	Not Reported		
Quad map:	13		
Long83dd:	-157.831944		
Lat83dd:	21.299167		
Gps:	0	Utm:	-1
Owner user:	W. Dillingham		
Land owner:	Not Reported		

Pump insta:	Not Reported		
Old number:	53-	Well type:	Not Reported
Casing dia:	6	Ground el:	36
Well depth:	310		
Solid case:	267	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	24.1	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-274
Bot solid:	-231	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000717

AB72
West
1/2 - 1 Mile
Lower

HI WELLS **HI9000000000795**

Wid:	3-1851-059	Island:	Oahu
Well name:	King St	Old name:	Not Reported
Yr drilled:	1960		
Driller:	Goodfellow Construction, Inc. Corporate		
Quad map:	13		
Long83dd:	-157.853056		
Lat83dd:	21.302222		
Gps:	0	Utm:	-1
Owner user:	Spuds Laundry		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	85-1	Well type:	Not Reported
Casing dia:	4	Ground el:	8
Well depth:	678		
Solid case:	607	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	25.9	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	48		
Test date:	Not Reported	Test gpm:	Not Reported

Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	36	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	RTSP		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-670
Bot solid:	-599	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 2-1-045:017
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	01-JAN-60
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000795

AA73
ESE
1/2 - 1 Mile
Higher

FED USGS **USGS40000269583**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211808157500501		
Monloc name:	3-1850-11 W53 MAKIKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.2990577
Longitude:	-157.8319795	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	36.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	18830101	Welldepth:	310
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

AB74
West
1/2 - 1 Mile
Lower

FED USGS **USGS40000269623**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211819157512101		
Monloc name:	3-1851-59 W85-1 DWNT		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3021137
Longitude:	-157.8530904	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	8.00
Vert measure units:	feet	Vertacc measure val:	.5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19600101	Welldepth:	736
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1964-04-27	-17.90	

AA75
ESE
1/2 - 1 Mile
Higher

FED USGS **USGS40000269590**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211810157500401		
Monloc name:	3-1850-14 W54 MAKIKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.2996132
Longitude:	-157.8317017	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	40.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	18840101	Welldepth:	271
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

AA76
ESE
1/2 - 1 Mile
Higher

HI WELLS **HI9000000000720**

Wid:	3-1850-014	Island:	Oahu
Well name:	Makiki	Old name:	Not Reported
Yr drilled:	1884		
Driller:	Not Reported		
Quad map:	13		
Long83dd:	-157.831667		
Lat83dd:	21.299722		
Gps:	0	Utm:	-1
Owner user:	R. King		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	54-	Well type:	Not Reported
Casing dia:	6	Ground el:	40
Well depth:	271		
Solid case:	240	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	30.8	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-231
Bot solid:	-200	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000720

Z77
WNW
1/2 - 1 Mile
Lower

FED USGS **USGS40000269657**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211831157512003		
Monloc name:	3-1851-24 W88-A DWNT		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3054468
Longitude:	-157.8528126	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	20.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19100101	Welldepth:	607
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

Z78
WNW
1/2 - 1 Mile
Lower

FED USGS **USGS40000269658**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211831157512004		
Monloc name:	3-1851-12,13,24,ETC		
Monloc type:	Well: Multiple wells		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3054468
Longitude:	-157.8528126	Sourcemap scale:	Not Reported
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID
Direction
Distance
Elevation

Database EDR ID Number

Z79
WNW
1/2 - 1 Mile
Lower

FED USGS **USGS40000269656**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211831157512002		
Monloc name:	3-1851-13 W88-I DWNT		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3054468
Longitude:	-157.8528126	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	22.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	18950101	Welldepth:	616
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

Z80
WNW
1/2 - 1 Mile
Lower

FED USGS **USGS40000269654**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211831157512000		
Monloc name:	3-1851-67 W88-J		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3054468
Longitude:	-157.8528126	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	18.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	19680101	Welldepth:	652
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

Z81
WNW
1/2 - 1 Mile
Lower

FED USGS **USGS40000269655**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211831157512001		
Monloc name:	3-1851-12 W88-H DWNT		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3054468
Longitude:	-157.8528126	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	21.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	18950101	Welldepth:	580
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

Z82
WNW
1/2 - 1 Mile
Lower

FED USGS **USGS40000269662**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211831157512008		
Monloc name:	3-1851-34 W88-F DWNT		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3054468
Longitude:	-157.8528126	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	14.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	19260101	Welldepth:	636
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

Z83
WNW
1/2 - 1 Mile
Lower

FED USGS **USGS40000269663**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211831157512009		
Monloc name:	3-1851-35 W88-G DWNT		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3054468
Longitude:	-157.8528126	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	15.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19260101	Welldepth:	566
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

Z84
WNW
1/2 - 1 Mile
Lower

FED USGS **USGS40000269661**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211831157512007		
Monloc name:	3-1851-33 W88-E DWNT		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3054468
Longitude:	-157.8528126	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	14.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	19260101	Welldepth:	533
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

Z85
WNW
1/2 - 1 Mile
Lower

FED USGS **USGS40000269659**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211831157512005		
Monloc name:	3-1851-31 W88-C DWNT		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3054468
Longitude:	-157.8528126	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	20.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19240101	Welldepth:	600
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

Z86
WNW
1/2 - 1 Mile
Lower

FED USGS **USGS40000269660**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211831157512006		
Monloc name:	3-1851-32 W88-D DWNT		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3054468
Longitude:	-157.8528126	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	20.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	19240101	Welldepth:	600
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

Z87
WNW
1/2 - 1 Mile
Lower

HI WELLS **HI9000000000760**

Wid:	3-1851-024	Island:	Oahu
Well name:	Beretania P Station	Old name:	Not Reported
Yr drilled:	1910		
Driller:	L. McCandless		
Quad map:	13		
Long83dd:	-157.852778		
Lat83dd:	21.305556		
Gps:	0	Utm:	-1
Owner user:	Board of Water Supply, BWS		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	88-A	Well type:	Not Reported
Casing dia:	12	Ground el:	20
Well depth:	616		
Solid case:	487	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	26.9	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-596
Bot solid:	-467	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 2-1-036:004
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	01-JAN-10
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000760

Z88
WNW
1/2 - 1 Mile
Lower

HI WELLS **HI9000000000761**

Wid:	3-1851-025	Island:	Oahu
Well name:	Beretania P Station	Old name:	Not Reported
Yr drilled:	1910		
Driller:	L. McCandless		
Quad map:	13		
Long83dd:	-157.852778		
Lat83dd:	21.305556		
Gps:	0	Utm:	-1
Owner user:	Board of Water Supply, BWS		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	88-B	Well type:	Not Reported
Casing dia:	12	Ground el:	17
Well depth:	617		
Solid case:	495	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	27.7	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-600
Bot solid:	-478	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 2-1-036:004
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	01-JAN-10
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000761

Z89
WNW
1/2 - 1 Mile
Lower

HI WELLS **HI9000000000768**

Wid:	3-1851-032	Island:	Oahu
Well name:	Beretania P Station	Old name:	Not Reported
Yr drilled:	1924		
Driller:	L. McCandless		
Quad map:	13		
Long83dd:	-157.852778		
Lat83dd:	21.305556		
Gps:	0	Utm:	-1
Owner user:	Board of Water Supply, BWS		
Land owner:	Not Reported		

Pump insta:	Not Reported		
Old number:	88-D	Well type:	Not Reported
Casing dia:	12	Ground el:	20
Well depth:	600		
Solid case:	489	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	27.8	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-580
Bot solid:	-469	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 2-1-036:004
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	01-JAN-24
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000768

Z90
WNW
1/2 - 1 Mile
Lower

HI WELLS **HI9000000000767**

Wid:	3-1851-031	Island:	Oahu
Well name:	Beretania P Station	Old name:	Not Reported
Yr drilled:	1924		
Driller:	L. McCandless		
Quad map:	13		
Long83dd:	-157.852778		
Lat83dd:	21.305556		
Gps:	0	Utm:	-1
Owner user:	Board of Water Supply, BWS		
Land owner:	State of Hawaii		
Pump insta:	Not Reported		
Old number:	88-C	Well type:	Not Reported
Casing dia:	12	Ground el:	20
Well depth:	600		
Solid case:	489	Perf case:	Not Reported
Use:	MUN - County		
Use year:	Not Reported		
Init head:	28	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported

Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-580
Bot solid:	-469	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 2-1-036:004
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	01-JAN-24
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000767

Z91
WNW
1/2 - 1 Mile
Lower

HI WELLS **HI9000000000749**

Wid:	3-1851-013	Island:	Oahu
Well name:	Beretania P Station	Old name:	Not Reported
Yr drilled:	1895		
Driller:	L. McCandless		
Quad map:	13		
Long83dd:	-157.852778		
Lat83dd:	21.305556		
Gps:	0	Utm:	-1
Owner user:	Board of Water Supply, BWS		
Land owner:	State of Hawaii		
Pump insta:	Not Reported		
Old number:	88-I	Well type:	Not Reported
Casing dia:	10	Ground el:	22
Well depth:	616		
Solid case:	499	Perf case:	Not Reported
Use:	MUN - County		
Use year:	Not Reported		
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-594
Bot solid:	-477	Bot perf:	Not Reported
Spec capac:	Not Reported		

Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 2-1-036:004
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000749

Z92
WNW
1/2 - 1 Mile
Lower

HI WELLS **HI9000000000748**

Wid:	3-1851-012	Island:	Oahu
Well name:	Beretania P Station	Old name:	Not Reported
Yr drilled:	1895		
Driller:	L. McCandless		
Quad map:	13		
Long83dd:	-157.852778		
Lat83dd:	21.305556		
Gps:	0	Utm:	-1
Owner user:	Board of Water Supply, BWS		
Land owner:	State of Hawaii		
Pump insta:	Not Reported		
Old number:	88-H	Well type:	Not Reported
Casing dia:	10	Ground el:	21
Well depth:	580		
Solid case:	499	Perf case:	Not Reported
Use:	MUN - County		
Use year:	Not Reported		
Init head:	32	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-559
Bot solid:	-478	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 2-1-036:004
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000748

Map ID Direction Distance Elevation			Database	EDR ID Number
Z93 **WNW** **1/2 - 1 Mile** **Lower**			**HI WELLS**	**HI9000000000771**

Wid:	3-1851-035	Island:	Oahu
Well name:	Beretania P Station	Old name:	Not Reported
Yr drilled:	1926		
Driller:	G Primmer		
Quad map:	13		
Long83dd:	-157.852778		
Lat83dd:	21.305556		
Gps:	0	Utm:	-1
Owner user:	Board of Water Supply, BWS		
Land owner:	State of Hawaii		
Pump insta:	Not Reported		
Old number:	88-G	Well type:	Not Reported
Casing dia:	12	Ground el:	15
Well depth:	566		
Solid case:	488	Perf case:	Not Reported
Use:	MUN - County		
Use year:	Not Reported		
Init head:	23.3	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	47		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-551
Bot solid:	-473	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 2-1-036:004
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	01-JAN-26
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000771

Z94 **WNW** **1/2 - 1 Mile** **Lower**		**HI WELLS**	**HI9000000000803**

Wid:	3-1851-067	Island:	Oahu
Well name:	Beretania Obs	Old name:	Not Reported
Yr drilled:	1968		
Driller:	Layne International		
Quad map:	13		
Long83dd:	-157.852778		
Lat83dd:	21.305556		
Gps:	0	Utm:	-1
Owner user:	Board of Water Supply, BWS		
Land owner:	State of Hawaii		

Pump insta:	Not Reported		
Old number:	88-J	Well type:	ROT
Casing dia:	20	Ground el:	18
Well depth:	619		
Solid case:	484	Perf case:	Not Reported
Use:	OBS - Deep (through transition zone)		
Use year:	Not Reported		
Init head:	3	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-601
Bot solid:	-466	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 2-1-036:004
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	01-JAN-68
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000803

Z95 **WNW** **1/2 - 1 Mile** **Lower**		**HI WELLS**	**HI9000000000769**

Wid:	3-1851-033	Island:	Oahu
Well name:	Beretania P Station	Old name:	Not Reported
Yr drilled:	1926		
Driller:	G Primmer		
Quad map:	13		
Long83dd:	-157.852778		
Lat83dd:	21.305556		
Gps:	0	Utm:	-1
Owner user:	Board of Water Supply, BWS		
Land owner:	State of Hawaii		
Pump insta:	Not Reported		
Old number:	88-E	Well type:	Not Reported
Casing dia:	12	Ground el:	14
Well depth:	533		
Solid case:	479	Perf case:	Not Reported
Use:	MUN - County		
Use year:	Not Reported		
Init head:	23.6	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported

Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-519
Bot solid:	-465	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 2-1-036:004
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	01-JAN-26
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000769

Z96
WNW
1/2 - 1 Mile
Lower

HI WELLS **HI9000000000770**

Wid:	3-1851-034	Island:	Oahu
Well name:	Beretania P Station	Old name:	Not Reported
Yr drilled:	1926		
Driller:	G Primmer		
Quad map:	13		
Long83dd:	-157.852778		
Lat83dd:	21.305556		
Gps:	0	Utm:	-1
Owner user:	Board of Water Supply, BWS		
Land owner:	State of Hawaii		
Pump insta:	Not Reported		
Old number:	88-F	Well type:	Not Reported
Casing dia:	12	Ground el:	14
Well depth:	636		
Solid case:	484	Perf case:	Not Reported
Use:	MUN - County		
Use year:	Not Reported		
Init head:	23.6	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	55		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-622
Bot solid:	-470	Bot perf:	Not Reported
Spec capac:	Not Reported		

Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 2-1-036:004
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	01-JAN-26
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000770

AB97
West
1/2 - 1 Mile
Lower

HI WELLS **HI9000000000800**

Wid:	3-1851-064	Island:	Oahu
Well name:	King St	Old name:	Not Reported
Yr drilled:	1967		
Driller:	Roscoe Moss Hawaii Inc		
Quad map:	13		
Long83dd:	-157.853333		
Lat83dd:	21.302778		
Gps:	0	Utm:	-1
Owner user:	Berts Service		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	85-2	Well type:	PER
Casing dia:	8	Ground el:	7
Well depth:	91		
Solid case:	27	Perf case:	35
Use:	Other		
Use year:	Not Reported		
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	200
Test ddown:	0.3	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	RTSP		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-84
Bot solid:	-20	Bot perf:	-28
Spec capac:	667		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	01-JAN-67
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000800

Map ID Direction Distance Elevation	Database	EDR ID Number
AB98 **West** **1/2 - 1 Mile** **Lower**	**FED USGS**	**USGS40000269633**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211821157512201		
Monloc name:	3-1851.03 -64/W85-2		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3026692
Longitude:	-157.8533682	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	7.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19671008	Welldepth:	91
Welldepth units:	ft	Wellholedepth:	91
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1967-10-05	7.00	

Note: The site had been pumped recently.

AB99 **West** **1/2 - 1 Mile** **Lower**	**HI WELLS**	**HI9000000000751**	

Wid:	3-1851-015	Island:	Oahu
Well name:	Ward Ave	Old name:	Not Reported
Yr drilled:	1898		
Driller:	L. McCandless		
Quad map:	13		
Long83dd:	-157.853333		
Lat83dd:	21.301111		
Gps:	0	Utm:	-1
Owner user:	Hawaiian Electric Company, Inc., HECO		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	85-	Well type:	Not Reported
Casing dia:	8	Ground el:	5
Well depth:	734		
Solid case:	602	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	28.3	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	70		
Test date:	Not Reported	Test gpm:	Not Reported

Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-729
Bot solid:	-597	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 2-1-044:039
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000751

AC100 **SE** **1/2 - 1 Mile** **Lower**	**HI WELLS**	**HI9000000000607**	

Wid:	3-1750-005	Island:	Oahu
Well name:	McCully	Old name:	Not Reported
Yr drilled:	1953		
Driller:	Not Reported		
Quad map:	13		
Long83dd:	-157.833056		
Lat83dd:	21.296389		
Gps:	0	Utm:	-1
Owner user:	Times Market		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	Not Reported	Well type:	Not Reported
Casing dia:	8	Ground el:	Not Reported
Well depth:	154		
Solid case:	70	Perf case:	Not Reported
Use:	UNU - Unused		
Use year:	Not Reported		
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	50
Test ddown:	8	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	Not Reported
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		

Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000607

AC101
SE **FED USGS** **USGS40000269562**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211758157500901		
Monloc name:	3-1750-05 W50 MCCULY		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.2962801
Longitude:	-157.8330907	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	15.00
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19530801	Welldepth:	154
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1953-08-01	12.00	

AB102
West **FED USGS** **USGS40000269608**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211815157512202		
Monloc name:	3-1851-15 W85 DWNTN		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3010026
Longitude:	-157.8533682	Sourcemap scale:	24000

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	5.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	18980101	Welldepth:	734
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

Z103
WNW **HI WELLS** **HI9000000000811**
1/2 - 1 Mile
Lower

Wid:	3-1851-075	Island:	Oahu
Well name:	Beretania Station 2	Old name:	Not Reported
Yr drilled:	1989		
Driller:	Water Resources International, Inc.		
Quad map:	13		
Long83dd:	-157.853056		
Lat83dd:	21.305556		
Gps:	0	Utm:	-1
Owner user:	Board of Water Supply, BWS		
Land owner:	State of Hawaii		
Pump insta:	Not Reported		
Old number:	Not Reported	Well type:	ROT
Casing dia:	14	Ground el:	18
Well depth:	625		
Solid case:	523	Perf case:	Not Reported
Use:	MUN - County		
Use year:	Not Reported		
Init head:	22.9	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	5/12/1989	Test gpm:	1400
Test ddown:	2.2	Test chlor:	102
Test temp:	20.4	Test unit:	C
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-607
Bot solid:	-505	Bot perf:	Not Reported
Spec capac:	636		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 2-1-036:004
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	14-MAY-89
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000811

Map ID Direction Distance Elevation	Database	EDR ID Number
Z104 **WNW** **1/2 - 1 Mile** **Lower**	**FED USGS**	**USGS40000269664**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211831157512101		
Monloc name:	3-1851-25 W88-B DWNT		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3054468
Longitude:	-157.8530904	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	17.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19100101	Welldepth:	617
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

AC105 **SE** **1/2 - 1 Mile** **Lower**	**HI WELLS**	**HI9000000000605**	

Wid:	3-1750-003	Island:	Oahu
Well name:	McCully	Old name:	Not Reported
Yr drilled:	1890		
Driller:	Not Reported		
Quad map:	13		
Long83dd:	-157.833333		
Lat83dd:	21.295833		
Gps:	0	Utm:	-1
Owner user:	Diamond Bakery		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	Not Reported	Well type:	Not Reported
Casing dia:	8	Ground el:	10
Well depth:	374		
Solid case:	340	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	28.2	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported

Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-364
Bot solid:	-330	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000605

AC106 **SE** **1/2 - 1 Mile** **Lower**	**FED USGS**	**USGS40000269559**	

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211756157501001		
Monloc name:	3-1750-03 W46 MCCULY		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.2957246
Longitude:	-157.8333685	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	10.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	18900101	Welldepth:	374
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

AD107 **ENE** **1/2 - 1 Mile** **Higher**	**FED USGS**	**USGS40000269698**	

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211841157500701		
Monloc name:	3-1850-24 W68 MAKIKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3082239
Longitude:	-157.8325349	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	137.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19060101	Welldepth:	302
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

AE108
ENE
1/2 - 1 Mile
Higher

FED USGS **USGS40000269677**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211834157500301		
Monloc name:	3-1850-23 W67 MAKIKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3062796
Longitude:	-157.8314238	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	104.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	18990101	Welldepth:	194
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID Direction Distance Elevation	Database	EDR ID Number
AD109 **ENE** **1/2 - 1 Mile** **Higher**	**HI WELLS**	**HI9000000000730**

Wid:	3-1850-024	Island:	Oahu
Well name:	Makiki	Old name:	Not Reported
Yr drilled:	1906		
Driller:	Not Reported		
Quad map:	13		
Long83dd:	-157.8325		
Lat83dd:	21.308333		
Gps:	0	Utm:	-1
Owner user:	S. Lowrey		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	68-	Well type:	Not Reported
Casing dia:	10	Ground el:	137
Well depth:	302		
Solid case:	256	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	16	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	32		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-165
Bot solid:	-119	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	01-JAN-06
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000730

AE110
ENE
1/2 - 1 Mile
Higher

HI WELLS **HI9000000000729**

Wid:	3-1850-023	Island:	Oahu
Well name:	Makiki	Old name:	Not Reported
Yr drilled:	1899		
Driller:	L. McCandless		
Quad map:	13		
Long83dd:	-157.831389		
Lat83dd:	21.306389		
Gps:	0	Utm:	-1
Owner user:	M. Condon		
Land owner:	Not Reported		

Pump insta:	Not Reported		
Old number:	67-	Well type:	Not Reported
Casing dia:	10	Ground el:	104
Well depth:	194		
Solid case:	86	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	33	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	47		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-90
Bot solid:	18	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000729

AF111
WNW
1/2 - 1 Mile
Lower

FED USGS **USGS40000269670**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211833157512201		
Monloc name:	3-1851-58 W86-1 DWNT		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3060023
Longitude:	-157.853368	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	6.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	19600101	Welldepth:	720
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

AF112
WNW
1/2 - 1 Mile
Lower

FED USGS **USGS40000269671**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211833157512202		
Monloc name:	3-1851-57 T85 DWNTN		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3060023
Longitude:	-157.853368	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	23.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19600101	Welldepth:	1509
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

AF113
WNW
1/2 - 1 Mile
Lower

HI WELLS **HI9000000000793**

Wid:	3-1851-057	Island:	Oahu
Well name:	Beretania Deep Monitor	Old name:	Not Reported
Yr drilled:	1960		
Driller:	Goodfellow Construction, Inc. Corporate		
Quad map:	13		
Long83dd:	-157.853333		
Lat83dd:	21.306111		
Gps:	0	Utm:	-1
Owner user:	Board of Water Supply, BWS		
Land owner:	Board of Water Supply, BWS		
Pump insta:	Not Reported		
Old number:	T85-	Well type:	Not Reported
Casing dia:	6	Ground el:	23
Well depth:	1509		
Solid case:	450	Perf case:	Not Reported
Use:	OBS - Deep (through transition zone)		
Use year:	Not Reported		
Init head:	26.9	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported

Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-1486
Bot solid:	-427	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 2-1-036:005
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	01-JAN-60
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000793

AA114
ESE
1/2 - 1 Mile
Higher

HI WELLS **HI9000000000716**

Wid:	3-1850-010	Island:	Oahu
Well name:	Makiki	Old name:	Not Reported
Yr drilled:	1883		
Driller:	Not Reported		
Quad map:	13		
Long83dd:	-157.831389		
Lat83dd:	21.298056		
Gps:	0	Utm:	-1
Owner user:	Lin Yap		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	49-	Well type:	Not Reported
Casing dia:	6	Ground el:	28
Well depth:	281		
Solid case:	234	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	30.3	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-253
Bot solid:	-206	Bot perf:	Not Reported
Spec capac:	Not Reported		

Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000716

Y115
ESE
1/2 - 1 Mile
Higher

FED USGS **USGS40000269575**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211804157500301		
Monloc name:	3-1850-10 W49 MAKIKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.2979467
Longitude:	-157.831424	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	28.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	18830101	Welldepth:	281
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

AG116
ESE
1/2 - 1 Mile
Higher

FED USGS **USGS40000269589**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211810157500001		
Monloc name:	3-1850-13 W52 MAKIKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.2996132
Longitude:	-157.8305906	Sourcemap scale:	24000

Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	37.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	18840101	Welldepth:	357
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

AG117
ESE
1/2 - 1 Mile
Higher

HI WELLS **HI9000000000719**

Wid:	3-1850-013	Island:	Oahu
Well name:	Makiki	Old name:	Not Reported
Yr drilled:	1884		
Driller:	Not Reported		
Quad map:	13		
Long83dd:	-157.830556		
Lat83dd:	21.299722		
Gps:	0	Utm:	-1
Owner user:	J. Villada		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	52-	Well type:	Not Reported
Casing dia:	6	Ground el:	37
Well depth:	357		
Solid case:	254	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	42.9	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	54		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-320
Bot solid:	-217	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000719

Map ID Direction Distance Elevation	Database	EDR ID Number
AF118 **WNW** **1/2 - 1 Mile** **Lower**	**FED USGS**	**USGS40000269672**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211833157512301		
Monloc name:	3-1851-75 BERETANIA W2		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3060023
Longitude:	-157.8536459	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	18.6
Vert measure units:	feet	Vertacc measure val:	.1
Vert accmeasure units:	feet		
Vertcollection method:	Level or other surveying method		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19890512	Welldepth:	625
Welldepth units:	ft	Wellholedepth:	625
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1989-05-12	-22.9	

AF119
WNW
1/2 - 1 Mile
Lower

HI WELLS **HI9000000000810**

Wid:	3-1851-074	Island:	Oahu
Well name:	Beretania Sta 1	Old name:	Not Reported
Yr drilled:	1988		
Driller:	Water Resources International, Inc.		
Quad map:	13		
Long83dd:	-157.853611		
Lat83dd:	21.306111		
Gps:	0	Utm:	-1
Owner user:	Board of Water Supply, BWS		
Land owner:	State of Hawaii		
Pump insta:	Not Reported		
Old number:	Not Reported	Well type:	ROT
Casing dia:	14	Ground el:	19
Well depth:	598		
Solid case:	498	Perf case:	Not Reported
Use:	MUN - County		
Use year:	Not Reported		
Init head:	21	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	9/26/1988	Test gpm:	1400

Test ddown:	1.9	Test chlor:	66
Test temp:	21.5	Test unit:	C
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-579
Bot solid:	-479	Bot perf:	Not Reported
Spec capac:	737		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 2-1-036:006
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	09-SEP-88
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000810

AF120
WNW
1/2 - 1 Mile
Lower

FED USGS **USGS40000269678**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211834157512301		
Monloc name:	3-1851-74 BERETANIA STA		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3062801
Longitude:	-157.8536459	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	19.0
Vert measure units:	feet	Vertacc measure val:	.1
Vert accmeasure units:	feet		
Vertcollection method:	Level or other surveying method		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19880908	Welldepth:	598
Welldepth units:	ft	Wellholedepth:	598
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1988-09-23	-21.	

AH121
East
1/2 - 1 Mile
Higher

FED USGS **USGS40000269611**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211816157495801		
Monloc name:	3-1849-05 W39 MAKIKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3012798
Longitude:	-157.830035	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	48.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	18890101	Welldepth:	213
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

AH122
East
1/2 - 1 Mile
Higher

HI WELLS **HI9000000000695**

Wid:	3-1849-005	Island:	Oahu
Well name:	Manoa Valley	Old name:	Not Reported
Yr drilled:	1889		
Driller:	Not Reported		
Quad map:	13		
Long83dd:	-157.83		
Lat83dd:	21.301389		
Gps:	0	Utm:	-1
Owner user:	Punahou School		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	39-	Well type:	Not Reported
Casing dia:	6	Ground el:	48
Well depth:	213		
Solid case:	172	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	35.8	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	55		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-165
Bot solid:	-124	Bot perf:	Not Reported
Spec capac:	Not Reported		

Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000695

AF123
WNW
1/2 - 1 Mile
Lower

FED USGS **USGS40000269687**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211837157512301		
Monloc name:	3-1851-11 W98 DWNTN		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3071134
Longitude:	-157.8536459	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	24.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	18940101	Welldepth:	521
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

AI124
WNW
1/2 - 1 Mile
Higher

HI WELLS **HI9000000000747**

Wid:	3-1851-011	Island:	Oahu
Well name:	Queens Hosp	Old name:	Not Reported
Yr drilled:	1894		
Driller:	L. McCandless		
Quad map:	13		
Long83dd:	-157.853333		
Lat83dd:	21.307778		
Gps:	0	Utm:	-1
Owner user:	The Queens Medical Center		
Land owner:	Not Reported		

Pump insta:	Not Reported		
Old number:	98-	Well type:	Not Reported
Casing dia:	8	Ground el:	24
Well depth:	521		
Solid case:	419	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	27.1	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	49		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-497
Bot solid:	-395	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000747

AJ125
ESE
1/2 - 1 Mile
Lower

HI WELLS **HI9000000000718**

Wid:	3-1850-012	Island:	Oahu
Well name:	Makiki	Old name:	Not Reported
Yr drilled:	1884		
Driller:	Not Reported		
Quad map:	13		
Long83dd:	-157.830556		
Lat83dd:	21.298056		
Gps:	0	Utm:	-1
Owner user:	Howard Murai (Maui Lani Partners)		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	47-	Well type:	Not Reported
Casing dia:	6	Ground el:	25
Well depth:	311		
Solid case:	305	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	30.7	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	60		
Test date:	Not Reported	Test gpm:	Not Reported

Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-286
Bot solid:	-280	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000718

AJ126
ESE
1/2 - 1 Mile
Lower

FED USGS **USGS40000269574**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211804157500001		
Monloc name:	3-1850-12 W47 MAKIKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.2979466
Longitude:	-157.8305906	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	25.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	18840101	Welldepth:	311
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

127
East
1/2 - 1 Mile
Higher

HI WELLS **HI9000000000705**

Wid:	3-1849-015	Island:	Oahu
Well name:	Wilder Avenue Well 4	Old name:	Not Reported
Yr drilled:	1962		
Driller:	Goodfellow Construction, Inc. Corporate		
Quad map:	13		
Long83dd:	-157.829639		
Lat83dd:	21.30325		
Gps:	-1	Utm:	0
Owner user:	Board of Water Supply, BWS		
Land owner:	Board of Water Supply, BWS		
Pump insta:	Derrick Moreira (Derrick's Well Drilling & Pump Services, LLC)		
Old number:	36-C	Well type:	ROT
Casing dia:	10	Ground el:	47
Well depth:	445		
Solid case:	321	Perf case:	Not Reported
Use:	MUN - County		
Use year:	Not Reported		
Init head:	0	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	2/22/1995	Test gpm:	1141
Test ddown:	4	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	1750		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	1977		
Draft yr:	Not Reported	Bot hole:	-398
Bot solid:	-274	Bot perf:	Not Reported
Spec capac:	285		
Pump mgd:	2.52		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 2-8-017:029
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	01-JAN-62
Pir:	4/22/2013		
Surveyor:	Board of Water Supply, BWS		
T:	Not Reported	Site id:	HI9000000000705

AG128
ESE
1/2 - 1 Mile
Higher

FED USGS **USGS40000269587**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211809157495801		
Monloc name:	3-1849-04 W41 MAKIKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.2993354
Longitude:	-157.830035	Sourcemap scale:	24000

Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	30.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	18850101	Welldepth:	260
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1885-06-01	-42.00	

AG129
ESE
1/2 - 1 Mile
Higher

HI WELLS **HI9000000000694**

Wid:	3-1849-004	Island:	Oahu
Well name:	Manoa Valley	Old name:	Not Reported
Yr drilled:	1885		
Driller:	Not Reported		
Quad map:	13		
Long83dd:	-157.83		
Lat83dd:	21.299444		
Gps:	0	Utm:	-1
Owner user:	T. Soon		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	41-	Well type:	Not Reported
Casing dia:	6	Ground el:	30
Well depth:	260		
Solid case:	181	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	42	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	52		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-230
Bot solid:	-151	Bot perf:	Not Reported
Spec capac:	Not Reported		

Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000694

AK130
West
1/2 - 1 Mile
Lower

HI WELLS **HI9000000000750**

Wid:	3-1851-014	Island:	Oahu
Well name:	Kapiolani Blvd	Old name:	Not Reported
Yr drilled:	1897		
Driller:	L. McCandless		
Quad map:	13		
Long83dd:	-157.855		
Lat83dd:	21.3025		
Gps:	0	Utm:	-1
Owner user:	C&C of Honolulu		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	91-	Well type:	Not Reported
Casing dia:	6	Ground el:	9
Well depth:	691		
Solid case:	650	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	24.9	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	80		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-682
Bot solid:	-641	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000750

Map ID Direction Distance Elevation	Database	EDR ID Number
AJ131 **ESE** **1/2 - 1 Mile** **Lower**	**HI WELLS**	**HI9000000000692**

Wid:	3-1849-002	Island:	Oahu
Well name:	Manoa Valley	Old name:	Not Reported
Yr drilled:	1881		
Driller:	Fessler		
Quad map:	13		
Long83dd:	-157.830278		
Lat83dd:	21.298056		
Gps:	0	Utm:	-1
Owner user:	Howard Murai (Maui Lani Partners)		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	48-	Well type:	Not Reported
Casing dia:	8	Ground el:	25
Well depth:	358		
Solid case:	306	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	30	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	51		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-333
Bot solid:	-281	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000692

AK132
West
1/2 - 1 Mile
Lower

FED USGS **USGS40000269627**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211820157512801		
Monloc name:	3-1851-14 W91 DWNTN		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3023915
Longitude:	-157.8550348	Sourcemap scale:	24000

Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	9.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	18970101	Welldepth:	691
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

AJ133
ESE
1/2 - 1 Mile
Lower

FED USGS **USGS40000269573**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211804157495901		
Monloc name:	3-1849-02 W48 MAKIKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.2979466
Longitude:	-157.8303129	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	25.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	18810101	Welldepth:	358
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1881-01-01	-42.00	

AL134
West
1/2 - 1 Mile
Lower

FED USGS **USGS40000269609**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211815157512801		
Monloc name:	3-1851-26 W89 DWNTN		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3010027
Longitude:	-157.8550348	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	6.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19100101	Welldepth:	725
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

AL135
West
1/2 - 1 Mile
Lower

HI WELLS **HI9000000000762**

Wid:	3-1851-026	Island:	Oahu
Well name:	Kapiolani Blvd	Old name:	Not Reported
Yr drilled:	1910		
Driller:	L. McCandless		
Quad map:	13		
Long83dd:	-157.855079		
Lat83dd:	21.301106		
Gps:	0	Utm:	-1
Owner user:	Bus Invest LTD		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	89-	Well type:	Not Reported
Casing dia:	8	Ground el:	6
Well depth:	725		
Solid case:	659	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	27.8	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	95		
Test date:	Not Reported	Test gpm:	800
Test ddown:	6	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-719
Bot solid:	-653	Bot perf:	Not Reported
Spec capac:	133		

Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 2-1-049:053
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	01-JAN-10
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000762

136
SSW
1/2 - 1 Mile
Lower

HI WELLS **HI9000000000627**

Wid:	3-1751-004	Island:	Oahu
Well name:	Ala Moana	Old name:	Not Reported
Yr drilled:	1967		
Driller:	Layne International		
Quad map:	13		
Long83dd:	-157.848056		
Lat83dd:	21.291389		
Gps:	0	Utm:	-1
Owner user:	Not Reported		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	76-1	Well type:	Not Reported
Casing dia:	Not Reported	Ground el:	5
Well depth:	0		
Solid case:	Not Reported	Perf case:	Not Reported
Use:	Other		
Use year:	Not Reported		
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	RF		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	Not Reported
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 2-3-006:001
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	01-JAN-67
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000627

Map ID Direction Distance Elevation	Database	EDR ID Number
AM137 **ENE** **1/2 - 1 Mile** **Higher**	**FED USGS**	**USGS40000269709**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211844157500101		
Monloc name:	3-1850-03 W70 MAKIKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3090572
Longitude:	-157.8308682	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	160.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	18810101	Welldepth:	900
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

AI138 **WNW** **1/2 - 1 Mile** **Higher**	**HI WELLS**	**HI9000000000790**

Wid:	3-1851-054	Island:	Oahu
Well name:	Queens Hospital	Old name:	Not Reported
Yr drilled:	1958		
Driller:	Goodfellow Construction, Inc. Corporate		
Quad map:	13		
Long83dd:	-157.853651		
Lat83dd:	21.308995		
Gps:	-1	Utm:	0
Owner user:	The Queens Medical Center		
Land owner:	The Queens Medical Center		
Pump insta:	Not Reported		
Old number:	98-1	Well type:	Not Reported
Casing dia:	10	Ground el:	34
Well depth:	460		
Solid case:	356	Perf case:	Not Reported
Use:	MUN - Private (but Public DOH definition)		
Use year:	Not Reported		
Init head:	28.5	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	41		
Test date:	Not Reported	Test gpm:	Not Reported

Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	750		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-426
Bot solid:	-322	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	1.08		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 2-1-035:003
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	01-JAN-58
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000790

AM139 **ENE** **1/2 - 1 Mile** **Higher**	**HI WELLS**	**HI9000000000709**

Wid:	3-1850-003	Island:	Oahu
Well name:	Makiki	Old name:	Not Reported
Yr drilled:	1881		
Driller:	Not Reported		
Quad map:	13		
Long83dd:	-157.830833		
Lat83dd:	21.309167		
Gps:	0	Utm:	-1
Owner user:	Board of Water Supply, BWS		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	70-	Well type:	Not Reported
Casing dia:	12	Ground el:	160
Well depth:	900		
Solid case:	Not Reported	Perf case:	Not Reported
Use:	UNU - Unused		
Use year:	Not Reported		
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	36		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-740
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		

Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 3-9-010:001
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000709

140
WNW
1/2 - 1 Mile
Higher

FED USGS **USGS40000269710**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211844157512201		
Monloc name:	3-1851-54 Queens Hospital, Oahu, HI		
Monloc type:	Well		
Monloc desc:	former W98-1 NAWQA entry ver. 05/15/2002 Hunt C		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3091944
Longitude:	-157.8536944	Sourcemap scale:	24000
Horiz Acc measure:	.1	Horiz Acc measure units:	seconds
Horiz Collection method:	Global positioning system (GPS), uncorrected		
Horiz coord refsys:	NAD83	Vert measure val:	34
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Hawaii volcanic-rock aquifers		
Formation type:	Koolau Volcanic Series, Lava Flows		
Aquifer type:	Confined single aquifer		
Construction date:	19580501	Welldepth:	460
Welldepth units:	ft	Wellholedepth:	460
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

AN141
South
1/2 - 1 Mile
Lower

HI WELLS **HI9000000000613**

Wid:	3-1750-011	Island:	Oahu
Well name:	Ala Moana	Old name:	Not Reported
Yr drilled:	1967		
Driller:	Layne International		
Quad map:	13		
Long83dd:	-157.842222		
Lat83dd:	21.289722		
Gps:	0	Utm:	-1
Owner user:	Kahui Pono, LLC		
Land owner:	Not Reported		

Pump insta:	Not Reported		
Old number:	63-2B	Well type:	Not Reported
Casing dia:	18	Ground el:	5
Well depth:	55		
Solid case:	37	Perf case:	Not Reported
Use:	Other		
Use year:	Not Reported		
Init head:	2.9	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	13451		
Test date:	Not Reported	Test gpm:	550
Test ddown:	0.5	Test chlor:	17680
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-50
Bot solid:	-32	Bot perf:	Not Reported
Spec capac:	1100		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 2-3-038:001
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	01-JAN-67
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000613

AO142
SE
1/2 - 1 Mile
Lower

HI WELLS **HI9000000000604**

Wid:	3-1750-002	Island:	Oahu
Well name:	McCully	Old name:	Not Reported
Yr drilled:	1890		
Driller:	Not Reported		
Quad map:	13		
Long83dd:	-157.831111		
Lat83dd:	21.295		
Gps:	0	Utm:	-1
Owner user:	Y. Kam		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	Not Reported	Well type:	Not Reported
Casing dia:	6	Ground el:	9
Well depth:	416		
Solid case:	363	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	29.6	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	75		
Test date:	Not Reported	Test gpm:	Not Reported

Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-407
Bot solid:	-354	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000604

AJ143
ESE
1/2 - 1 Mile
Lower

HI WELLS **HI9000000000698**

Wid:	3-1849-008	Island:	Oahu
Well name:	Manoa Valley	Old name:	Not Reported
Yr drilled:	1894		
Driller:	Not Reported		
Quad map:	13		
Long83dd:	-157.829722		
Lat83dd:	21.297222		
Gps:	0	Utm:	-1
Owner user:	J. Shinn		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	44-	Well type:	Not Reported
Casing dia:	8	Ground el:	20
Well depth:	397		
Solid case:	337	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	30.8	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	56		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-377
Bot solid:	-317	Bot perf:	Not Reported
Spec capac:	Not Reported		

Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000698

AJ144
ESE
1/2 - 1 Mile
Lower

FED USGS **USGS40000269566**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211801157495701		
Monloc name:	3-1849-08 W44 MAKIKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.2971133
Longitude:	-157.8297573	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	20.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	18940101	Welldepth:	397
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

AO145
SE
1/2 - 1 Mile
Lower

FED USGS **USGS40000269555**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211753157500201		
Monloc name:	3-1750-02 W45 MCCULY		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.2948913
Longitude:	-157.8311463	Sourcemap scale:	24000

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	8.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	18900101	Welldepth:	416
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

AN146
South
1/2 - 1 Mile
Lower

HI WELLS **HI9000000000612**

Wid:	3-1750-010	Island:	Oahu
Well name:	Ala Moana	Old name:	Not Reported
Yr drilled:	1967		
Driller:	Layne International		
Quad map:	13		
Long83dd:	-157.841944		
Lat83dd:	21.289444		
Gps:	0	Utm:	-1
Owner user:	Kahui Pono, LLC		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	63-2A	Well type:	Not Reported
Casing dia:	18	Ground el:	4
Well depth:	88		
Solid case:	42	Perf case:	Not Reported
Use:	Other		
Use year:	Not Reported		
Init head:	2.8	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	13954		
Test date:	Not Reported	Test gpm:	600
Test ddown:	0.8	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-84
Bot solid:	-38	Bot perf:	Not Reported
Spec capac:	750		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 2-3-038:001
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	01-JAN-67
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000612

Map ID Direction Distance Elevation	Database	EDR ID Number
AP147 **ENE** **1/2 - 1 Mile** **Higher**	**FED USGS**	**USGS40000269680**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211835157495401		
Monloc name:	3-1849-09 W66 MAKIKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3065573
Longitude:	-157.8289238	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	170.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19010101	Welldepth:	194
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

AQ148
East
1/2 - 1 Mile
Higher

FED USGS **USGS40000269602**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211813157495201		
Monloc name:	3-1849-10 W37 MAKIKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3004465
Longitude:	-157.8283683	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	44.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	19091101	Welldepth:	302
Welldepth units:	ft	Wellholedepth:	315
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

AP149
ENE
1/2 - 1 Mile
Higher

HI WELLS **HI9000000000699**

Wid:	3-1849-009	Island:	Oahu
Well name:	Manoa Valley	Old name:	Not Reported
Yr drilled:	1901		
Driller:	Not Reported		
Quad map:	13		
Long83dd:	-157.828889		
Lat83dd:	21.306667		
Gps:	0	Utm:	-1
Owner user:	R. Morgan		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	66-	Well type:	Not Reported
Casing dia:	10	Ground el:	154
Well depth:	194		
Solid case:	103	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	37	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	55		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-40
Bot solid:	51	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	01-JAN-01
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000699

AQ150
East
1/2 - 1 Mile
Higher

HI WELLS **HI9000000000700**

Wid:	3-1849-010	Island:	Oahu
Well name:	Punahou	Old name:	Not Reported
Yr drilled:	1909		
Driller:	L. McCandless		
Quad map:	13		
Long83dd:	-157.828167		
Lat83dd:	21.300306		
Gps:	0	Utm:	-1
Owner user:	Punahou School		
Land owner:	Punahou School		
Pump insta:	Not Reported		
Old number:	37-	Well type:	Not Reported
Casing dia:	8	Ground el:	36
Well depth:	315		
Solid case:	195	Perf case:	Not Reported
Use:	DOMN - Schools		
Use year:	Not Reported		
Init head:	29.1	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	48		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-279
Bot solid:	-159	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 2-8-018:001
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	01-JAN-09
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000700

AR151
South
1/2 - 1 Mile
Lower

HI WELLS **HI9000000000614**

Wid:	3-1750-012	Island:	Oahu
Well name:	Yacht Harbor 1	Old name:	Not Reported
Yr drilled:	1972		
Driller:	Not Reported		
Quad map:	13		
Long83dd:	-157.840833		
Lat83dd:	21.289167		
Gps:	0	Utm:	-1
Owner user:	Yacht Harbor Towers		
Land owner:	Yacht Harbor Towers		

Pump insta:	Not Reported		
Old number:	Not Reported	Well type:	Not Reported
Casing dia:	Not Reported	Ground el:	Not Reported
Well depth:	0		
Solid case:	Not Reported	Perf case:	Not Reported
Use:	IND - Geothermal, Thermoelectric Cooling, Power De		
Use year:	Not Reported		
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	18750		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	1800		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	Not Reported
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	2.592		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 2-3-036:039
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000614

AR152
South
1/2 - 1 Mile
Lower

HI WELLS **HI9000000000615**

Wid:	3-1750-013	Island:	Oahu
Well name:	Yacht Harbor 2	Old name:	Not Reported
Yr drilled:	1972		
Driller:	Not Reported		
Quad map:	13		
Long83dd:	-157.840833		
Lat83dd:	21.289167		
Gps:	0	Utm:	-1
Owner user:	Yacht Harbor Towers		
Land owner:	Yacht Harbor Towers		
Pump insta:	Not Reported		
Old number:	Not Reported	Well type:	Not Reported
Casing dia:	Not Reported	Ground el:	Not Reported
Well depth:	0		
Solid case:	Not Reported	Perf case:	Not Reported
Use:	IND - Geothermal, Thermoelectric Cooling, Power De		
Use year:	Not Reported		
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	18750		
Test date:	Not Reported	Test gpm:	Not Reported

Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	1800		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	Not Reported
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	2.592		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 2-3-036:039
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000615

AS153
ESE
1/2 - 1 Mile
Lower

HI WELLS **HI9000000000697**

Wid:	3-1849-007	Island:	Oahu
Well name:	Manoa Valley	Old name:	Not Reported
Yr drilled:	1891		
Driller:	L. McCandless		
Quad map:	13		
Long83dd:	-157.829167		
Lat83dd:	21.296944		
Gps:	0	Utm:	-1
Owner user:	Land Process Service Corp.		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	43-	Well type:	Not Reported
Casing dia:	8	Ground el:	18
Well depth:	0		
Solid case:	Not Reported	Perf case:	Not Reported
Use:	UNU - Unused		
Use year:	Not Reported		
Init head:	30	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	55		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	36	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	Not Reported
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		

Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 2-8-009:078
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000697

AS154
ESE
1/2 - 1 Mile
Lower

FED USGS **USGS40000269565**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211800157495501		
Monloc name:	3-1849-07 W43 MAKIKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.2968355
Longitude:	-157.8292018	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	18.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	18910701	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

AS155
ESE
1/2 - 1 Mile
Lower

HI WELLS **HI9000000000696**

Wid:	3-1849-006	Island:	Oahu
Well name:	Manoa Valley	Old name:	Not Reported
Yr drilled:	1891		
Driller:	L. McCandless		
Quad map:	13		
Long83dd:	-157.828889		
Lat83dd:	21.296944		
Gps:	0	Utm:	-1
Owner user:	Steve Ching (Department of Environmental Services, C&CH Wastewater Management)		
Land owner:	Not Reported		

Pump insta:	Not Reported		
Old number:	42-	Well type:	Not Reported
Casing dia:	8	Ground el:	17
Well depth:	160		
Solid case:	Not Reported	Perf case:	Not Reported
Use:	UNU - Unused		
Use year:	Not Reported		
Init head:	30.6	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	54		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	36	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-143
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 2-8-009:080
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000696

AS156
ESE
1/2 - 1 Mile
Lower

FED USGS **USGS40000269564**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211800157495401		
Monloc name:	3-1849-06 W42 MAKIKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.2968355
Longitude:	-157.828924	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	17.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	18910101	Welldepth:	160
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

AQ157
East
1/2 - 1 Mile
Higher

FED USGS **USGS40000269593**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211812157495001		
Monloc name:	3-1849-01 W38 MAKIKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3001687
Longitude:	-157.8278128	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	37.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	18800101	Welldepth:	295
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

AQ158
East
1/2 - 1 Mile
Higher

HI WELLS **HI9000000000691**

Wid:	3-1849-001	Island:	Oahu
Well name:	Manoa Valley	Old name:	Not Reported
Yr drilled:	1880		
Driller:	Pierce		
Quad map:	13		
Long83dd:	-157.827778		
Lat83dd:	21.300278		
Gps:	0	Utm:	-1
Owner user:	Elmer Marques		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	38-	Well type:	Not Reported
Casing dia:	3	Ground el:	37
Well depth:	295		
Solid case:	273	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	43.5	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	49		
Test date:	Not Reported	Test gpm:	Not Reported

Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-258
Bot solid:	-236	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000691

AT159
WNW
1/2 - 1 Mile
Lower

HI WELLS **HI9000000000780**

Wid:	3-1851-044	Island:	Oahu
Well name:	Punchbowl St	Old name:	Not Reported
Yr drilled:	1939		
Driller:	W. Mullin		
Quad map:	13		
Long83dd:	-157.856389		
Lat83dd:	21.306111		
Gps:	0	Utm:	-1
Owner user:	Medical Group		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	97-1	Well type:	Not Reported
Casing dia:	6	Ground el:	Not Reported
Well depth:	62		
Solid case:	40	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	RTSP		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	Not Reported
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		

Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	01-JAN-39
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000780

AT160
WNW
1/2 - 1 Mile
Lower

FED USGS **USGS40000269673**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211833157513301		
Monloc name:	3-1851-44 W97-1 DWNT		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3060024
Longitude:	-157.8564236	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	15.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19390101	Welldepth:	62
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

AU161
West
1/2 - 1 Mile
Lower

HI WELLS **HI9000000000757**

Wid:	3-1851-021	Island:	Oahu
Well name:	Kawaiahao St	Old name:	Not Reported
Yr drilled:	1901		
Driller:	L. McCandless		
Quad map:	13		
Long83dd:	-157.857222		
Lat83dd:	21.301944		
Gps:	0	Utm:	-1
Owner user:	Magoon Estate, Limited		
Land owner:	Not Reported		

Pump insta:	Not Reported		
Old number:	92-	Well type:	Not Reported
Casing dia:	8	Ground el:	4
Well depth:	791		
Solid case:	614	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	29.1	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	90		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	RTSP		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-787
Bot solid:	-610	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 2-1-048:018
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	01-JAN-01
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000757

AU162
West
1/2 - 1 Mile
Lower

FED USGS **USGS40000269621**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211818157513601		
Monloc name:	3-1851-21 W92 DWNTN		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.301836
Longitude:	-157.8572569	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	4.00
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	19010101	Welldepth:	789
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

AV163
NW
1/2 - 1 Mile
Higher

FED USGS **USGS40000269721**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211849157512701		
Monloc name:	3-1851-07 W108 DWNTN		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3104465
Longitude:	-157.8547569	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	28.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	18840101	Welldepth:	560
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

AV164
NW
1/2 - 1 Mile
Higher

HI WELLS **HI9000000000743**

Wid:	3-1851-007	Island:	Oahu
Well name:	Pacific Club	Old name:	Not Reported
Yr drilled:	1884		
Driller:	Ashley		
Quad map:	13		
Long83dd:	-157.854611		
Lat83dd:	21.310694		
Gps:	0	Utm:	-1
Owner user:	The Pacific Club		
Land owner:	The Pacific Club		
Pump insta:	Not Reported		
Old number:	108-	Well type:	Not Reported
Casing dia:	3	Ground el:	28
Well depth:	560		
Solid case:	498	Perf case:	Not Reported
Use:	IRR - Irrigation (non-domestic, non-agriculture)		
Use year:	Not Reported		
Init head:	23.2	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	35		
Test date:	Not Reported	Test gpm:	Not Reported

Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	35		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	1985		
Draft yr:	Not Reported	Bot hole:	-532
Bot solid:	-470	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	.05		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 2-1-019:014
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000743

AW165
ENE
1/2 - 1 Mile
Higher

FED USGS **USGS40000269676**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211834157494901		
Monloc name:	3-1849-03 W60 MAKIKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3062795
Longitude:	-157.8275349	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	200.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	18820101	Welldepth:	980
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

AW166
ENE
1/2 - 1 Mile
Higher

HI WELLS **HI9000000000693**

Wid:	3-1849-003	Island:	Oahu
Well name:	Manoa Valley	Old name:	Not Reported
Yr drilled:	1882		
Driller:	Not Reported		
Quad map:	13		
Long83dd:	-157.8275		
Lat83dd:	21.306389		
Gps:	0	Utm:	-1
Owner user:	D. Pietsch		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	60-	Well type:	Not Reported
Casing dia:	Not Reported	Ground el:	200
Well depth:	980		
Solid case:	Not Reported	Perf case:	Not Reported
Use:	ABN - Sealed		
Use year:	Not Reported		
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-780
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	Not Reported
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	30-DEC-99
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000693

AX167
East
1/2 - 1 Mile
Higher

FED USGS **USGS40000269597**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211813157494702		
Monloc name:	3-1849-12 W36-B MAKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3004464
Longitude:	-157.8269794	Sourcemap scale:	24000

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	43.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19120101	Welldepth:	430
Welldepth units:	ft	Wellholedepth:	430
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

AX168
East
1/2 - 1 Mile
Higher

FED USGS **USGS40000269596**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211813157494701		
Monloc name:	3-1849-11 W36-A MAKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3004464
Longitude:	-157.8269794	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	43.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19120101	Welldepth:	298
Welldepth units:	ft	Wellholedepth:	395
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

AX169
East
1/2 - 1 Mile
Higher

FED USGS **USGS40000269595**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211813157494700		
Monloc name:	3-1849-11 TO 16		
Monloc type:	Well: Multiple wells		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3004464
Longitude:	-157.8269794	Sourcemap scale:	24000

Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	43
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Unknown		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

AX170
East
1/2 - 1 Mile
Higher

FED USGS **USGS40000269598**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211813157494703		
Monloc name:	3-1849-13 W36-D MAKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3004464
Longitude:	-157.8269794	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	50.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19611121	Welldepth:	405
Welldepth units:	ft	Wellholedepth:	405
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

AX171
East
1/2 - 1 Mile
Higher

FED USGS **USGS40000269600**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211813157494705		
Monloc name:	3-1849-15 W36-C MAKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3004464
Longitude:	-157.8269794	Sourcemap scale:	24000

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	42.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19620202	Welldepth:	396
Welldepth units:	ft	Wellholedepth:	409
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

AX172
East
1/2 - 1 Mile
Higher

FED USGS **USGS40000269599**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211813157494704		
Monloc name:	3-1849-14 W36-E MAKI		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3004464
Longitude:	-157.8269794	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	56.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19611223	Welldepth:	410
Welldepth units:	ft	Wellholedepth:	413
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

AX173
East
1/2 - 1 Mile
Higher

HI WELLS **HI9000000000702**

Wid:	3-1849-012	Island:	Oahu
Well name:	Wilder Ave	Old name:	Not Reported
Yr drilled:	1912		
Driller:	L. McCandless		
Quad map:	13		
Long83dd:	-157.826944		
Lat83dd:	21.300556		
Gps:	0	Utm:	-1
Owner user:	Board of Water Supply, BWS		
Land owner:	Not Reported		

Pump insta:	Not Reported		
Old number:	36-B	Well type:	ROT
Casing dia:	12	Ground el:	43
Well depth:	430		
Solid case:	300	Perf case:	Not Reported
Use:	OBS - Observation		
Use year:	Not Reported		
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	QHB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-387
Bot solid:	-257	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 2-8-017:029
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	01-JAN-12
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000702

AX174
East
1/2 - 1 Mile
Higher

HI WELLS **HI9000000000701**

Wid:	3-1849-011	Island:	Oahu
Well name:	Wilder Ave	Old name:	Not Reported
Yr drilled:	1912		
Driller:	L. McCandless		
Quad map:	13		
Long83dd:	-157.826944		
Lat83dd:	21.300556		
Gps:	0	Utm:	-1
Owner user:	Board of Water Supply, BWS		
Land owner:	Not Reported		
Pump insta:	Not Reported		
Old number:	36-A	Well type:	ROT
Casing dia:	12	Ground el:	43
Well depth:	304		
Solid case:	272	Perf case:	Not Reported
Use:	OBS - Observation		
Use year:	Not Reported		
Init head:	27.7	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	52		
Test date:	Not Reported	Test gpm:	Not Reported

Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	QHB		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	-261
Bot solid:	-229	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 2-8-017:029
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	01-JAN-12
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000000701

AX175
East
1/2 - 1 Mile
Higher

HI WELLS **HI9000000000706**

Wid:	3-1849-016	Island:	Oahu
Well name:	Wilder Avenue Well 2	Old name:	Not Reported
Yr drilled:	1962		
Driller:	Goodfellow Construction, Inc. Corporate		
Quad map:	13		
Long83dd:	-157.826951		
Lat83dd:	21.300359		
Gps:	-1	Utm:	0
Owner user:	Board of Water Supply, BWS		
Land owner:	Board of Water Supply, BWS		
Pump insta:	Not Reported		
Old number:	36-F	Well type:	ROT
Casing dia:	10	Ground el:	56
Well depth:	466		
Solid case:	345	Perf case:	Not Reported
Use:	MUN - County		
Use year:	Not Reported		
Init head:	Not Reported	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	6/3/1996	Test gpm:	1345
Test ddown:	7	Test chlor:	34
Test temp:	21.3	Test unit:	C
Pump gpm:	1750		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKB		
Pump yr:	1977		
Draft yr:	Not Reported	Bot hole:	-410
Bot solid:	-289	Bot perf:	Not Reported
Spec capac:	192		

Pump mgd:	2.52		
Draft mgd:	Not Reported	Pump elev:	-49
Pump depth:	105	Tmk:	(1) 2-8-017:029
Aqui code:	30102		
Latest hd:	Not Reported	Wcr:	01-JAN-62
Pir:	1/1/1961		
Surveyor:	Board of Water Supply, BWS		
T:	Not Reported	Site id:	HI9000000000706

AX176
East
1/2 - 1 Mile
Higher

FED USGS **USGS40000269601**

Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-211813157494706		
Monloc name:	3-1849-16 Wilder Ave Wells no. 2, Oahu, HI		
Monloc type:	Well		
Monloc desc:	former W36-F,NAWQA entry ver. 05/15/2002 Hunt C		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.3003889
Longitude:	-157.8268889	Sourcemap scale:	24000
Horiz Acc measure:	.1	Horiz Acc measure units:	seconds
Horiz Collection method:	Global positioning system (GPS), uncorrected		
Horiz coord refsys:	NAD83	Vert measure val:	55
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Hawaii volcanic-rock aquifers		
Formation type:	Koolau Volcanic Series, Lava Flows		
Aquifer type:	Confined single aquifer		
Construction date:	19620316	Welldepth:	371
Welldepth units:	ft	Wellholedepth:	371
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

AREA RADON INFORMATION

Federal EPA Radon Zone for HONOLULU County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for HONOLULU COUNTY, HI

Number of sites tested: 209

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.015 pCi/L	100%	0%	0%
Living Area - 2nd Floor	0.125 pCi/L	100%	0%	0%
Basement	0.415 pCi/L	96%	4%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Well Index Database
Source: Commission on Water Resource Management
Telephone: 808-587-0214
CWRM maintains a Well Index Database to track specific information pertaining to the construction and installation of production wells in Hawaii

OTHER STATE DATABASE INFORMATION

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STREET AND ADDRESS INFORMATION

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HAWAII PUBLIC HOUSING AUTHORITY

ENVIRONMENTAL REVIEW

SPENCER HOUSE

Honolulu, O`ahu

AMP 35
HPHA No. 1073

Prepared for:

State of Hawaii
Hawaii Public Housing Authority

Prepared by:

HHF PLANNERS
places for people

U.S. Department of Housing and Urban Development
451 Seventh Street, SW
Washington, DC 20410
www.hud.gov

espanol.hud.gov

Environmental Review for Activity/Project that is Categorically Excluded Subject to Section 58.5

Pursuant to 24 CFR 58.35(a)

Project Information

Project Name: Spencer House (AMP 35)

Responsible Entity: Hawaii Public Housing Authority
1002 North School Street
Honolulu, HI 96817

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

State/Local Identifier: State of Hawai‘i

Preparer: Mr. Scott Ezer, Vice President
HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawai‘i 96813

Certifying Officer Name and Title: Mr. David Y. Ige
Governor, State of Hawai‘i

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

Consultant (if applicable): HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawai‘i 96813

Direct Comments to: Mr. Hakim Ouansafi, Executive Director
Hawaii Public Housing Authority
1002 North School Street
Honolulu, Hawai‘i 96817

Project Location: 1035 Spencer Street
Honolulu, Hawai‘i 96819

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]**:**

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a "major construction activity" and would involve one or a combination of several HUD designated categories of actions.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent;
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons;
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland;
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation;
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls);
7. Interior and exterior renovations and rehabilitation;
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site;
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Level of Environmental Review Determination:

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.5. Compliance with and completion of conformance determinations for other statute, executive order, or regulation has been completed and support the Categorical Exclusion.

Funding Information

Grant Number	HUD Program	Funding Amount
To be determined	Capital Fund	To be determined
To be determined	Economic Development Initiative Special Project Grant	To be determined
To be determined	Other Grants	To be determined

Estimated Total HUD Funded Amount:

To be determined by using a formula and based upon Federal budget.

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]**:**

Depends upon funds available.

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	*The project is not within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.*
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☒	*The State of Hawai'i does not have any designated coastal barrier resource units. (http://www.fws.gov/CBRA/Maps/Mapper.html)*
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes ☐ No ☒	*As indicated in the Flood Insurance Rate Panel 15003C0353G (Panel Effective Date: January 19, 2011, Index Date: November 05, 2014), this housing project is located within Flood Hazard Zone X (areas determined to be outside the 0.2% annual chance floodplain). A field inspection and information obtained from the site manager confirmed no major flooding issues within the site. Based on its description, this project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.*

STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5		
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes ☐ No ☒	*The State of Hawai'i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. EPA's Green Book for currently designated "nonattainment areas" as of June 2015. Planned repair and rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.*
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes ☐ No ☒	*Documentation from the Office of Planning determined that projects receiving federal funds do not require review for consistency with Hawai'i's Coastal Zone Management (CZM) program.*
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☐ No ☒	*There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.*
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes ☒ No ☐	*The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (USFWS) in their letter dated September 28, 2015 which is included in the Appendices, while project-specific mitigation measures are identified in the following section.*
Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes ☐ No ☒	*There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.*

Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes ☐ No ☒	*The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.*
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes ☐ No ☒	*This housing project is located in Zone X, an area of minimal flooding (i.e., 0.2% annual chance flood), and is located outside the 500-year flood zone. A field inspection and information obtained from AMP Manager confirmed no major flooding issues within the project site.*
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes ☐ No ☒	*Spencer House was first occupied in 1968 and is 47 years old. To be eligible for listing in the National Register of Historic Places (NRHP), a property must meet the National Register criteria for evaluation which involves examining its integrity, significance, and age (generally at least 50 years old). Due to its age, this housing project does not meet the eligibility criteria to be evaluated for the NRHP. In a letter to the State Historic Preservation Officer dated July 23, 2015, the HPHA determined that no historic properties would be affected by repair and rehabilitation improvements for this housing project. No comments or objections about this no effect determination were received.*
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes ☐ No ☒	*The project site is not situated along a highway that has a high volume of vehicular traffic. The HUD noise calculator estimated noise levels at the project site to be 62.5 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.*
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes ☐ No ☒	*The housing project is located within the O‘ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation.*

Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☐ No ☒	*There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.* *(http://www.fws.gov/wetlands/data/mapper.HTML)*
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes ☐ No ☒	*There are no Wild and Scenic Rivers in Hawai'i, which excludes this project from mitigation or formal consultation requirements (http://www.rivers.gov/map.php)*
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes ☐ No ☒	*Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, these improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects on minority populations and low-income populations. Improvements should benefit low-income and minority populations living within this housing project.*

Field Inspection (Date and completed by)**:** May29, 2015
Joseph Tamburello, Planner
HHF Planners

Summary of Findings and Conclusions:

Repair and rehabilitation improvements implemented for this existing housing project by HPHA should not result in significant environmental impacts based upon research data collected, a field inspection, consultation with the site manager and maintenance staff, consultation with pertinent resource agencies, and prior HPHA experience implementing repair and rehabilitation improvements. Therefore, repair and rehabilitation improvements would comply and be consistent with the statutes, executive orders, and regulations addressed. Furthermore, HPHA would evaluate improvements planned to ensure the work is consistent with the designated categories of actions described under the project description section. Compliance with these factors evaluated are further addressed in the attached Source Documentation Statutory Worksheet along with relevant technical reports/assessments.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Law, Authority, or Factor	Mitigation Measure
Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	*Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.* *Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.* *Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.* *Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.* *Newell's shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.* *Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.*

	<u>Hawaiian Waterbirds</u>: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo‘i, impoundments or other vegetated water bodies. *1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS’s recommended Hawaiian Waterbird Survey Protocols.* *2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.* *3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.* *In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.* *<u>Additional Measures</u>: The following additional measures would be implemented:* *1. No vegetation or soil disturbance shall be conducted outside a project’s previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.*

Determination:

☒ This categorically excluded activity/project converts to **EXEMPT** per Section 58.34(a)(12), because it does not require any mitigation for compliance with any listed statutes or authorities, nor requires any formal permit or license; **Funds may be committed and drawn down after certification of this part** for this (now) EXEMPT project; OR

☐ This categorically excluded activity/project cannot convert to Exempt status because one or more statutes or authorities listed at Section 58.5 requires formal consultation or mitigation. Complete consultation/mitigation protocol requirements, **publish NOI/RROF and obtain "Authority to Use Grant Funds"** (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR

☐ This project is not categorically excluded OR, if originally categorically excluded, is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

Preparer Signature: _____ Date: 11-10-15

Name/Title/Organization: Mr. Scott Ezer, Vice President
HHF Planners

Responsible Entity Agency Official Signature:

_____ Date: APR 28 2016

Name/Title: Mr. David Y. Ige, Governor

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

Spencer House (HA # 1073)

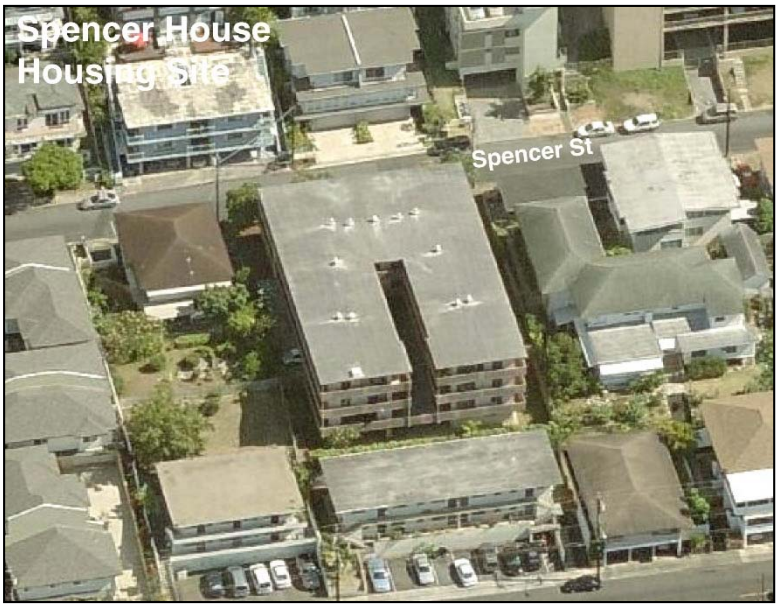
TMK: (1) 2-4-016:008

Hawai‘i Public Housing Authority (HPHA) Environmental Review

SOURCE DOCUMENTATION (SD) STATUTORY WORKSHEET

Site Visit Date: May 29, 2015
Prepared By: Joseph Tamburello

The Spencer House project is located in the Makiki community of the Honolulu district on the island of O‘ahu. This predominantly higher density residential community is located makai (south) of the National Memorial Cemetery of the Pacific (Punchbowl Crater) and mauka (north) of the developing mixed use Kaka‘ako community.



The housing site is situated along Spencer Street surrounded by existing higher density residential buildings. This housing project is within HPHA’s Asset Management Project (AMP) 35 which includes four other housing projects located within a few miles.

Spencer House was first occupied in 1986 and has a street address of 1035 Spencer Street. The property consists of 0.32 acres, and it is identified as Tax Map Key (TMK) No. (1) 2-04-016: 008. The housing project is comprised of a single three-story low-rise apartment building with a single two-bedroom unit and 16 three-bedroom units. The State’s land use designation for the property is the “Urban District.” The City’s zoning for the parcel is A-2 Medium-Density Apartment.

The project site is not located within a tsunami evacuation zone, and the entire site is located in Flood Zone X based upon the Flood Insurance Rate Map (Community Panel Number 15003C0362G, Effective Date: January 19, 2011, Index Date: November 05, 2014). Zone X is defined as areas determined to be outside the 0.2 percent annual (500-year) chance floodplain.

The following figures in Exhibit A provide supporting information on this housing project:

Figure 1: Location Map
Figure 2: TMK Map
Figure 3: Site Map
Figure 4: Flood Map

COMPLIANCE FACTORS

I. AIRPORT CLEAR ZONES AND ACCIDENT POTENTIAL ZONES (24 CFR PART 51D)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The housing project does not lie within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: 24 CFR 51 (D).

Honolulu International Airport Master Plan - 2010 (August 1994), State Department of Transportation, Airports Division;

*Hawai`i Airports and Flying Safety Guide (2012-13, Fifth Edition, Revision 1)* Hawai`i Department of Transportation, Airports Division; and

http://hidot.hawaii.gov/airports/files/2013/01/Airport-Safety-Guide-2012-2013-5rev1.pdf

II. COASTAL BARRIER RESOURCES (COASTAL BARRIER IMPROVEMENT ACT OF 1990 [16 USC 3501])

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i does not have any designated coastal barrier resource units.

SUPPORTING DOCUMENTATION:

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/cbra/maps/mapper.html (Date accessed: 6/30/15).

III. FLOOD INSURANCE (FLOOD DISASTER PROTECTION ACT OF 1973 AND NATIONAL FLOOD INSURANCE REFORM ACT OF 1994 [42 USC 4001-4128 AND 42 USC 5154a])

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program.

As indicated in the Flood Insurance Rate Panel 15003C0353G (Panel Effective Date: January 19, 2011, Index Date: November 05, 2014), this housing project is located within Flood Hazard Zone X (areas determined to be outside the 0.2% annual chance floodplain). A field inspection and information obtained from the site manager confirmed no major flooding issues within the site. Based on its description, this project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal signs of flooding problems. An interview with the AMP Manager also determined that major ponding or flooding issues are currently not an issue for the project site.

Printed: Flood Insurance Rate Map, Community Panel Number 15003C0362G, Effective Date: January 19, 2011, Index Date: November 05, 2014.

Hawai`i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 7/27/15)

IV. CLEAN AIR ACT (40 CFR PARTS 6, 51, 93)

SUPPORTING DOCUMENTS	
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. Environmental Protection Agency's Green Book for currently designated "nonattainment areas" as of June 2015. Planned rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.

SUPPORTING DOCUMENTATION:

Printed: *State of Hawai‘i Annual Summary 2013 Air Quality Data*. State of Hawai'i, Department of Health, July 2014.

U.S. Environmental Protection Agency website at: http://epa.gov/airquality/greenbk/

V. COASTAL ZONE MANAGEMENT ACT (16 USC 1451, SECTIONS 307 (C), (D)

CONTACT:

Mr. John Nakagawa
Office of Planning
Department of Business, Economic Development & Tourism
State of Hawai‘i
P.O. Box 2359
Honolulu, Hawai'i, 96804-2359

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

Documentation from the Office of Planning determined that projects receiving federal funds do not require review for consistency with Hawai‘i's Coastal Zone Management (CZM) program.

SUPPORTING DOCUMENTATION:

Contact: In an email to the Office of Planning (OP) dated July 27, 2015, the HPHA determined that the use of HUD funds for the implementation of repair and rehabilitation improvements does not require review for consistency with Hawai‘i's CZM program. The OP confirmed this determination in an email dated July 28, 2015 and it is included in the Appendices.

Experience: Previous reviews conducted by OP in 2003, 2005, and 2010 determined that projects receiving federal funds from HUD do not require CZM federal consistency review. OP's current determination confirms this condition is still applicable. Copies of these prior documentations are included in the Appendices.

VI. CONTAMINATION AND TOXIC SUBSTANCES (24 CFR PART 50.3 & 58.5(I)(2))

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Project Not Affected.

There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.

SUPPORTING DOCUMENTATION:

Field: A site inspection and interview with the Asset Management Project (AMP) Manager revealed no presence of any toxic or radioactive materials on the project site that warrant concern. There is one secured, locked metal cabinet for each high-rise tower (total of two), containing small amounts of paint cans and gasoline for lawn equipment, located next to the trash area.

Study: Environmental Data Resources, Inc. (EDR), conducted a search of available environmental records and prepared a Radius Map Report (Inquiry Number 4237094.58s, March 17, 2015). EDR reviewed more than 25 federal and statewide regulatory databases for information regarding the treatment, storage, disposal and release of toxic chemicals at the project site and within specific radii (generally 1 mile) of the site. A Detail Map within the EDR report documents those sites identified within a 0.25 mile radius of the project site. The EDR report in Exhibit B includes the results of their research findings.

The EDR report notes the following activities within a 0.125 mile radius of the project site: Eco Dream (917 feet away) is Classified as a Non-Generator (Handler). Hawai‘i Mission Academy (1003 feet away) has two gasoline UST, Status: Permanently Out of Use.

This project site was not identified as a Formerly Used Defense Site (FUDS) by the U.S. Army Corps of Engineers and is not subject to any cleanup actions for Department of Defense-generated contamination.

VII. ENDANGERED SPECIES (50 CFR PART 402)

CONTACT:
Mr. Loyal Mehrhoff, Field Supervisor
Pacific Islands Administrator
Fish and Wildlife Services
U.S. Department of the Interior
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawai'i 96813
Tel. #: 792-9400

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Adverse Effect Subject to Mitigation

The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from by the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices.

SUPPORTING DOCUMENTATION:

Contact: A letter from the HPHA dated July 24, 2015 was submitted to the Pacific Island Administrator for the FWS determining that repair and rehabilitation improvements that may be implemented using HUD funds for this housing project would have no likelihood of effect on any listed species or proposed species, or existing or proposed designated critical habitat subject to certain measures. Concurrence with this determination along with proposed minimization and avoidance measures was received from the FWS in a letter dated September 28, 2015 which is included in the Appendices. This housing project is subject to the following minimization and avoidance measures.

Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.

Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.

Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.

Newell's shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If

nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.

Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.

Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro loʻi, impoundments or other vegetated water bodies.

1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols.
2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.
3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.

In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.

Additional Measures: The following additional measures would be implemented:

1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.

Experience: The FWS was previously consulted as part of environmental reviews that were completed in 2005 (39 housing projects) and 2010 (70 housing projects) which supported the determination that repair and rehabilitation improvements would either: 1) have no likelihood of effect for certain housing projects; or 2) not likely adversely affect federally listed species or critical habitat for certain housing projects subject to mitigative measures. A summary of these consultation efforts follows.

2005 Consultation: In a letter dated July 15, 2005, the Housing and Community Development Corporation of Hawaiʻi (predecessor to the HPHA), determined that the implementation of minor repair and rehabilitation improvements for 39 housing projects

would not have an adverse effect on federally-listed species or critical habitat. In a letter dated August 11, 2005, the FWS concurred with the HCDCH determination.

2010 Consultation: In a letter dated May 17, 2010, the HPHA informed the FWS that HUD funds would be used to immediately implement repair and rehabilitation improvements for six housing projects on O'ahu and the island of Hawai`i. In a subsequent letter dated May 21, 2010, the FWS was informed that HPHA would be using HUD funds to implement minor repair and rehabilitation improvements for 64 projects throughout the State. In both letters, the HPHA determined that the repair and rehabilitation improvements were not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat. Based on further consultation and a meeting with FWS staff on June 24, 2010, the HPHA determined that repair and rehabilitation improvements for most of their housing projects would not likely adversely affect any listed or proposed species, or existing or proposed designated habitat, subject to various mitigative measures for certain housing projects.

VIII. EXPLOSIVE AND FLAMMABLE OPERATIONS (24 CFR PART 51C)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

SUPPORTING DOCUMENTATION:

Field: Field inspection was limited to the exterior of residential buildings and associated structures for this housing project. No above-ground explosive or flammable material storage containers in excess of 100 gallons were observed at the site.

Printed: 24 CFR Part 51, Subpart C addresses acceptable separation distance from above-ground explosive or flammable fuels or chemical containers. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

IX. FARMLANDS PROTECTION (7 CFR PART 658)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. Since the property consists of an existing housing development within an urbanized area, no farmlands would be impacted by the implementation of repair and rehabilitation improvements.

Printed: The property is designated for "Urban" use by the State Land Use Commission and the County's zoning for the parcel is RD-3.75 Double-Family Residential District.

Hawai`i Office of Planning website at: http://planning.hawaii.gov/gis/
(Date accessed: 6/30/2015)

X. FLOODPLAIN MANAGEMENT (EXECUTIVE ORDER 11988, 24 CFR PART 55)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program

This housing project is located in Zone X, an area of minimal flooding (i.e., 0.2% annual chance flood), and is located outside the 500-year flood zone. A field inspection and information obtained from AMP Manager confirmed no major flooding issues within the project site.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal signs of previous flooding problems. An interview with the AMP Manager also determined that no major ponding or flooding issues occur on the project site.

Printed: Flood Insurance Rate Map, Community Panel Number 15003C0362G, Effective Date: January 19, 2011, Index Date: November 05, 2014.

Hawai`i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/ (Date accessed7/21/15)

XI. HISTORIC PRESERVATION (NATIONAL HISTORIC PRESERVATION ACT OF 1966; SECTIONS 106 AND 110; 36 CFR, PART 800)

CONTACT:	SUPPORTING DOCUMENTS	
Ms. Suzanne Case, Chairperson	X	Field
Department of Land and Natural Resources (DLNR)	X	Contact
State of Hawai‘i	X	Printed
1151 Punchbowl Street		Experience
Honolulu, Hawai‘i 96813	X	Study
Tel. #: 587-0400		

DETERMINATION:

Status Category: No Effect on Historic Properties

The subject housing was initially occupied in 1968 and is 47 years old. To be eligible for listing in the National Register of Historic Places (NRHP), a property must meet the National Register criteria for evaluation which involves examining its integrity, significance, and age (generally at least 50 years old). Due to its age, this housing project does not meet the eligibility criteria to be evaluated for the NRHP. In a letter to the State Historic Preservation Officer (SHPO) dated July 23, 2015, the HPHA determined that no historic properties would be affected (no effect) by repair and rehabilitation improvements for this housing project. No comments or objections about this no effect determination were received.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not locate any existing or potential archaeological sites (e.g., heiau) or cultural features on the property. An interview with the AMP Manager indicates that no known sites or features are present on the property.

Contact: A letter from the HPHA dated July 23, 2015, which is included in the Appendix, was submitted to the State Historic Preservation Officer [SHPO] (Chair of State Board of Land and Natural Resources) as part of Section 106 consultation determining that no historic properties would be affected (no effect) by repair and rehabilitation improvements that may be implemented using HUD funds for this housing project. The SHPO did not submit any comments or objections on the “no effect” determination for this housing project, which included follow-up e-mails with the State Historic Preservation Division regarding a response. . On September 28, 2015, notice of HPHA’s determination was also distributed to several native Hawaiian organizations and the various County Planning Departments. No concerns or opposition to this determination was received.

Printed: A review of the U.S. National Parks Service website for the National Register of Historic Places did not identify any historic properties within the limits of this housing project. A similar review of the State DLNR website for the State Register of Historic Places revealed that there are no historic properties within the project site.

National Register: U.S. National Park Service website at: http://www.nps.gov/nr/research/ (Date accessed: 7/2/15).

State Register: Hawai`i Department of Land and Natural Resources website at: http://dlnr.hawaii.gov/shpd/state-register/ (Date accessed: 7/2/15).

Experience: In letter to the State Historic Preservation Officer (SHPO) dated April 19, 2011, the HPHA determined that minor repair and rehabilitation improvement at 57 public housing projects throughout Hawai'i (including this housing site) would have "no effect" on historic properties. The SHPO had no comments or objections on the "no effect" determination.

XII. NOISE ABATEMENT CONTROL (24 CFR PART 51B)

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Within HUD Noise Standards

The project site is not situated along a highway that has a high volume of vehicular traffic. The HUD noise calculator estimated noise levels at the project site to be 62.5 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

SUPPORTING DOCUMENTATION:

Field: No significant noise generating sources were identified within the project site during the site inspection. The subject housing lots are located within an urban residential neighborhood, along Spencer Street. Spencer Street is expected to have low volumes of traffic because traffic in this area would primarily be to existing residences. Furthermore, an interview with the AMP Manager did not identify any loud noise producing sources in the area. As a result, notable noise sources are predominantly associated with vehicular traffic along adjacent streets. Traffic noise did not appear significant during the site visit.

Study: The HUD day/night noise level calculator was used to estimate approximate traffic noise. Traffic counts were based on 2013 Hawai'i State Department of Transportation data taken along Ward Ave (a major County roadway) and applied to Spencer Street. Using this HUD calculator, the estimated noise levels at the project site is 62.5 dBA. Actual noise levels are expected to be lower since Ward Ave is a major roadway, whereas Spencer Street is narrower, serving primarily existing residences. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and

rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

XIII. SOLE SOURCE AQUIFER (40 CFR PART 149)

	SUPPORTING DOCUMENTS
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact on Sole Source Aquifer

The housing project is located within the O‘ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation. However, if exceptional circumstances require compliance steps with any of these authorities, such compliance must be established and documented prior to approving the site-specific loan or grant.

SUPPORTING DOCUMENTATION:

Printed: This determination was based upon review of the Sole Source Aquifer Memorandum of 4/30/90 (Sections II.B.1 and II.B.2) and consideration of the type of rehabilitation related improvements that would be conducted for this project.

XIV. WETLANDS PROTECTION (EXECUTIVE ORDER 11990)

	SUPPORTING DOCUMENTS
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the property did not identify the presence of any wetlands.

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/wetlands/data/mapper.html (Date accessed 7/23/2015).

XV. WILD AND SCENIC RIVERS ACT (16 USC 1271, SECTION 7 (B), (C))

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no Wild and Scenic Rivers in Hawai‘i, which excludes this project from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: National Wild and Scenic Rivers System website at: http://www.rivers.gov/index.php (Date accessed: 6/30/2015).

XVI. ENVIRONMENTAL JUSTICE (EXECUTIVE ORDER NO. 12898)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Conflict with Requirements

Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, repair and rehabilitation improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations. Repair and rehabilitation improvements should benefit low-income and minority populations living within this housing project.

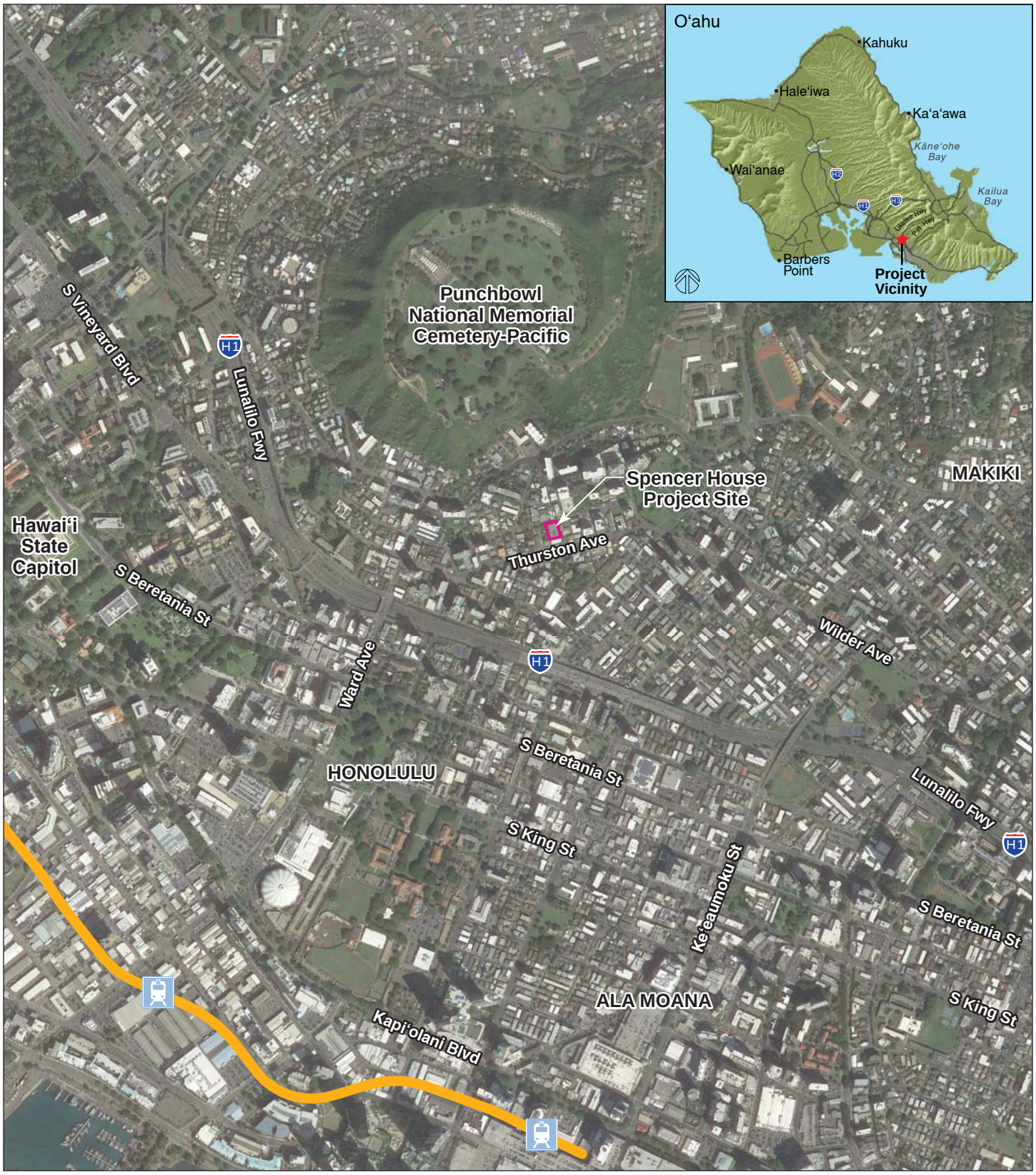
SUPPORTING DOCUMENTATION:

Printed: Executive Order 12898.

U.S. Department of Housing and Urban Development website at:
https://www.hudexchange.info/environmental-review/environmental-justice/

EXHIBIT A

Location Map, TMK Map, Site Map, Flood Map, and Site Photos



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

HONOLULU RAIL TRANSIT

Transit Corridor

Transit Station

HPHA No. 1073 - Spencer House (AMP 35)

Figure 1 - Project Location Map

Honolulu, O'ahu

1,000 FT

HHF PLANNERS
places for people

HPHA No. 1073 - Spencer House (AMP 35)

Figure 2 - TMK Map

Honolulu, O'ahu

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1073 - Spencer House (AMP 35)

Figure 3 - Site Map

Honolulu, O'ahu

20 FEET

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

LEGEND

Zone X - Outside the 0.2% Annual Chance of Flood

HPHA No. 1073 - Spencer House (AMP 35)

Figure 4 - Flood Map

Honolulu, O'ahu

20 FEET

HHF PLANNERS
places for people

SPENCER HOUSE
SITE PHOTOS

Spencer Street fronting project site, facing east

Spencer Street fronting project site, facing west

Front yard condition of housing site

Left side yard

Right side yard

EXHIBIT B

EDR Radius Map Report

Spencer House
1035 Spencer St.
Honolulu, HI 96822

Inquiry Number: 4237094.58s
March 17, 2015

EDR Summary Radius Map Report

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

FORM-NULL-PVC

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

1035 SPENCER ST.
HONOLULU County, HI 96822

COORDINATES

Latitude (North):	21.3075000 - 21˚ 18' 27.00''
Longitude (West):	157.8444000 - 157˚ 50' 39.84''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	619860.4
UTM Y (Meters):	2356480.5
Elevation:	124 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	USGS 7.5 min quad index

MAPPED SITES SUMMARY

Target Property Address:
1035 SPENCER ST.
, HI 96822

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
1	ECO DREAM INC	1420 VICTORIA ST	RCRA NonGen / NLR	Lower	917, WSW
2		1561 PENSACOLA ST	EDR US Hist Auto Stat	Lower	930, ESE
3		1103 PROSPECT ST	EDR US Hist Cleaners	Higher	993, NNE
4	HAWAIIAN MISSION ACA	1438 PENSACOLA ST	UST, Financial Assurance	Lower	1003, SSE
5	1310 PENSACOLA STREE	1310 PENSACOLA ST	SHWS	Lower	1526, South
6	PUNCHBOWL MILITARY R	2177 PUOWAINA DRIVE	LUST, UST	Higher	1669, North
7	C&CH MAKIKI FIRE STA	1202 WILDER AVE	LUST, UST, Financial Assurance	Lower	1750, ESE
8	BMW OF HONOLULU LTD	1075 S BERETANIA ST	LUST, UST	Lower	1869, SSW
9	MID PAC PETROLEUM LL	882 S BERETANIA ST	LUST, UST, Financial Assurance	Lower	2186, SW
10	SCHUMAN CARRIAGE MOT	1234 S BERETANIA ST	SHWS, LUST, UST, SPILLS, INST CONTROL, Financial...	Lower	2228, SSE
11	HONOLULU POLICE DEPT	801 S BERETANIA ST	LUST, UST, Financial Assurance	Lower	2551, WSW
12	AUXILIARY SERVICES -	1039 S KING ST	SHWS, UST, Financial Assurance	Lower	2574, SSW
13	GRACE OTSUKA APARTME	1233 YOUNG ST	SHWS, ENG CONTROLS, INST CONTROL	Lower	2655, SSE
14	1510 FREAR STREET	1510 FREAR ST	SHWS, SPILLS	Lower	2712, West
15	1012 PIIKOI STREET,	1012 PIIKOI ST	SHWS, SPILLS	Lower	2736, South
16	CARTWRIGHT NEIGHBORH	KEEAUMOKU ST & MATLO	SHWS	Lower	2797, SE
17	801 SOUTH HOTEL STRE	801 S HOTEL ST	SHWS	Lower	2808, WSW
18	ONE ARCHER LANE	801 S KING ST	SHWS, SPILLS	Lower	3207, WSW
19	MEADOW GOLD DAIRIES	1418 YOUNG ST	SHWS, SPILLS	Lower	3456, SSE
20	THE QUEEN'S MEDICAL	1301 PUNCHBOWL ST	SHWS, LUST, UST, AIRS, Financial Assurance	Lower	3610, West
A21	HECO PAD-MOUNTED #65	650 KAPIOLANI BLVD	SHWS, SPILLS, INST CONTROL	Lower	4047, WSW
22	BMW OF HONOLULU	777 KAPIOLANI BLVD	SHWS, SPILLS, ENG CONTROLS, INST CONTROL	Lower	4114, SW
B23	CHUEI SHOKOH, INC.	825 KAPIOLANI BLVD	SHWS, SPILLS, ENG CONTROLS, INST CONTROL, VCP	Lower	4125, SW
A24	HAWAII NEWSPAPER AGE	605 KAPIOLANI BLVD	SHWS, LUST, UST, SPILLS, ENG CONTROLS, INST...	Lower	4130, WSW
B25	HECO SOIL CONTAMINAT	CHAPIN LN & KAPIOLAN	SHWS, ENG CONTROLS, INST CONTROL	Lower	4131, SW
26	SYMPHONY PARK	850 KAPIOLANI BLVD	SHWS, SPILLS	Lower	4162, SW
27	HD&C, 725 KAPIOLANI	725 KAPIOLANI BLVD	SHWS, SPILLS, INST CONTROL	Lower	4195, WSW
C28	ALOHA/KING SELF STOR	1414 KALAKAUA AVE	SHWS, ENG CONTROLS, INST CONTROL, VCP	Lower	4263, SE
C29	7-11 KALAKAUA	1323 KALAKAUA AVE	SHWS, UST, Financial Assurance	Lower	4267, SE
D30	HAKUYOSHA HAWAII, IN	730 SHERIDAN ST	SHWS, SPILLS, INST CONTROL, AIRS	Lower	4276, South
D31	MOTOR SUPPLY	726 SHERIDAN ST	SHWS, INST CONTROL	Lower	4276, South
32	KAPIOLANI WOMEN'S &	1319 PUNAHOU ST	SHWS, UST, AIRS, Financial Assurance	Lower	4314, SE
33	LIKE LIKE PLAZA PETR	745 KEEAUMOKU ST	SHWS	Lower	4371, SSE
34	PACIFICA CONDOMINIUM	1009 KAPIOLANI BLVD	SHWS, LUST	Lower	4386, SSW
35	EVERSHINE X	1230 KAPIOLANI BLVD	SHWS, VCP	Lower	4554, SSW
36	CENPAC PROPERTIES -	615 PIIKOI ST	SHWS, LUST, UST, SPILLS, Financial Assurance	Lower	4581, South
E37	836 KAWAIAHAO STREET	836 KAWAIAHAO ST	SHWS	Lower	4622, SW
E38	AMERICAN LINEN WAREH	837 KAWAIAHAO ST	SHWS, SPILLS	Lower	4633, SW
39	K&Y AUTO SERVICE AND	902 KAWAIAHAO ST & 5	SHWS, SPILLS	Lower	4649, SW

MAPPED SITES SUMMARY

Target Property Address:
1035 SPENCER ST.
, HI 96822

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
40	PUNAHOU SCHOOL - MAI	1601 PUNAHOU ST	SHWS, LUST, UST, Financial Assurance	Lower	4661, ESE
41	JAS W GLOVER LTD	1046 WAIMAMU ST	RCRA NonGen / NLR, FINDS, SHWS, LUST, UST	Lower	4724, SSW
42	CAPITOL PLACE DEVELO	1212 QUEEN EMMA ST	SHWS	Lower	4727, WNW
43	HAWAII OPERA THEATER	962 KAWAIAHAO ST	SHWS, SPILLS, ENG CONTROLS, INST CONTROL	Lower	4735, SW
44	DURANT PROPERTIES	1235 KONA ST	SHWS, INST CONTROL	Lower	4955, SSW
45	HONOLULU SAKE BREWER	2150 BOOTH RD	SHWS, LUST, UST, SPILLS	Lower	4989, NNW
46	SELF STORAGE 1	438 KAMAKEE ST	SHWS, SPILLS	Lower	5000, SSW
47	RESERVE HOUSING TOWE	1141 WAIMANU ST	SHWS, SPILLS	Lower	5015, SSW
48	QUEEN EMMALANI TOWER	600 QUEEN ST	CERC-NFRAP, RCRA NonGen / NLR, FINDS, SHWS,...	Lower	5081, WSW
49	RUBBER STAMP PLANTAT	746 ILANIWAI ST	SHWS	Lower	5121, SW
50	CUTTER CHEVROLET	1391 KAPIOLANI BLVD	SHWS, LUST, UST, Financial Assurance	Lower	5158, South
51	KOOLANI TOWER PROJEC	1189 WAIMANU ST	SHWS, SPILLS, ENG CONTROLS, INST CONTROL	Lower	5163, SSW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

State- and tribal - equivalent CERCLIS

SHWS: A review of the SHWS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 42 SHWS sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
1310 PENSACOLA STREE	1310 PENSACOLA ST	S 1/4 - 1/2 (0.289 mi.)	5	7
SCHUMAN CARRIAGE MOT	***1234 S BERETANIA ST***	***SSE 1/4 - 1/2 (0.422 mi.)***	***10***	***9***
AUXILIARY SERVICES -	***1039 S KING ST***	***SSW 1/4 - 1/2 (0.488 mi.)***	***12***	***10***
GRACE OTSUKA APARTME	***1233 YOUNG ST***	***SSE 1/2 - 1 (0.503 mi.)***	***13***	***10***
1510 FREAR STREET	***1510 FREAR ST***	***W 1/2 - 1 (0.514 mi.)***	***14***	***10***
1012 PIIKOI STREET,	***1012 PIIKOI ST***	***S 1/2 - 1 (0.518 mi.)***	***15***	***10***
CARTWRIGHT NEIGHBORH	KEEAUMOKU ST & MATLO	SE 1/2 - 1 (0.530 mi.)	16	10
801 SOUTH HOTEL STRE	801 S HOTEL ST	WSW 1/2 - 1 (0.532 mi.)	17	11
ONE ARCHER LANE	***801 S KING ST***	***WSW 1/2 - 1 (0.607 mi.)***	***18***	***11***
MEADOW GOLD DAIRIES	***1418 YOUNG ST***	***SSE 1/2 - 1 (0.655 mi.)***	***19***	***11***
THE QUEEN'S MEDICAL	***1301 PUNCHBOWL ST***	***W 1/2 - 1 (0.684 mi.)***	***20***	***11***
HECO PAD-MOUNTED #65	***650 KAPIOLANI BLVD***	***WSW 1/2 - 1 (0.766 mi.)***	***A21***	***12***
BMW OF HONOLULU	***777 KAPIOLANI BLVD***	***SW 1/2 - 1 (0.779 mi.)***	***22***	***12***
CHUEI SHOKOH, INC.	***825 KAPIOLANI BLVD***	***SW 1/2 - 1 (0.781 mi.)***	***B23***	***12***
HAWAII NEWSPAPER AGE	***605 KAPIOLANI BLVD***	***WSW 1/2 - 1 (0.782 mi.)***	***A24***	***12***
HECO SOIL CONTAMINAT	***CHAPIN LN & KAPIOLAN***	***SW 1/2 - 1 (0.782 mi.)***	***B25***	***12***
SYMPHONY PARK	***850 KAPIOLANI BLVD***	***SW 1/2 - 1 (0.788 mi.)***	***26***	***13***
HD&C, 725 KAPIOLANI	***725 KAPIOLANI BLVD***	***WSW 1/2 - 1 (0.795 mi.)***	***27***	***13***
ALOHA/KING SELF STOR	***1414 KALAKAUA AVE***	***SE 1/2 - 1 (0.807 mi.)***	***C28***	***13***
7-11 KALAKAUA	***1323 KALAKAUA AVE***	***SE 1/2 - 1 (0.808 mi.)***	***C29***	***13***
HAKUYOSHA HAWAII, IN	***730 SHERIDAN ST***	***S 1/2 - 1 (0.810 mi.)***	***D30***	***13***
MOTOR SUPPLY	***726 SHERIDAN ST***	***S 1/2 - 1 (0.810 mi.)***	***D31***	***14***
KAPIOLANI WOMEN'S &	***1319 PUNAHOU ST***	***SE 1/2 - 1 (0.817 mi.)***	***32***	***14***
LIKE LIKE PLAZA PETR	745 KEEAUMOKU ST	SSE 1/2 - 1 (0.828 mi.)	33	14
PACIFICA CONDOMINIUM	***1009 KAPIOLANI BLVD***	***SSW 1/2 - 1 (0.831 mi.)***	***34***	***14***
EVERSHINE X	***1230 KAPIOLANI BLVD***	***SSW 1/2 - 1 (0.863 mi.)***	***35***	***14***
CENPAC PROPERTIES -	***615 PIIKOI ST***	***S 1/2 - 1 (0.868 mi.)***	***36***	***15***

Lower Elevation	Address	Direction / Distance	Map ID	Page
836 KAWAIAHAO STREET	836 KAWAIAHAO ST	SW 1/2 - 1 (0.875 mi.)	E37	15
AMERICAN LINEN WAREH	***837 KAWAIAHAO ST***	***SW 1/2 - 1 (0.877 mi.)***	***E38***	***15***
K&Y AUTO SERVICE AND	***902 KAWAIAHAO ST & 5***	***SW 1/2 - 1 (0.880 mi.)***	***39***	***15***
PUNAHOU SCHOOL - MAI	***1601 PUNAHOU ST***	***ESE 1/2 - 1 (0.883 mi.)***	***40***	***15***
JAS W GLOVER LTD	***1046 WAIMAMU ST***	***SSW 1/2 - 1 (0.895 mi.)***	***41***	***16***
CAPITOL PLACE DEVELO	1212 QUEEN EMMA ST	WNW 1/2 - 1 (0.895 mi.)	42	16
HAWAII OPERA THEATER	***962 KAWAIAHAO ST***	***SW 1/2 - 1 (0.897 mi.)***	***43***	***16***
DURANT PROPERTIES	***1235 KONA ST***	***SSW 1/2 - 1 (0.938 mi.)***	***44***	***16***
HONOLULU SAKE BREWER	***2150 BOOTH RD***	***NNW 1/2 - 1 (0.945 mi.)***	***45***	***17***
SELF STORAGE 1	***438 KAMAKEE ST***	***SSW 1/2 - 1 (0.947 mi.)***	***46***	***17***
RESERVE HOUSING TOWE	***1141 WAIMANU ST***	***SSW 1/2 - 1 (0.950 mi.)***	***47***	***17***
QUEEN EMMALANI TOWER	***600 QUEEN ST***	***WSW 1/2 - 1 (0.962 mi.)***	***48***	***17***
RUBBER STAMP PLANTAT	746 ILANIWAI ST	SW 1/2 - 1 (0.970 mi.)	49	18
CUTTER CHEVROLET	***1391 KAPIOLANI BLVD***	***S 1/2 - 1 (0.977 mi.)***	***50***	***18***
KOOLANI TOWER PROJEC	***1189 WAIMANU ST***	***SSW 1/2 - 1 (0.978 mi.)***	***51***	***18***

State and tribal leaking storage tank lists

LUST: A review of the LUST list, as provided by EDR, and dated 12/16/2014 has revealed that there are 6 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PUNCHBOWL MILITARY R	***2177 PUOWAINA DRIVE***	***N 1/4 - 1/2 (0.316 mi.)***	***6***	***8***
Facility Status: Site Cleanup Completed (NFA)				

Lower Elevation	Address	Direction / Distance	Map ID	Page
C&CH MAKIKI FIRE STA	***1202 WILDER AVE***	***ESE 1/4 - 1/2 (0.331 mi.)***	***7***	***8***
Facility Status: Site Cleanup Completed (NFA)				
BMW OF HONOLULU LTD	***1075 S BERETANIA ST***	***SSW 1/4 - 1/2 (0.354 mi.)***	***8***	***8***
Facility Status: Site Cleanup Completed (NFA)				
MID PAC PETROLEUM LL	***882 S BERETANIA ST***	***SW 1/4 - 1/2 (0.414 mi.)***	***9***	***9***
Facility Status: Site Cleanup Completed (NFA)				
SCHUMAN CARRIAGE MOT	***1234 S BERETANIA ST***	***SSE 1/4 - 1/2 (0.422 mi.)***	***10***	***9***
Facility Status: Site Cleanup Completed (NFA)				
HONOLULU POLICE DEPT	***801 S BERETANIA ST***	***WSW 1/4 - 1/2 (0.483 mi.)***	***11***	***9***
Facility Status: Site Assessment Ongoing				

State and tribal registered storage tank lists

UST: A review of the UST list, as provided by EDR, and dated 12/18/2014 has revealed that there is 1 UST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
HAWAIIAN MISSION ACA	***1438 PENSACOLA ST***	***SSE 1/8 - 1/4 (0.190 mi.)***	***4***	***7***

State and tribal institutional control / engineering control registries

INST CONTROL: A review of the INST CONTROL list, as provided by EDR, and dated 12/02/2014 has revealed that there is 1 INST CONTROL site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SCHUMAN CARRIAGE MOT	***1234 S BERETANIA ST***	***SSE 1/4 - 1/2 (0.422 mi.)***	***10***	***9***

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

RCRA NonGen / NLR: A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 12/09/2014 has revealed that there is 1 RCRA NonGen / NLR site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ECO DREAM INC	1420 VICTORIA ST	WSW 1/8 - 1/4 (0.174 mi.)	1	7

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Auto Stat: A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there is 1 EDR US Hist Auto Stat site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	1561 PENSACOLA ST	ESE 1/8 - 1/4 (0.176 mi.)	2	7

EDR US Hist Cleaners: A review of the EDR US Hist Cleaners list, as provided by EDR, has revealed that there is 1 EDR US Hist Cleaners site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	1103 PROSPECT ST	NNE 1/8 - 1/4 (0.188 mi.)	3	7

Count: 6 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
HONOLULU	S117391417	1339 SCHOOL STREET	1339, 1341, 1343 N SCHOOL ST		SHWS, ENG CONTROLS, INST CONT
HONOLULU	1006820751	KAKAAKO MAKAI GATEWAY	COOKE ST & ILALO ST	96814	SHWS
HONOLULU	S117391944	SPENCER STREET SORBENT BOOM	CORNER OF SPENCER AND VICTORIA		SPILLS
HONOLULU	S106708609	CANNON CLUB	DIAMOND HEAD RD		SHWS, BROWNFIELDS
HONOLULU	S111704745	HONOLULU SEAWATER AIR CONDITIONING	KEAWE ST		SHWS, ENG CONTROLS, INST CONT
HONOLULU	S106818337	KEEAUMOKU SUPERBLOCK PROJECT	KEEAUMOKU ST		SHWS, SPILLS

OVERVIEW MAP - 4237094.58S

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Spencer House ADDRESS: 1035 Spencer St. Honolulu HI 96822 LAT/LONG: 21.3075 / 157.8444	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.58s DATE: March 17, 2015 5:37 pm

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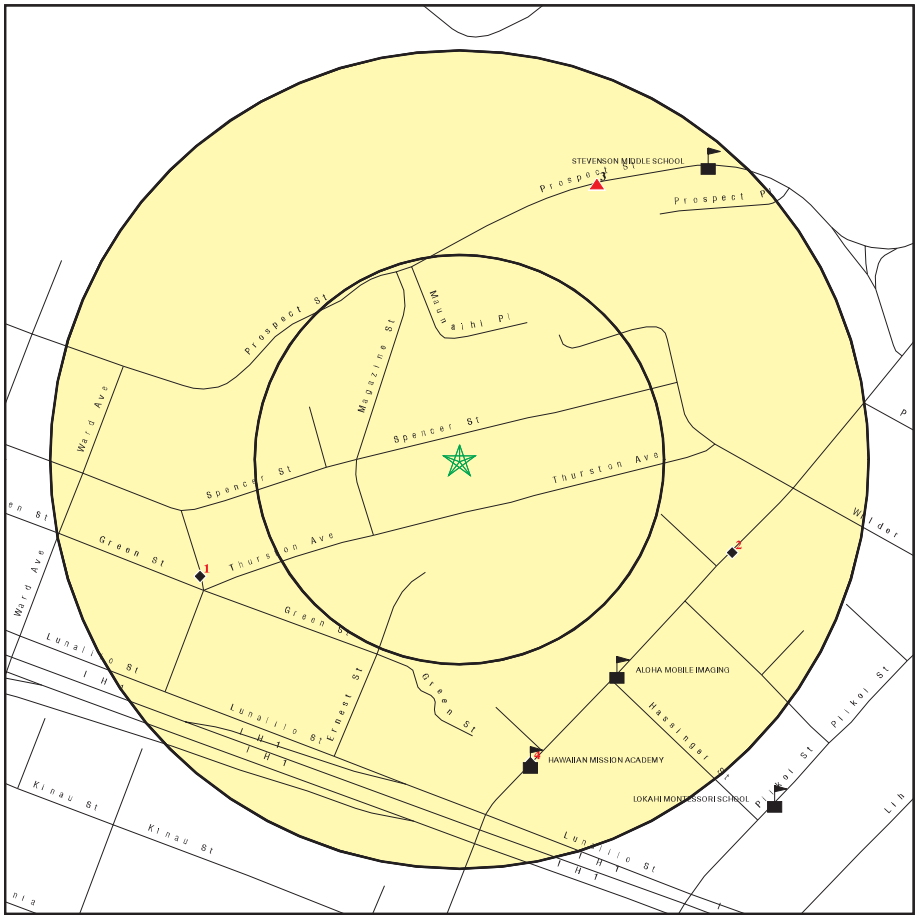
DETAIL MAP - 4237094.58S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone

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SITE NAME: Spencer House ADDRESS: 1035 Spencer St. Honolulu HI 96822 LAT/LONG: 21.3075 / 157.8444	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.58s DATE: March 17, 2015 5:38 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
SHWS	1.000		0	0	3	39	NR	42
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	0	6	NR	NR	6
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250		0	1	NR	NR	NR	1

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		0	0	0	NR	NR	0
INST CONTROL	0.500		0	0	1	NR	NR	1
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	1	NR	NR	NR	1
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		0	1	NR	NR	NR	1
EDR US Hist Cleaners	0.250		0	1	NR	NR	NR	1
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
RGA HWS	TP		NR	NR	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

1
WSW
1/8-1/4
0.174 mi.
917 ft.

Relative: Lower

ECO DREAM INC — **RCRA NonGen / NLR** — **1012178278**
1420 VICTORIA ST — **HIR000139477**
HONOLULU, HI 96822

Click here for full text details

RCRA NonGen / NLR
EPA Id: HIR000139477

2
ESE
1/8-1/4
0.176 mi.
930 ft.

Relative: Lower

EDR US Hist Auto Stat — **1015247944**
1561 PENSACOLA ST — **N/A**
HONOLULU, HI 96822

Click here for full text details

3
NNE
1/8-1/4
0.188 mi.
993 ft.

Relative: Higher

EDR US Hist Cleaners — **1014974851**
1103 PROSPECT ST — **N/A**
HONOLULU, HI 96822

Click here for full text details

4
SSE
1/8-1/4
0.190 mi.
1003 ft.

Relative: Lower

HAWAIIAN MISSION ACADEMY — **UST** — **U001235902**
1438 PENSACOLA ST — **Financial Assurance** — **N/A**
HONOLULU, HI 96822

Click here for full text details

UST
Facility Id: 9-102409
Tank Status: Permanently Out of Use

5
South
1/4-1/2
0.289 mi.
1526 ft.

Relative: Lower

1310 PENSACOLA STREET — **SHWS** — **S111704658**
1310 PENSACOLA ST — **N/A**
HONOLULU, HI

Click here for full text details

6
North
1/4-1/2
0.316 mi.
1669 ft.

Relative: Higher

PUNCHBOWL MILITARY RESERVATION — **LUST** — **U003221610**
2177 PUOWAINA DRIVE — **UST** — **N/A**
HONOLULU, HI 96813

Click here for full text details

LUST
Facility Id: 9-100784
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-202489
Facility Id: 9-100784
Tank Status: Permanently Out of Use

7
ESE
1/4-1/2
0.331 mi.
1750 ft.

Relative: Lower

C&CH MAKIKI FIRE STATION — **LUST** — **U004223395**
1202 WILDER AVE — **UST** — **N/A**
HONOLULU, HI 96822 — **Financial Assurance**

Click here for full text details

LUST
Facility Id: 9-100081
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-100081
Tank Status: Permanently Out of Use
Tank Status: Currently in Use

8
SSW
1/4-1/2
0.354 mi.
1869 ft.

Relative: Lower

BMW OF HONOLULU LTD — **LUST** — **U001235080**
1075 S BERETANIA ST — **UST** — **N/A**
HONOLULU, HI 96814

Click here for full text details

LUST
Facility Id: 9-100174
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-100174
Tank Status: Permanently Out of Use

9 SW 1/4-1/2 0.414 mi. 2186 ft. Relative: Lower

MID PAC PETROLEUM LLC 2705952
882 S BERETANIA ST
HONOLULU, HI 96813

LUST **UST** **Financial Assurance**
U003402799 **N/A**

Click here for full text details

LUST
Facility Id: 9-100040
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-100040
Tank Status: Permanently Out of Use
Tank Status: Currently in Use

---

10 SSE 1/4-1/2 0.422 mi. 2228 ft. Relative: Lower

SCHUMAN CARRIAGE MOTORS, LTD.
1234 S BERETANIA ST
HONOLULU, HI 96814

SHWS **LUST** **UST** **SPILLS** **INST CONTROL** **Financial Assurance**
U003221663 **N/A**

Click here for full text details

LUST
Facility Id: 9-101276
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-101276
Tank Status: Permanently Out of Use

---

11 WSW 1/4-1/2 0.483 mi. 2551 ft. Relative: Lower

HONOLULU POLICE DEPT
801 S BERETANIA ST
HONOLULU, HI 96813

LUST **UST** **Financial Assurance**
U003221617 **N/A**

Click here for full text details

LUST
Facility Id: 9-100815
Facility Status: Site Assessment Ongoing

UST
Facility Id: 9-100815
Tank Status: Permanently Out of Use
Tank Status: Temporarily out of Use
Tank Status: Currently in Use

12 SSW 1/4-1/2 0.488 mi. 2574 ft. Relative: Lower

AUXILIARY SERVICES - DOE
1039 S KING ST
HONOLULU, HI 96814

SHWS **UST** **Financial Assurance**
U003154583 **N/A**

Click here for full text details

UST
Facility Id: 9-102337
Tank Status: Permanently Out of Use

---

13 SSE 1/2-1 0.503 mi. 2655 ft. Relative: Lower

GRACE OTSUKA APARTMENT COMPLEX
1233 YOUNG ST
HONOLULU, HI 96814

SHWS **ENG CONTROLS** **INST CONTROL**
S110061466 **N/A**

Click here for full text details

---

14 West 1/2-1 0.514 mi. 2712 ft. Relative: Lower

1510 FREAR STREET
1510 FREAR ST
HONOLULU, HI 96813

SHWS **SPILLS**
S107024174 **N/A**

Click here for full text details

---

15 South 1/2-1 0.518 mi. 2736 ft. Relative: Lower

1012 PIIKOI STREET, ANIN-PIIKOI BUILDING
1012 PIIKOI ST
HONOLULU, HI 96814

SHWS **SPILLS**
S106815117 **N/A**

Click here for full text details

---

16 SE 1/2-1 0.530 mi. 2797 ft. Relative: Lower

CARTWRIGHT NEIGHBORHOOD PARK
KEEAUMOKU ST & MATLOCK AVE
HONOLULU, HI 96814

SHWS
1006820122 **N/A**

Click here for full text details

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
17 WSW 1/2-1 0.532 mi. 2808 ft. Relative: Lower	**801 SOUTH HOTEL STREET** **801 S HOTEL ST** **HONOLULU, HI 96813** Click here for full text details	**SHWS**	**S115488669** **N/A**
18 WSW 1/2-1 0.607 mi. 3207 ft. Relative: Lower	**ONE ARCHER LANE** **801 S KING ST** **HONOLULU, HI 96813** Click here for full text details	**SHWS** **SPILLS**	**1006818981** **N/A**
19 SSE 1/2-1 0.655 mi. 3456 ft. Relative: Lower	**MEADOW GOLD DAIRIES (ICE CREAM PLANT)** **1418 YOUNG ST** **HONOLULU, HI 96814** Click here for full text details	**SHWS** **SPILLS**	**S104657475** **N/A**
20 West 1/2-1 0.684 mi. 3610 ft. Relative: Lower	**THE QUEEN'S MEDICAL CENTER** **1301 PUNCHBOWL ST** **HONOLULU, HI 96813** Click here for full text details	**SHWS** **LUST** **UST** **AIRS** **Financial Assurance**	**1000490311** **N/A**

LUST
Facility Id: 9-100901
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-100901
Tank Status: Currently In Use
Tank Status: Permanently Out of Use

AIRS
Facility Id: 0353-02-C

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
A21 WSW 1/2-1 0.766 mi. 4047 ft. Relative: Lower	**HECO PAD-MOUNTED #65844 TRANSFORMER RELEASE** **650 KAPIOLANI BLVD** **HONOLULU, HI 96813** Click here for full text details	**SHWS** **SPILLS** **INST CONTROL**	**1006818926** **N/A**
22 SW 1/2-1 0.779 mi. 4114 ft. Relative: Lower	**BMW OF HONOLULU** **777 KAPIOLANI BLVD** **HONOLULU, HI** Click here for full text details	**SHWS** **SPILLS** **ENG CONTROLS** **INST CONTROL**	**S106816569** **N/A**
B23 SW 1/2-1 0.781 mi. 4125 ft. Relative: Lower	**CHUEI SHOKOH, INC.** **825 KAPIOLANI BLVD** **HONOLULU, HI 96813** Click here for full text details	**SHWS** **SPILLS** **ENG CONTROLS** **INST CONTROL** **VCP**	**1006820040** **N/A**
A24 WSW 1/2-1 0.782 mi. 4130 ft. Relative: Lower	**HAWAII NEWSPAPER AGENCY INC** **605 KAPIOLANI BLVD** **HONOLULU, HI 96813** Click here for full text details	**SHWS** **LUST** **UST** **SPILLS** **ENG CONTROLS** **INST CONTROL**	**1000146678** **N/A**

LUST
Facility Id: 9-100938
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-100938
Tank Status: Permanently Out of Use

B25 SW 1/2-1 0.782 mi. 4131 ft. Relative: Lower	**HECO SOIL CONTAMINATION CHAPIN LANE AND KAPIOLANI BOULEVARD** **CHAPIN LN & KAPIOLANI BLVD** **HONOLULU, HI** Click here for full text details	**SHWS** **ENG CONTROLS** **INST CONTROL**	**S106817445** **N/A**

26 SW 1/2-1 0.788 mi. 4162 ft. Relative: Lower
SYMPHONY PARK
850 KAPIOLANI BLVD
HONOLULU, HI 96807
SHWS S107022567
SPILLS N/A

Click here for full text details

---

27 WSW 1/2-1 0.795 mi. 4195 ft. Relative: Lower
HD&C, 725 KAPIOLANI BOULEVARD
725 KAPIOLANI BLVD
HONOLULU, HI
SHWS S106817426
SPILLS N/A
INST CONTROL

Click here for full text details

C28 SE 1/2-1 0.807 mi. 4263 ft. Relative: Lower
ALOHA/KING SELF STORAGE
1414 KALAKAUA AVE
HONOLULU, HI
SHWS S106816203
ENG CONTROLS N/A
INST CONTROL
VCP

Click here for full text details

C29 SE 1/2-1 0.808 mi. 4267 ft. Relative: Lower
7-11 KALAKAUA
1323 KALAKAUA AVE
HONOLULU, HI 96826
SHWS U001235396
UST N/A
Financial Assurance

Click here for full text details

UST
Facility Id: 9-101172
Tank Status: Currently in Use
Tank Status: Permanently out of Use
Tank Status: Currently In Use

D30 South 1/2-1 0.810 mi. 4276 ft. Relative: Lower
HAKUYOSHA HAWAII, INC
730 SHERIDAN ST
HONOLULU, HI 96814
SHWS S106817254
SPILLS N/A
INST CONTROL
AIRS

Click here for full text details

AIRS
Facility Id: 0462-01-N
Facility Id: 0564-01-C

D31 South 1/2-1 0.810 mi. 4276 ft. Relative: Lower
MOTOR SUPPLY
726 SHERIDAN ST
HONOLULU, HI 96814
SHWS S108008592
INST CONTROL N/A

Click here for full text details

---

32 SE 1/2-1 0.817 mi. 4314 ft. Relative: Lower
KAPIOLANI WOMEN'S & CHILDREN'S MEDICAL CENTER
1319 PUNAHOU ST
HONOLULU, HI 96826
SHWS U001235208
UST N/A
AIRS
Financial Assurance

Click here for full text details

UST
Facility Id: 9-100740
Tank Status: Permanently Out of Use
Tank Status: Currently in Use

AIRS
Facility Id: 0588-01-N

---

33 SSE 1/2-1 0.828 mi. 4371 ft. Relative: Lower
LIKE LIKE PLAZA PETROLEUM CONTAMINATION
745 KEEAUMOKU ST
HONOLULU, HI 96814
SHWS 1006819347
N/A

Click here for full text details

---

34 SSW 1/2-1 0.831 mi. 4386 ft. Relative: Lower
PACIFICA CONDOMINIUM
1009 KAPIOLANI BLVD
HONOLULU, HI 96814
SHWS S110765470
LUST N/A

Click here for full text details

LUST
Facility Id: 9-103909
Facility Status: Site Cleanup Completed (NFA)

---

35 SSW 1/2-1 0.863 mi. 4554 ft. Relative: Lower
EVERSHINE X
1230 KAPIOLANI BLVD
HONOLULU, HI 96814
SHWS S105262688
VCP N/A

Click here for full text details

36 South 1/2-1 0.868 mi. 4581 ft. Relative: Lower

CENPAC PROPERTIES - OFFICE BUILDING
615 PIIKOI ST
HONOLULU, HI 96814

SHWS **U003402842**
LUST **N/A**
UST
SPILLS
Financial Assurance

Click here for full text details

LUST
Facility Id: 9-103438
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-103438
Tank Status: Permanently Out of Use

E37 SW 1/2-1 0.875 mi. 4622 ft. Relative: Lower

836 KAWAIAHAO STREET
836 KAWAIAHAO ST
HONOLULU, HI

SHWS **S111704659**
N/A

Click here for full text details

E38 SW 1/2-1 0.877 mi. 4633 ft. Relative: Lower

AMERICAN LINEN WAREHOUSE
837 KAWAIAHAO ST
HONOLULU, HI

SHWS **S106816215**
SPILLS **N/A**

Click here for full text details

---

39 SW 1/2-1 0.880 mi. 4649 ft. Relative: Lower

K&Y AUTO SERVICE AND WAYNE'S AUTO ELECTRIC
902 KAWAIAHAO ST & 539 KAMANI ST
HONOLULU, HI

SHWS **S111677440**
SPILLS **N/A**

Click here for full text details

---

40 ESE 1/2-1 0.883 mi. 4661 ft. Relative: Lower

PUNAHOU SCHOOL - MAINTENANCE SHOP
1601 PUNAHOU ST
HONOLULU, HI 96822

SHWS **U003541737**
LUST **N/A**
UST
Financial Assurance

Click here for full text details

LUST
Facility Id: 9-100297
Facility Status: Site Cleanup Completed (NFA)

UST

PUNAHOU SCHOOL - MAINTENANCE SHOP (Continued) **U003541737**

Facility Id: 9-100297
Facility Id: 9-101654
Facility Id: 9-101653
Tank Status: Permanently Out of Use
Tank Status: Currently in Use

---

41 SSW 1/2-1 0.895 mi. 4724 ft. Relative: Lower

JAS W GLOVER LTD
1046 WAIMAMU ST
HONOLULU, HI 96814

RCRA NonGen / NLR **1000135795**
FINDS **HID981637861**
SHWS
LUST
UST

Click here for full text details

RCRA NonGen / NLR
EPA Id: HID981637861

LUST
Facility Id: 9-100835
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-100835
Tank Status: Permanently Out of Use

---

42 WNW 1/2-1 0.895 mi. 4727 ft. Relative: Lower

CAPITOL PLACE DEVELOPMENT PROJECT
1212 QUEEN EMMA ST
HONOLULU, HI 96813

SHWS **S108008488**
N/A

Click here for full text details

---

43 SW 1/2-1 0.897 mi. 4735 ft. Relative: Lower

HAWAII OPERA THEATER SETS & PROPS WAREHOUSE
962 KAWAIAHAO ST
HONOLULU, HI

SHWS **S115488700**
SPILLS **N/A**
ENG CONTROLS
INST CONTROL

Click here for full text details

---

44 SSW 1/2-1 0.938 mi. 4955 ft. Relative: Lower

DURANT PROPERTIES
1235 KONA ST
HONOLULU, HI

SHWS **S109096045**
INST CONTROL **N/A**

Click here for full text details

45 NNW 1/2-1 0.945 mi. 4989 ft. Relative: Lower

HONOLULU SAKE BREWERY CO, LTD
2150 BOOTH RD
HONOLULU, HI 96813

Database(s): SHWS, LUST, UST, SPILLS
EDR ID Number: U003221588
EPA ID Number: N/A

Click here for full text details

LUST
Facility Id: 9-100247
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-100247
Tank Status: Permanently Out of Use

---

46 SSW 1/2-1 0.947 mi. 5000 ft. Relative: Lower

SELF STORAGE 1
438 KAMAKEE ST
HONOLULU, HI 96814

Database(s): SHWS, SPILLS
EDR ID Number: 1006819998
EPA ID Number: N/A

Click here for full text details

---

47 SSW 1/2-1 0.950 mi. 5015 ft. Relative: Lower

RESERVE HOUSING TOWER SOIL CONTAMINATION
1141 WAIMANU ST
HONOLULU, HI 96813

Database(s): SHWS, SPILLS
EDR ID Number: 1006819959
EPA ID Number: N/A

Click here for full text details

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48 WSW 1/2-1 0.962 mi. 5081 ft. Relative: Lower

QUEEN EMMALANI TOWER
600 QUEEN ST
HONOLULU, HI 96813

Database(s): CERC-NFRAP, RCRA NonGen / NLR, FINDS, SHWS, SPILLS, ENG CONTROLS, INST CONTROL
EDR ID Number: 1000688441
EPA ID Number: HID982442394

Click here for full text details

CERC-NFRAP
EPA Id: HID984466698

RCRA NonGen / NLR
EPA Id: HID982442394

49 SW 1/2-1 0.970 mi. 5121 ft. Relative: Lower

RUBBER STAMP PLANTATION
746 ILANIWAI ST
HONOLULU, HI

Database(s): SHWS
EDR ID Number: S111704854
EPA ID Number: N/A

Click here for full text details

---

50 South 1/2-1 0.977 mi. 5158 ft. Relative: Lower

CUTTER CHEVROLET
1391 KAPIOLANI BLVD
HONOLULU, HI 96814

Database(s): SHWS, LUST, UST, Financial Assurance
EDR ID Number: U001235085
EPA ID Number: N/A

Click here for full text details

LUST
Facility Id: 9-100185
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-100185
Tank Status: Permanently Out of Use

---

51 SSW 1/2-1 0.978 mi. 5163 ft. Relative: Lower

KOOLANI TOWER PROJECT
1189 WAIMANU ST
HONOLULU, HI 96814

Database(s): SHWS, SPILLS, ENG CONTROLS, INST CONTROL
EDR ID Number: S106818609
EPA ID Number: N/A

Click here for full text details

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
HI	AIRS	List of Permitted Facilities	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	BROWNFIELDS	Brownfields Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	CDL	Clandestine Drug Lab Listing	Department of Health	08/04/2010	09/10/2010	10/22/2010
HI	DRYCLEANERS	Permitted Drycleaner Facility Listing	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	ENG CONTROLS	Engineering Control Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	Financial Assurance	Financial Assurance Information Listing	Department of Health	12/01/2014	12/19/2014	01/28/2015
HI	INST CONTROL	Sites with Institutional Controls	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	LUST	Leaking Underground Storage Tank Database	Department of Health	12/16/2014	12/19/2014	01/28/2015
HI	RGA HWS	Recovered Government Archive State Hazardous Waste Facilitie	Department of Health		07/01/2013	01/08/2014
HI	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Health		07/01/2013	01/17/2014
HI	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	Department of Health		07/01/2013	01/03/2014
HI	SHWS	Sites List	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	SPILLS	Release Notifications	Department of Health	12/02/2014	12/22/2014	01/28/2015
HI	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	03/10/2012	01/03/2013	02/11/2013
HI	SWF/LF	Permitted Landfills in the State of Hawaii	Department of Health	09/17/2012	04/03/2013	05/10/2013
HI	UIC	Underground Injection Wells Listing	Department of Health	02/07/2013	02/12/2013	04/09/2013
HI	UST	Underground Storage Tank Database	Department of Health	12/18/2014	12/19/2014	01/28/2015
HI	VCP	Voluntary Response Program Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	04/22/2013	03/03/2015	03/09/2015
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2011	02/26/2013	04/19/2013
US	CERCLIS	Comprehensive Environmental Response, Compensation, and Liab	EPA	10/25/2013	11/11/2013	02/13/2014
US	CERCLIS-NFRAP	CERCLIS No Further Remedial Action Planned	EPA	10/25/2013	11/11/2013	02/13/2014
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	07/01/2014	09/10/2014	10/20/2014
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	01/23/2015	02/13/2015	03/09/2015
US	CORRACTS	Corrective Action Report	EPA	12/09/2014	12/29/2014	01/29/2015
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DELISTED NPL	National Priority List Deletions	EPA	12/16/2014	01/08/2015	02/09/2015
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	07/31/2012	08/07/2012	09/18/2012
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EDR US Hist Auto Stat	EDR Exclusive Historic Gas Stations	EDR, Inc.			
US	EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	09/29/2014	09/30/2014	11/06/2014
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	07/21/2014	10/07/2014	10/20/2014
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
US	FEMA UST	Underground Storage Tank Listing	FEMA	01/01/2010	02/16/2010	04/12/2010
US	FINDS	Facility Index System/Facility Registry System	EPA	08/16/2014	09/10/2014	10/20/2014
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	06/06/2014	09/10/2014	09/18/2014
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	12/29/2014	12/30/2014	03/09/2015
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	01/23/2015	02/06/2015	03/09/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	02/01/2013	05/01/2013	11/01/2013

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	01/30/2015	02/05/2015	03/09/2015
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/10/2015	03/13/2015
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	01/28/2015	01/30/2015	03/13/2015
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	01/08/2015	01/08/2015	02/09/2015
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2005	12/08/2006	01/11/2007
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	02/01/2013	05/01/2013	01/27/2014
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	01/30/2015	02/05/2015	03/13/2015
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/13/2015	03/13/2015
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	01/29/2015	01/30/2015	03/13/2015
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	12/14/2014	02/13/2015	03/13/2015
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	09/29/2014	10/01/2014	11/06/2014
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	11/25/2014	11/26/2014	01/29/2015
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	02/18/2014	03/18/2014	04/24/2014
US	LUCIS	Land Use Control Information System	Department of the Navy	12/03/2014	12/12/2014	01/29/2015
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	12/29/2014	01/08/2015	01/29/2015
US	NPL	National Priority List	EPA	12/16/2014	01/08/2015	02/09/2015
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	07/01/2014	10/15/2014	11/17/2014
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	02/01/2011	10/19/2011	01/10/2012
US	PRP	Potentially Responsible Parties	EPA	10/25/2013	10/17/2014	10/20/2014
US	Proposed NPL	Proposed National Priority List Sites	EPA	12/16/2014	01/08/2015	02/09/2015
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	10/07/2014	10/08/2014	10/20/2014
US	RCRA NonGen / NLR	RCRA - Non Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RMP	Risk Management Plans	Environmental Protection Agency	08/01/2014	08/12/2014	11/06/2014
US	ROD	Records Of Decision	EPA	11/25/2013	12/12/2013	02/24/2014
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	03/07/2011	03/09/2011	05/02/2011
US	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2011	07/31/2013	09/13/2013
US	TSCA	Toxic Substances Control Act	EPA	12/31/2012	01/15/2015	01/29/2015
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	09/14/2010	10/07/2011	03/01/2012
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/16/2014	10/31/2014	11/17/2014
US	US AIRS MINOR	Air Facility System Data	EPA	10/16/2014	10/31/2014	11/17/2014

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	12/22/2014	12/22/2014	01/29/2015
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	11/19/2014	11/21/2014	01/29/2015
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	12/30/2014	12/31/2014	01/29/2015
US	Oil/Gas Pipelines	GeoData Digital Line Graphs from 1:100,000-Scale Maps	USGS			
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
US	USGS 7.5' Topographic Map	Scanned Digital USGS 7.5' Topographic Map (DRG)	USGS			

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

SPENCER HOUSE
1035 SPENCER ST.
HONOLULU, HI 96822

TARGET PROPERTY COORDINATES

Latitude (North):	21.3075 - 21˚ 18' 27.00''
Longitude (West):	157.8444 - 157˚ 50' 39.84''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	619860.4
UTM Y (Meters):	2356480.5
Elevation:	124 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	21157-C7 HONOLULU, HI
Most Recent Revision:	Not reported

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

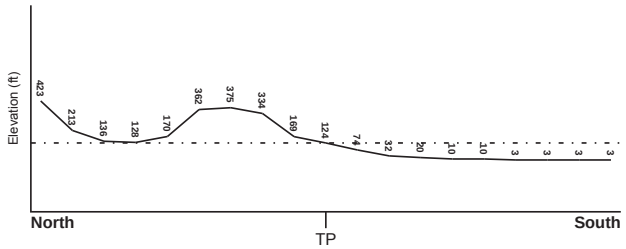
TOPOGRAPHIC INFORMATION

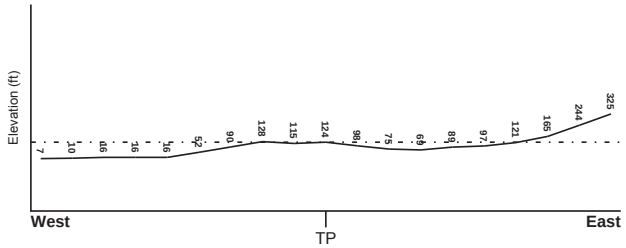
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General South

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 124 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
HONOLULU, HI	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 15003C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
HONOLULU	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

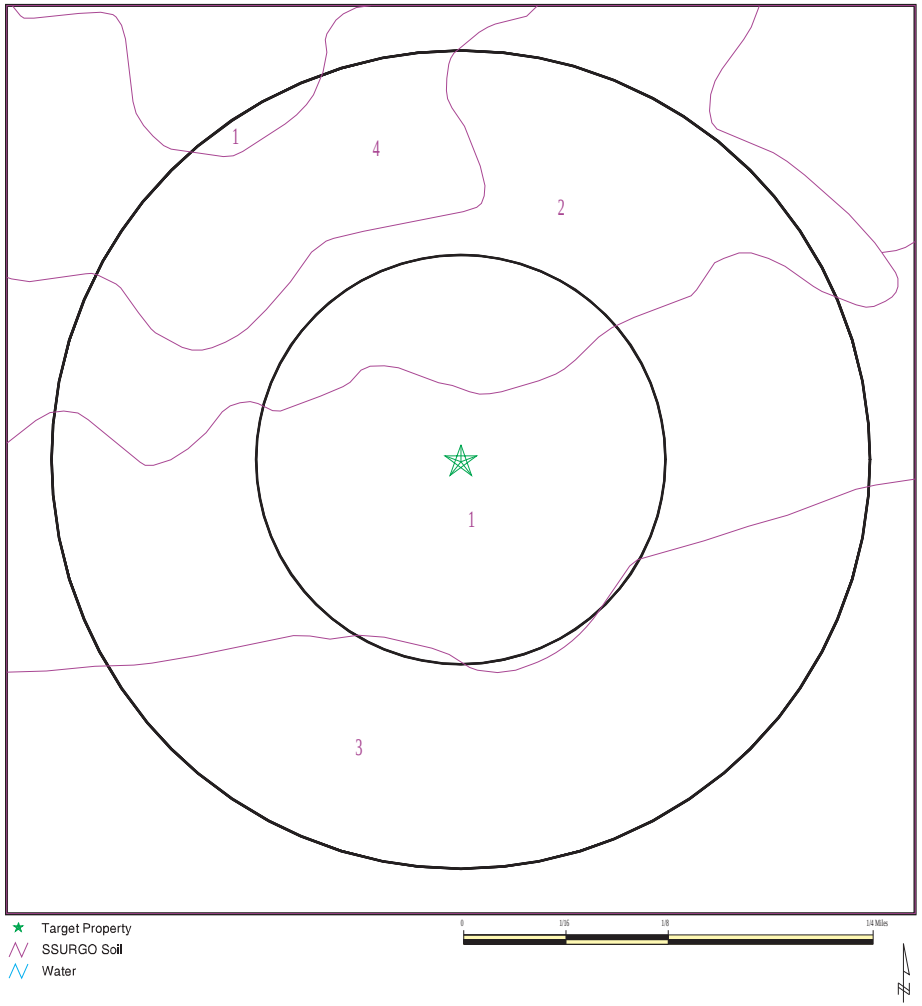
Era: -
System: -
Series: -
Code: N/A *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: -

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4237094.58s



★ Target Property
SSURGO Soil
Water

SITE NAME: Spencer House ADDRESS: 1035 Spencer St. Honolulu HI 96822 LAT/LONG: 21.3075 / 157.8444	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.58s DATE: March 17, 2015 5:39 pm

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DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Tantalus

Soil Surface Texture: silty clay loam

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	18 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	MH-A (proposed)	Max: 141.14 Min: 14.11	Max: 7.3 Min: 6.1
2	18 inches	29 inches	gravelly very fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	MH-A (proposed)	Max: 141.14 Min: 14.11	Max: 7.3 Min: 6.1
3	29 inches	59 inches	gravel	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Clean gravels, Poorly Graded Gravel.	Max: 705 Min: 141.14	Max: 7.3 Min: 6.1

Soil Map ID: 2

Soil Component Name: Tantalus

Soil Surface Texture: silty clay loam

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	18 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Gravels, Clean gravels, Poorly Graded Gravel.	Max: 141.14 Min: 14.11	Max: 7.3 Min: 6.1
2	18 inches	29 inches	gravelly very fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Gravels, Clean gravels, Poorly Graded Gravel.	Max: 141.14 Min: 14.11	Max: 7.3 Min: 6.1
3	29 inches	59 inches	gravel	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Clean gravels, Poorly Graded Gravel.	Max: 705 Min: 141.14	Max: 7.3 Min: 6.1

Soil Map ID: 3

Soil Component Name: Makiki

Soil Surface Texture: clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	20 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Gravels, Clean gravels, Poorly Graded Gravel.	Max: 42 Min: 4.23	Max: 5.5 Min: 5.1
2	20 inches	29 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Gravels, Clean gravels, Poorly Graded Gravel.	Max: 14.11 Min: 4.23	Max: 6 Min: 5.6
3	29 inches	59 inches	paragravelly clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.14 Min: 14.11	Max: 6 Min: 5.6

Soil Map ID: 4

Soil Component Name: Rock land

Soil Surface Texture: silty clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	3 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6
2	3 inches	7 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6
3	7 inches	20 inches	bedrock	Not reported	Not reported	Max: 0.42 Min: 0.02	Max: Min:

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A3	USGS40000269644	1/4 - 1/2 Mile SW
B5	USGS40000269642	1/4 - 1/2 Mile SE
C8	USGS40000269615	1/4 - 1/2 Mile South
A9	USGS40000269637	1/4 - 1/2 Mile SW
D11	USGS40000269632	1/4 - 1/2 Mile SE
E13	USGS40000269619	1/4 - 1/2 Mile SSW
E15	USGS40000269620	1/4 - 1/2 Mile SSW
F16	USGS40000269720	1/4 - 1/2 Mile ENE
G18	USGS40000269702	1/4 - 1/2 Mile East

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
H21	USGS40000269616	1/2 - 1 Mile SW
H23	USGS40000269622	1/2 - 1 Mile SW
J36	USGS40000269657	1/2 - 1 Mile WSW
J37	USGS40000269658	1/2 - 1 Mile WSW
J38	USGS40000269656	1/2 - 1 Mile WSW
J39	USGS40000269654	1/2 - 1 Mile WSW
J40	USGS40000269655	1/2 - 1 Mile WSW
J41	USGS40000269662	1/2 - 1 Mile WSW
J42	USGS40000269663	1/2 - 1 Mile WSW
J43	USGS40000269661	1/2 - 1 Mile WSW
J44	USGS40000269659	1/2 - 1 Mile WSW
J45	USGS40000269660	1/2 - 1 Mile WSW
I46	USGS40000269638	1/2 - 1 Mile WSW
J52	USGS40000269645	1/2 - 1 Mile WSW
J53	USGS40000269664	1/2 - 1 Mile WSW
J57	USGS40000269670	1/2 - 1 Mile West
J58	USGS40000269671	1/2 - 1 Mile West
M59	USGS40000269603	1/2 - 1 Mile SE
N61	USGS40000269584	1/2 - 1 Mile SSE
L63	USGS40000269687	1/2 - 1 Mile West
K64	USGS40000269585	1/2 - 1 Mile SSW
I65	USGS40000269639	1/2 - 1 Mile WSW
J67	USGS40000269678	1/2 - 1 Mile West
J68	USGS40000269672	1/2 - 1 Mile West
71	USGS40000269710	1/2 - 1 Mile West
M72	USGS40000269592	1/2 - 1 Mile SSE
O73	USGS40000269604	1/2 - 1 Mile SW
O74	USGS40000269605	1/2 - 1 Mile SW
P77	USGS40000269633	1/2 - 1 Mile WSW
P78	USGS40000269623	1/2 - 1 Mile WSW
Q81	USGS40000269614	1/2 - 1 Mile SE
S83	USGS40000269721	1/2 - 1 Mile WNW
T85	USGS40000269569	1/2 - 1 Mile South
U87	USGS40000269608	1/2 - 1 Mile SW
V90	USGS40000269572	1/2 - 1 Mile SSE
X92	USGS40000269698	1/2 - 1 Mile East
W94	USGS40000269627	1/2 - 1 Mile WSW
Y97	USGS40000269607	1/2 - 1 Mile SE
Z98	USGS40000269673	1/2 - 1 Mile West
V100	USGS40000269568	1/2 - 1 Mile SSE
V101	USGS40000269571	1/2 - 1 Mile SSE
AA103	USGS40000269580	1/2 - 1 Mile SE
AB105	USGS40000269609	1/2 - 1 Mile WSW
AD107	USGS40000269561	1/2 - 1 Mile SSE
AE108	USGS40000269677	1/2 - 1 Mile East
AF113	USGS40000269703	1/2 - 1 Mile West
AC114	USGS40000269567	1/2 - 1 Mile SSE
AG116	USGS40000269681	1/2 - 1 Mile West
AH117	USGS40000269733	1/2 - 1 Mile WNW
AI119	USGS40000269709	1/2 - 1 Mile East
AF123	USGS40000269699	1/2 - 1 Mile West
AK125	USGS40000269578	1/2 - 1 Mile SE

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
AL127	USGS40000269591	1/2 - 1 Mile SE
AG130	USGS40000269695	1/2 - 1 Mile West
AJ131	USGS40000269646	1/2 - 1 Mile WSW
AN135	USGS40000269715	1/2 - 1 Mile West
AN136	USGS40000269716	1/2 - 1 Mile West
AM137	USGS40000269621	1/2 - 1 Mile WSW
AN139	USGS40000269712	1/2 - 1 Mile West
AO141	USGS40000269636	1/2 - 1 Mile WSW
AJ142	USGS40000269649	1/2 - 1 Mile West
AP143	USGS40000269784	1/2 - 1 Mile NW
AQ145	USGS40000269807	1/2 - 1 Mile North
AN147	USGS40000269717	1/2 - 1 Mile West
AR151	USGS40000269556	1/2 - 1 Mile SSE
AO152	USGS40000269634	1/2 - 1 Mile WSW
AS154	USGS40000269590	1/2 - 1 Mile ESE
AS156	USGS40000269583	1/2 - 1 Mile SE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
J47	HI0000331	1/2 - 1 Mile WSW

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	HI8000000002299	1/8 - 1/4 Mile NNE
A2	HI8000000002224	1/4 - 1/2 Mile SW
B4	HI8000000002222	1/4 - 1/2 Mile SE
C6	HI8000000002188	1/4 - 1/2 Mile South
A7	HI8000000002219	1/4 - 1/2 Mile SW
D10	HI8000000002209	1/4 - 1/2 Mile SE
E12	HI8000000002192	1/4 - 1/2 Mile SSW
E14	HI8000000002191	1/4 - 1/2 Mile SSW
F17	HI8000000002298	1/4 - 1/2 Mile ENE
G19	HI8000000002285	1/4 - 1/2 Mile East
H20	HI8000000002186	1/2 - 1 Mile SW
H22	HI8000000002196	1/2 - 1 Mile SW
I24	HI8000000002220	1/2 - 1 Mile WSW
J25	HI8000000002234	1/2 - 1 Mile WSW
J26	HI8000000002235	1/2 - 1 Mile WSW
J27	HI8000000002236	1/2 - 1 Mile WSW
J28	HI8000000002240	1/2 - 1 Mile WSW
J29	HI8000000002239	1/2 - 1 Mile WSW
J30	HI8000000002238	1/2 - 1 Mile WSW
J31	HI8000000002243	1/2 - 1 Mile WSW
J32	HI8000000002244	1/2 - 1 Mile WSW

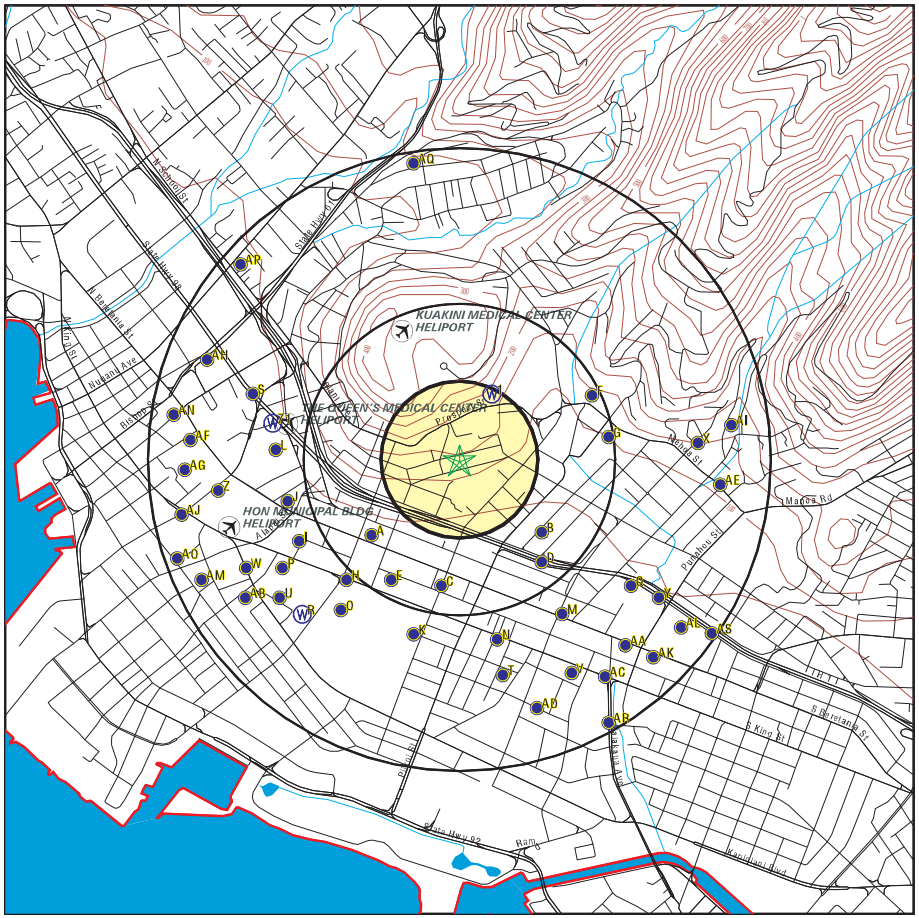
STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
J33	HI8000000002241	1/2 - 1 Mile WSW
J34	HI8000000002242	1/2 - 1 Mile WSW
K35	HI8000000002155	1/2 - 1 Mile SSW
K48	HI8000000002153	1/2 - 1 Mile SSW
J49	HI8000000002228	1/2 - 1 Mile WSW
J50	HI8000000002237	1/2 - 1 Mile WSW
L51	HI8000000002272	1/2 - 1 Mile West
J54	HI8000000002248	1/2 - 1 Mile West
M55	HI8000000002170	1/2 - 1 Mile SE
N56	HI8000000002148	1/2 - 1 Mile SSE
K60	HI8000000002147	1/2 - 1 Mile SSW
I62	HI8000000002221	1/2 - 1 Mile WSW
J66	HI8000000002247	1/2 - 1 Mile West
L69	HI8000000002289	1/2 - 1 Mile West
O70	HI8000000002169	1/2 - 1 Mile SW
P75	HI8000000002208	1/2 - 1 Mile WSW
P76	HI8000000002195	1/2 - 1 Mile WSW
Q79	HI8000000002187	1/2 - 1 Mile SE
R80	HI8000000002166	1/2 - 1 Mile SW
S82	HI8000000002300	1/2 - 1 Mile WNW
T84	HI8000000002133	1/2 - 1 Mile SSE
U86	HI8000000002178	1/2 - 1 Mile SW
R88	HI8000000002164	1/2 - 1 Mile SW
V89	HI8000000002136	1/2 - 1 Mile SSE
W91	HI8000000002205	1/2 - 1 Mile WSW
X93	HI8000000002283	1/2 - 1 Mile East
Y95	HI8000000002181	1/2 - 1 Mile SE
Z96	HI8000000002250	1/2 - 1 Mile West
V99	HI8000000002134	1/2 - 1 Mile SSE
AA102	HI8000000002146	1/2 - 1 Mile SE
AB104	HI8000000002177	1/2 - 1 Mile WSW
AC106	HI8000000002137	1/2 - 1 Mile SE
AE109	HI8000000002251	1/2 - 1 Mile East
AD110	HI8000000002120	1/2 - 1 Mile SSE
AC111	HI8000000002130	1/2 - 1 Mile SSE
AF112	HI8000000002284	1/2 - 1 Mile West
AG115	HI8000000002257	1/2 - 1 Mile West
AH118	HI8000000002308	1/2 - 1 Mile WNW
AI120	HI8000000002291	1/2 - 1 Mile East
AF121	HI8000000002282	1/2 - 1 Mile West
AJ122	HI8000000002225	1/2 - 1 Mile WSW
AK124	HI8000000002145	1/2 - 1 Mile SE
AL126	HI8000000002156	1/2 - 1 Mile SE
AJ128	HI8000000002229	1/2 - 1 Mile West
AG129	HI8000000002271	1/2 - 1 Mile West
AM132	HI8000000002190	1/2 - 1 Mile WSW
AN133	HI8000000002296	1/2 - 1 Mile West
AN134	HI8000000002297	1/2 - 1 Mile West
AN138	HI8000000002293	1/2 - 1 Mile West
AJ140	HI8000000002230	1/2 - 1 Mile West
AP144	HI8000000002349	1/2 - 1 Mile NW
AN146	HI8000000002295	1/2 - 1 Mile West

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
AQ148	HI8000000002373	1/2 - 1 Mile North
AR149	HI8000000002117	1/2 - 1 Mile SSE
AO150	HI8000000002207	1/2 - 1 Mile WSW
AS153	HI8000000002157	1/2 - 1 Mile ESE
AS155	HI8000000002149	1/2 - 1 Mile SE

PHYSICAL SETTING SOURCE MAP - 4237094.58s



County Boundary
Major Roads
Contour Lines
Airports
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons

Groundwater Flow Direction
Indeterminate Groundwater Flow at Location
Groundwater Flow Varies at Location

SITE NAME: Spencer House ADDRESS: 1035 Spencer St. Honolulu HI 96822 LAT/LONG: 21.3075 / 157.8444	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.58s DATE: March 17, 2015 5:39 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
1 NNE 1/8 - 1/4 Mile Higher	Click here for full text details	HI WELLS	HI8000000002299
A2 SW 1/4 - 1/2 Mile Lower	Click here for full text details	HI WELLS	HI8000000002224
A3 SW 1/4 - 1/2 Mile Lower	Click here for full text details	FED USGS	USGS40000269644
B4 SE 1/4 - 1/2 Mile Lower	Click here for full text details	HI WELLS	HI8000000002222
B5 SE 1/4 - 1/2 Mile Lower	Click here for full text details	FED USGS	USGS40000269642
C6 South 1/4 - 1/2 Mile Lower	Click here for full text details	HI WELLS	HI8000000002188
A7 SW 1/4 - 1/2 Mile Lower	Click here for full text details	HI WELLS	HI8000000002219
C8 South 1/4 - 1/2 Mile Lower	Click here for full text details	FED USGS	USGS40000269615
A9 SW 1/4 - 1/2 Mile Lower	Click here for full text details	FED USGS	USGS40000269637

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
D10 **SE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002209**
D11 **SE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269632**
E12 **SSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002192**
E13 **SSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269619**
E14 **SSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002191**
E15 **SSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269620**
F16 **ENE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269720**
F17 **ENE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002298**
G18 **East** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269702**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
G19 **East** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002285**
H20 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002186**
H21 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269616**
H22 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002196**
H23 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269622**
I24 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002220**
J25 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002234**
J26 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002235**
J27 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002236**

Map ID Direction Distance Elevation		Database	EDR ID Number
J28 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002240**
J29 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002239**
J30 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002238**
J31 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002243**
J32 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002244**
J33 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002241**
J34 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002242**
K35 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002155**
J36 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269657**

Map ID Direction Distance Elevation		Database	EDR ID Number
J37 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269658**
J38 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269656**
J39 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269654**
J40 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269655**
J41 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269662**
J42 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269663**
J43 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269661**
J44 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269659**
J45 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269660**

Map ID Direction Distance Elevation		Database	EDR ID Number
I46 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269638**
J47 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FRDS PWS**	**HI0000331**
K48 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002153**
J49 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002228**
J50 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002237**
L51 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002272**
J52 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269645**
J53 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269664**
J54 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002248**

Map ID Direction Distance Elevation		Database	EDR ID Number
M55 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002170**
N56 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002148**
J57 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269670**
J58 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269671**
M59 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269603**
K60 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002147**
N61 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269584**
I62 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002221**
L63 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269687**

Map ID Direction Distance Elevation		Database	EDR ID Number
K64 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269585**
I65 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269639**
J66 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002247**
J67 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269678**
J68 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269672**
L69 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002289**
O70 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002169**
71 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269710**
M72 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269592**

Map ID Direction Distance Elevation		Database	EDR ID Number
O73 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269604**
O74 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269605**
P75 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002208**
P76 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002195**
P77 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269633**
P78 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269623**
Q79 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002187**
R80 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002166**
Q81 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269614**

Map ID Direction Distance Elevation		Database	EDR ID Number
S82 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002300**
S83 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269721**
T84 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002133**
T85 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269569**
U86 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002178**
U87 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269608**
R88 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002164**
V89 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002136**
V90 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269572**

Map ID Direction Distance Elevation		Database	EDR ID Number
W91 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002205**
X92 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269698**
X93 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002283**
W94 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269627**
Y95 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002181**
Z96 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002250**
Y97 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269607**
Z98 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269673**
V99 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002134**

Map ID Direction Distance Elevation		Database	EDR ID Number
V100 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269568**
V101 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269571**
AA102 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002146**
AA103 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269580**
AB104 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002177**
AB105 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269609**
AC106 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002137**
AD107 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269561**
AE108 **East** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269677**

Map ID Direction Distance Elevation		Database	EDR ID Number
AE109 **East** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002251**
AD110 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002120**
AC111 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002130**
AF112 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002284**
AF113 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269703**
AC114 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269567**
AG115 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002257**
AG116 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269681**
AH117 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269733**

Map ID Direction Distance Elevation		Database	EDR ID Number
AH118 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002308**
AI119 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269709**
AI120 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002291**
AF121 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002282**
AJ122 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002225**
AF123 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269699**
AK124 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002145**
AK125 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269578**
AL126 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002156**

Map ID Direction Distance Elevation		Database	EDR ID Number
AL127 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269591**
AJ128 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002229**
AG129 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002271**
AG130 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269695**
AJ131 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269646**
AM132 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002190**
AN133 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002296**
AN134 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002297**
AN135 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269715**

Map ID Direction Distance Elevation		Database	EDR ID Number
AN136 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269716**
AM137 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269621**
AN138 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002293**
AN139 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269712**
AJ140 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002230**
AO141 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269636**
AJ142 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269649**
AP143 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269784**
AP144 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002349**

Map ID Direction Distance Elevation		Database	EDR ID Number
AQ145 **North** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269807**
AN146 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002295**
AN147 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269717**
AQ148 **North** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002373**
AR149 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002117**
AO150 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002207**
AR151 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269556**
AO152 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269634**
AS153 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002157**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
AS154 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269590**
AS155 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002149**
AS156 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269583**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for HONOLULU County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 96822

Number of sites tested: 4

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	-0.450 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	-0.575 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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HAWAII PUBLIC HOUSING AUTHORITY

ENVIRONMENTAL REVIEW

KŪHIŌ HOMES

Honolulu, O`ahu

AMP 40
HPHA No. 1007

Prepared for:

State of Hawaii
Hawaii Public Housing Authority

Prepared by:

HHF PLANNERS
places for people

U.S. Department of Housing and Urban Development
451 Seventh Street, SW
Washington, DC 20410
www.hud.gov

espanol.hud.gov

Environmental Review for Activity/Project that is Categorically Excluded Subject to Section 58.5

Pursuant to 24 CFR 58.35(a)

Project Information

Project Name: Kūhiō Homes (AMP 40)

Responsible Entity: Hawaii Public Housing Authority
1002 North School Street
Honolulu, HI 96817

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

State/Local Identifier: State of Hawaiʻi

Preparer: Mr. Scott Ezer, Vice President
HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaiʻi 96813

Certifying Officer Name and Title: Mr. David Y. Ige
Governor, State of Hawaiʻi

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

Consultant (if applicable): HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaiʻi 96813

Direct Comments to: Mr. Hakim Ouansafi, Executive Director
Hawaii Public Housing Authority
1002 North School Street
Honolulu, Hawaiʻi 96817

Project Location: 1441 Ahonui Street
Honolulu, Hawaiʻi 96819

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]**:**

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a "major construction activity" and would involve one or a combination of several HUD designated categories of actions.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent;
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons;
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland;
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation;
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls);
7. Interior and exterior renovations and rehabilitation;
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site;
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Level of Environmental Review Determination:

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.5. Compliance with and completion of conformance determinations for other statute, executive order, or regulation has been completed and support the Categorical Exclusion.

Funding Information

Grant Number	HUD Program	Funding Amount
To be determined	Capital Fund	To be determined
To be determined	Economic Development Initiative Special Project Grant	To be determined
To be determined	Other Grants	To be determined

Estimated Total HUD Funded Amount:

To be determined by HUD using a formula and based upon federal budget.

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]**:**

Depends upon funds available.

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	*The project is not within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.*
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☒	*The State of Hawai'i does not have any designated coastal barrier resource units. (http://www.fws.gov/CBRA/Maps/Mapper.html)*
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes ☐ No ☒	*As indicated in the Flood Insurance Rate Panel 15003C0353G, Revised November 05, 2014, this housing project is located in Flood Hazard Zone X (areas determined to be outside the 0.2% annual chance floodplain). A field inspection and information obtained from the site manager confirmed no major flooding issues within the site. Based on its description, this project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.*

STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5		
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes ☐ No ☒	*The State of Hawai'i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. EPA's Green Book for currently designated "nonattainment areas" as of June 2015. Planned repair and rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.*
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes ☐ No ☒	*Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai'i's Coastal Zone Management (CZM) program.*
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☐ No ☒	*There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.*
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes ☒ No ☐	*The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices, while project-specific mitigation measures are identified in the following section.*
Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes ☐ No ☒	*There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.*

Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes ☐ No ☒	*The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.*
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes ☐ No ☒	*The project site is located in Zone X, an area of minimal flooding (i.e., 0.2% annual chance flood), and is located outside the 500-year flood zone. A field inspection and information obtained from AMP Manager confirmed no major flooding issues within the project site.*
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes ☒ No ☐	*This housing project was constructed in 1953, and buildings have been altered over the years. A Historical Property Evaluation (HPE) conducted in 2010 determined that the buildings have been altered and the integrity of design, materials, feeling and workmanship have been compromised. Therefore, this housing project does not meet the eligibility criteria to be evaluated for the National Register of Historic Places. In a letter dated December 11, 2015, the State Historic Preservation Officer determined that repair and rehabilitation improvements for this project would have "no adverse effect" on historic properties pursuant to NHPA Section 106 and subject to certain mitigative measures.*
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes ☐ No ☒	*The project site is not situated along a highway that has a high volume of vehicular traffic. The HUD noise calculator estimated noise levels at the project site to be 41.6 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.*
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes ☐ No ☒	*The housing project is located within the O'ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation.*

Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☐ No ☒	*There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.* *(http://www.fws.gov/wetlands/data/mapper.HTML)*
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes ☐ No ☒	*There are no Wild and Scenic Rivers in Hawai'i, which excludes this project from mitigation or formal consultation requirements (http://www.rivers.gov/map.php)*
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes ☐ No ☒	*Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, these improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects on minority populations and low-income populations. Improvements should benefit low-income and minority populations living within this housing project.*

Field Inspection (Date and completed by)**:** June 23, 2015
Questor Lau
HHF Planners

Summary of Findings and Conclusions:

Repair and rehabilitation improvements implemented for this existing housing project by HPHA should not result in significant environmental impacts based upon research data collected, a field inspection, consultation with the site manager and maintenance staff, consultation with pertinent resource agencies, and prior HPHA experience implementing repair and rehabilitation improvements. Therefore, repair and rehabilitation improvements would comply and be consistent with the statutes, executive orders, and regulations addressed. Furthermore, HPHA would evaluate improvements planned to ensure the work is consistent with the designated categories of actions described under the project description section. Compliance with these factors evaluated are further addressed in the attached Source Documentation Statutory Worksheet along with relevant technical reports/assessments.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Law, Authority, or Factor	Mitigation Measure
Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	*Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.* *Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved land site at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed upon completion of work, and no contamination of adjacent habitats shall be allowed from project-related activities.* *Hawaiian Hoary Bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.* *Hawaiian Goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season (September through March). A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.* *Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo'i, impoundments or other vegetated water bodies.* *1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols.* *2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to*

	ensure that Hawaiian waterbirds and nests are not adversely impacted. *3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.* *In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.* *<u>Additional Measures</u>: The following additional measures would be implemented:* *1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.*
National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	*1. If ground disturbing activity is anticipated, HPHA must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation.* *a. Submit detailed plans, specifications and a detailed scope of work once the plans have been developed.* *b. Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation.* *c. Submit a TMK map showing the full extent of the project area within the affected parcel/s.* *d. Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area.* *e. Summary of land use history, such as previous intensive cultivation, grubbing or grading.* *f. Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.* *In addition to these mitigation measures, the HPHA would enter into a Programmatic Agreement with the SHPO to address the implementation of future repair and rehabilitation improvements to State housing projects after the current Section 106 review process is completed and prior to the next environmental review process in approximately five years. Furthermore, should subsurface human remains or other*

	traces of human activity greater than 50 years old be encountered during construction, all work in the vicinity of the find would immediately stop and the SHPD would be promptly notified. The treatment of any human remains that are encountered would be conducted in accordance with applicable requirements of Chapter 6E, Hawai'i Revised Statutes (Historic Preservation) and Chapter 13-300, Hawai'i Administrative Rules (Rules of Practice and Procedure Relating to Burial Sites and Human Remains).

Determination:

☐ This categorically excluded activity/project converts to **EXEMPT** per Section 58.34(a)(12), because it does not require any mitigation for compliance with any listed statutes or authorities, nor requires any formal permit or license; **Funds may be committed and drawn down after certification of this part** for this (now) EXEMPT project; OR

☒ This categorically excluded activity/project cannot convert to Exempt status because one or more statutes or authorities listed at Section 58.5 requires formal consultation or mitigation. Complete consultation/mitigation protocol requirements, **publish NOI/RROF and obtain "Authority to Use Grant Funds"** (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR

☐ This project is not categorically excluded OR, if originally categorically excluded, is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

Preparer Signature: Scott Ezer Date: 12-17-15

Name/Title/Organization: Mr. Scott Ezer, Vice President
HHF Planners

Responsible Entity Agency Official Signature:

David Y. Ige Date: APR 28 2016

Name/Title: Mr. David Y. Ige, Governor

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

KUHIO HOMES (HA # 1007)

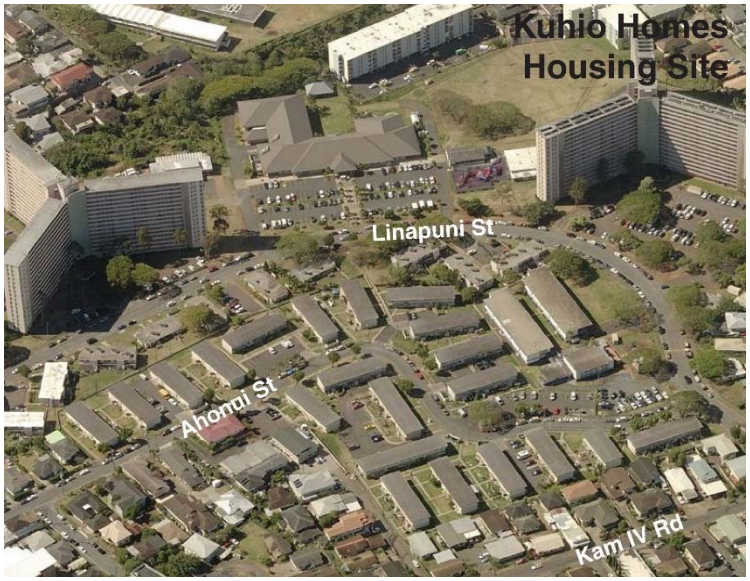
TMK: (1) 1-3-039:003 and 006

Hawai‘i Public Housing Authority (HPHA) Environmental Review

SOURCE DOCUMENTATION (SD) STATUTORY WORKSHEET

Site Visit Date: June 23, 2015
Prepared By: Questor Lau

PROJECT DESCRIPTION



The Kūhiō Homes housing project is located in the Kalihi community of Honolulu on the island of O‘ahu. Kalihi is an urban neighborhood situated west of downtown Honolulu and east of Fort Shafter.

The housing site is positioned along Ahonui Street and is bordered to the south by the Kūhiō Park Terrace Low-Rise housing project. This housing project is within HPHA’s Asset Management Project (AMP) 40 which includes one other housing project.

Kūhiō Homes was established in 1953 and has street address of 1441 Ahonui Street. The property consists of a combined area of 6.45 acres and encompasses two parcels, Tax Map Key (TMK) Nos. (1) 1-03-039: 003 and 006. The housing project is comprised of 21 two-story low-rise apartment buildings with housing units ranging from one to five bedrooms per unit. Figure 4 includes a Site Plan of this housing project. The State’s land use designation for the property is the “Urban District,” and the City’s zoning for the parcel is A-2 Medium-Density Apartment.

The project site is not located within a tsunami evacuation zone, and the entire site is located in Flood Zone X, an area of minimal flood hazard (Community Panel Numbers 15003C0353G, Panel Effective Date: January 19, 2011, Index Date: November 05, 2014).

The following figures in Exhibit A provide supporting information on this housing project:

Figure 1: Location Map
Figure 2: TMK Map
Figure 3: Site Map
Figure 4: Flood Map

COMPLIANCE FACTORS

I. AIRPORT CLEAR ZONES AND ACCIDENT POTENTIAL ZONES (24 CFR PART 51D)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The housing project does not lie within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: 24 CFR 51 (D).

Honolulu International Airport Master Plan - 2010 (August 1994), State Department of Transportation, Airports Division;

*Hawai`i Airports and Flying Safety Guide (2012-13, Fifth Edition, Revision 1)* Hawai`i Department of Transportation, Airports Division; and

http://hidot.hawaii.gov/airports/files/2013/01/Airport-Safety-Guide-2012-2013-5rev1.pdf

II. COASTAL BARRIER RESOURCES (COASTAL BARRIER IMPROVEMENT ACT OF 1990 [16 USC 3501])

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i does not have any designated coastal barrier resource units.

SUPPORTING DOCUMENTATION:

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/cbra/maps/mapper.html (Date accessed: 6/30/15).

III. FLOOD INSURANCE (FLOOD DISASTER PROTECTION ACT OF 1973 AND NATIONAL FLOOD INSURANCE REFORM ACT OF 1994 [42 USC 4001-4128 AND 42 USC 5154a])

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program.

As indicated in the Flood Insurance Rate Panel 15003C0353G, Revised November 05, 2014, this housing project is located in Flood Hazard Zone X (areas determined to be outside the 0.2% annual chance floodplain). A field inspection and information obtained from the site manager confirmed no major flooding issues within the site. Based on its description, this project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal signs of flooding problems. An interview with the AMP Manager also determined that major ponding or flooding issues are currently not an issue for the project site.

Printed: Flood Insurance Rate Map, Community Panel Number 15003C0353G, Panel Effective Date: January 19, 2011, Index Date: November 05, 2014.

Hawai`i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 7/27/15)

IV. CLEAN AIR ACT (40 CFR PARTS 6, 51, 93)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. Environmental Protection Agency's Green Book for currently designated "nonattainment areas" as of June 2015. Planned rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.

SUPPORTING DOCUMENTATION:

Printed: *State of Hawai‘i Annual Summary 2013 Air Quality Data*. State of Hawai'i, Department of Health, July 2014.

U.S. Environmental Protection Agency website at: http://epa.gov/airquality/greenbk/

V. COASTAL ZONE MANAGEMENT ACT (16 USC 1451, SECTIONS 307 (C), (D)

CONTACT:

Mr. John Nakagawa
Office of Planning
Department of Business, Economic Development & Tourism
State of Hawai‘i
P.O. Box 2359
Honolulu, Hawai'i, 96804-2359

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai‘i's Coastal Zone Management (CZM) program.

SUPPORTING DOCUMENTATION:

Contact: In an email to the Office of Planning (OP) dated July 27, 2015, the HPHA determined that the use of HUD funds for the implementation of repair and rehabilitation improvements does not require review for consistency with Hawai‘i's CZM program. The OP confirmed this determination in an email dated July 28, 2015 and it is included in the Appendices.

Experience: Previous reviews conducted by OP in 2003, 2005, and 2010 determined that projects receiving federal funds from HUD do not require CZM federal consistency review. OP's current determination confirms this condition is still applicable. Copies of these prior documentations are included in the Appendices.

VI. CONTAMINATION AND TOXIC SUBSTANCES (24 CFR PART 50.3 & 58.5(I)(2))

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Project Not Affected.

There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.

SUPPORTING DOCUMENTATION:

Field: A site inspection and interview with the Asset Management Project (AMP) Manager revealed no presence of any toxic or radioactive materials on the project site that warrant concern. Building D-1 is used as a secure furniture storage area. A secure cabinet outside that building stores small quantities of gasoline for lawn equipment.

Study: Environmental Data Resources, Inc. (EDR), conducted a search of available environmental records and prepared a Radius Map Report (Inquiry Number 4237094.154s, March 18, 2015). EDR reviewed more than 25 federal and statewide regulatory databases for information regarding the treatment, storage, disposal and release of toxic chemicals at the project site and within specific radii (generally 1 mile) of the site. A Detail Map within the EDR report documents those sites identified within a 0.25 mile radius of the project site. The EDR report in Exhibit B includes the results of their research findings.

The EDR report notes the following activities within a 0.125 mile radius from the center of the project site. This housing project along with existing surrounding areas are within the Fort Shafter Army Department of Defense region. This project site was not identified as a Formerly Used Defense Site (FUDS) by the U.S. Army Corps of Engineers and is not subject to any cleanup actions for Department of Defense-generated contamination.

The subject housing project site is classified as a Non-Generator (Handler) that does not generate hazardous waste, and no violations were found. The adjacent KPT High-Rise housing project (now known as Kūhiō Park Terrace Towers), is listed as a brownfield. The site is registered with the State Department of Health and its hazard priority is “no further work” as potential hazards are managed with controls. Lead under the building (specific building not identified) and asphalt were addressed.

Restrictions with the KPT High-Rise include prohibiting any activity that may disturb the integrity of the capping system, and reassess this system if the asphalt or building are disturbed. Also, elevated levels of dieldrin (insecticide) were also reported found around the perimeter of the buildings. The assessment and response to this is ongoing and it has a medium priority. Controls are required to manage the contamination. The report also

notes that this site was used for agricultural purposes until developed for residential homes in the 1940s. The Kūhiō Park Terrace Community Center is also a site is registered with the State Department of Health and its hazard priority is "no further work" as potential hazards are managed with controls. Lead under the building and asphalt were addressed, controls are required to manage the contamination, but no restrictions were identified.

VII. ENDANGERED SPECIES (50 CFR PART 402)

CONTACT:
Mr. Loyal Mehrhoff, Field Supervisor
Pacific Islands Administrator
Fish and Wildlife Services
U.S. Department of the Interior
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawai'i 96813
Tel. #: 792-9400

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Adverse Effect Subject to Mitigation

The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received by the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices.

SUPPORTING DOCUMENTATION:

Contact: A letter from the HPHA dated July 24, 2015 was submitted to the Pacific Island Administrator for the FWS determining that repair and rehabilitation improvements that may be implemented using HUD funds for this housing project would have no likelihood of effect on any listed species or proposed species, or existing or proposed designated critical habitat subject to certain measures. Concurrence with this determination along with proposed minimization and avoidance measures was received from the FWS in a letter dated September 28, 2015 which is included in the Appendices. This housing project is subject to the following minimization and avoidance measures.

Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.

Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved land site at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed upon completion of work, and no contamination of adjacent habitats shall be allowed from project-related activities.

Hawaiian Hoary Bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.

Hawaiian Goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season (September through March). A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.

Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro loʻi, impoundments or other vegetated water bodies.

1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols.
2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.
3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.

In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.

Additional Measures: The following additional measures would be implemented:

1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.

Experience: The FWS was previously consulted as part of environmental reviews that were completed in 2005 (39 housing projects) and 2010 (70 housing projects) which supported the determination that repair and rehabilitation improvements would either: 1) have no likelihood of effect for certain housing projects; or 2) not likely adversely affect federally listed species or critical habitat for certain housing projects subject to mitigative measures. A summary of these consultation efforts follows.

2005 Consultation: In a letter dated July 15, 2005, the Housing and Community Development Corporation of Hawaiʻi (predecessor to the HPHA), determined that the implementation of minor repair and rehabilitation improvements for 39 housing projects would not have an adverse effect on federally-listed species or critical habitat. In a letter dated August 11, 2005, the FWS concurred with the HCDCH determination.

2010 Consultation: In a letter dated May 17, 2010, the HPHA informed the FWS that HUD funds would be used to immediately implement repair and rehabilitation

improvements for six housing projects on O'ahu and the island of Hawai`i. In a subsequent letter dated May 21, 2010, the FWS was informed that HPHA would be using HUD funds to implement minor repair and rehabilitation improvements for 64 projects throughout the State. In both letters, the HPHA determined that the repair and rehabilitation improvements were not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat. Based on further consultation and a meeting with FWS staff on June 24, 2010, the HPHA determined that repair and rehabilitation improvements for most of their housing projects would not likely adversely affect any listed or proposed species, or existing or proposed designated habitat, subject to various mitigative measures for certain housing projects.

VIII. EXPLOSIVE AND FLAMMABLE OPERATIONS (24 CFR PART 51C)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

SUPPORTING DOCUMENTATION:

Field: Field inspection was limited to the exterior of residential buildings and associated structures for this housing project. No above-ground explosive or flammable material storage containers in excess of 100 gallons were observed at the site.

Printed: 24 CFR Part 51, Subpart C addresses acceptable separation distance from above-ground explosive or flammable fuels or chemical containers. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

IX. FARMLANDS PROTECTION (7 CFR PART 658)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. Since the property consists of an existing housing development within an urbanized area, no farmlands would be impacted by the implementation of repair and rehabilitation improvements.

Printed: The property is designated for "Urban" use by the State Land Use Commission and the County's zoning for the parcel is RD-3.75 Double-Family Residential District.

Hawai`i Office of Planning website at: http://planning.hawaii.gov/gis/
(Date accessed: 6/30/2015)

X. FLOODPLAIN MANAGEMENT (EXECUTIVE ORDER 11988, 24 CFR PART 55)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program

The project site is located in Zone X, an area of minimal flooding (i.e., 0.2% annual chance flood), and is located outside the 500-year flood zone. A field inspection and information obtained from AMP Manager confirmed no major flooding issues within the project site.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal signs of previous flooding problems. An interview with the AMP Manager also determined that no major ponding or flooding issues occur on the project site. Stormwater catch basins at Ahonui Street were noted to be filled with trash and need to be cleaned to function properly. Also, near Building 15, the concrete lined drainage ditch appears to be overgrown with weeds.

Printed: Flood Hazard Assessment Report, FIRM Panel: 15003C0353G, Revised November 05, 2014

Hawai`i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/ (Date accessed7/21/15)

XI. HISTORIC PRESERVATION (NATIONAL HISTORIC PRESERVATION ACT OF 1966; SECTIONS 106 AND 110; 36 CFR, PART 800)

CONTACT:

Ms. Suzanne Case, Chairperson
Department of Land and Natural Resources (DLNR)
State of Hawai'i
1151 Punchbowl Street
Honolulu, Hawai'i 96813
Tel. #: 587-0400

SUPPORTING DOCUMENTS	
X	Field
X	Contact
X	Printed
X	Experience
X	Study

DETERMINATION:

Status Category: No Effect on Historic Properties with Mitigation

This housing project was first occupied in 1953, and buildings have been altered over the years. A Historical Property Evaluation (HPE) conducted in 2010 determined that the buildings have been altered and the integrity of design, materials, feeling and workmanship have been compromised. Therefore, this housing project does not meet the eligibility criteria to be evaluated for the National Register of Historic Places (NHRP). In a letter dated December 11, 2015, the State Historic Preservation Officer (SHPO) provided a determination and set forth conditions for ground-disturbing activities. In responding to this letter, the HPHA concurred with the conditions set forth by the SHPO.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not locate any existing or potential archaeological sites (e.g., heiau) or cultural features on the property. An interview with the AMP Manager indicates that no known sites or features are present on the property.

Contact: Based on the findings and recommendations of the 2010 HPE, the HPHA submitted a letter to the SHPO dated August 20, 2015 regarding 28 housing projects, which is included in the Appendix. Of this total, 15 housing projects did not meet National Register eligibility criteria (including Kūhiō Homes), therefore, a "no historic properties affected" determination was proposed for these repair and rehabilitation improvements. Repair and rehabilitation improvements for the other 13 housing projects were determined to meet

National Register eligibility criteria and were proposed to have "no adverse effect" on historic properties subject to certain mitigative measures.

In a letter dated December 11, 2015, the SHPO determined that repair and rehabilitation improvements for this housing project would have "no adverse effect" on historic properties instead of "no historic properties" pursuant to NHPA Section 106 and subject to the following mitigative measures. In responding to this letter, the HPHA concurred with the conditions set forth by the SHPO. A copy of these letters is included in Exhibit C.

1. If ground disturbing activity is anticipated, HPHA must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation.

    a. Submit detailed plans, specifications and a detailed scope of work once the plans have been developed.

    b. Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation.

    c. Submit a TMK map showing the full extent of the project area within the affected parcel/s.

    d. Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area.

    e. Summary of land use history, such as previous intensive cultivation, grubbing or grading.

    f. Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

In addition to these mitigation measures, the HPHA would enter into a Programmatic Agreement with the SHPO to address the implementation of future repair and rehabilitation improvements to State housing projects after the current Section 106 review process is completed and prior to the next environmental review process in approximately five years. Furthermore, should subsurface human remains or other traces of human activity greater than 50 years old be encountered during construction, all work in the vicinity of the find would immediately stop and the SHPD would be promptly notified. The treatment of any human remains that are encountered would be conducted in accordance with applicable requirements of Chapter 6E, Hawai'i Revised Statutes (Historic Preservation) and Chapter 13-300, Hawai'i Administrative Rules (Rules of Practice and Procedure Relating to Burial Sites and Human Remains).

Printed: A review of the U.S. National Parks Service website for the National Register of Historic Places did not identify any historic properties within the limits of this housing project. A similar review of the State DLNR website for the State Register of Historic Places revealed that there are no historic properties within the project site.

National Register: U.S. National Park Service website at:
http://www.nps.gov/nr/research/ (Date accessed: 7/2/15).

State Register: Hawai`i Department of Land and Natural Resources website at: http://dlnr.hawaii.gov/shpd/state-register/ (Date accessed: 7/2/15).

Experience: A letter from the HPHA to the State Historic Preservation Officer (SHPO), dated July 14, 2010, addressed five housing projects throughout Hawai'i for review under Section 106. HPHA determined that minor repair and rehabilitation improvement at three of the public housing projects would have "no adverse effect" on historic properties, subject to mitigative measures. The Kūhiō Homes project along with another housing project included with this letter did not meet National Register eligibility criteria. This determination was based upon a June 2010 Historic Property Evaluation (HPE) prepared by Mason Architects, Inc. The SHPO had no comments or objections to these determinations.

Study: In 2010, a Historic Property Evaluation (HPE) was conducted by Mason Architects, Inc. that included this housing project. This housing project was constructed in 1953, and buildings have been altered over the years. The original windows have been replaced with aluminum-frame fixed-pane and jalousie windows. Original exterior flush wood doors have been replaced, primarily with metal-clad doors. Screen doors have been replaced as well. The original asphalt tiles on the floors have been covered with new vinyl composition tile. Interior panel doors have been replaced with flush ones. Kitchens and bathrooms have been renovated with laminate countertops, newer cabinets, and with newer plumbing fixtures in the bathrooms. When individual electric meters were installed for each unit, numerous metal conduits were attached to the exterior of the buildings. Therefore, the HPE determined that the buildings have been altered and the integrity of design, materials, feeling and workmanship have been compromised. Therefore, this housing project does not meet the eligibility criteria to be evaluated for the National Register of Historic Properties (NHRP).

XII. NOISE ABATEMENT CONTROL (24 CFR PART 51B)

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Within HUD Noise Standards

The project site is not situated along a highway that has a high volume of vehicular traffic. The HUD noise calculator estimated noise levels at the project site to be 41.6 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

SUPPORTING DOCUMENTATION:

Field: No significant noise generating sources were identified within the project site during the site inspection. The subject housing lots are located within an urban residential neighborhood along Ahonui Street. Ahonui Street is expected to have low volumes of

vehicles because traffic in this area would primarily be to the existing homes in this area. Furthermore, an interview with the AMP Manager did not identify any loud noise producing sources in the area. As a result, notable noise sources are predominantly associated with vehicular traffic along adjacent streets. Traffic noise did not appear significant during the site visit.

Study: The HUD day/night noise level calculator was used to estimate approximate traffic noise levels at the project site. Middle Street is a primary County roadway. Middle Street serves vehicular traffic entering and exiting Kalihi along with providing access to other surrounding urban areas. Traffic counts were based on 2013 Hawai‘i State Department of Transportation data and applied to a distance of 500 feet from the project site. Using this HUD calculator, the estimated noise levels at the project site is 41.6 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

XIII. SOLE SOURCE AQUIFER (40 CFR PART 149)

	SUPPORTING DOCUMENTS
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact on Sole Source Aquifer

The housing project is located within the O‘ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation. However, if exceptional circumstances require compliance steps with any of these authorities, such compliance must be established and documented prior to approving the site-specific loan or grant.

SUPPORTING DOCUMENTATION:

Printed: This determination was based upon review of the Sole Source Aquifer Memorandum of 4/30/90 (Sections II.B.1 and II.B.2) and consideration of the type of rehabilitation related improvements that would be conducted for this project.

XIV. WETLANDS PROTECTION (EXECUTIVE ORDER 11990)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the property did not identify the presence of any wetlands.

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/wetlands/data/mapper.html (Date accessed 7/23/2015).

XV. WILD AND SCENIC RIVERS ACT (16 USC 1271, SECTION 7 (B), (C))

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no Wild and Scenic Rivers in Hawaiʻi, which excludes this project from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: National Wild and Scenic Rivers System website at: http://www.rivers.gov/index.php (Date accessed: 6/30/2015).

XVI. ENVIRONMENTAL JUSTICE (EXECUTIVE ORDER NO. 12898)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Conflict with Requirements

Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, repair and rehabilitation improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations. Repair and rehabilitation improvements should benefit low-income and minority populations living within this housing project.

SUPPORTING DOCUMENTATION:

Printed: Executive Order 12898.

U.S. Department of Housing and Urban Development website at:
https://www.hudexchange.info/environmental-review/environmental-justice/

EXHIBIT A

Location Map, TMK Map, Site Map, Flood Map, and Site Photos

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

HONOLULU RAIL TRANSIT

Transit Corridor

Transit Station

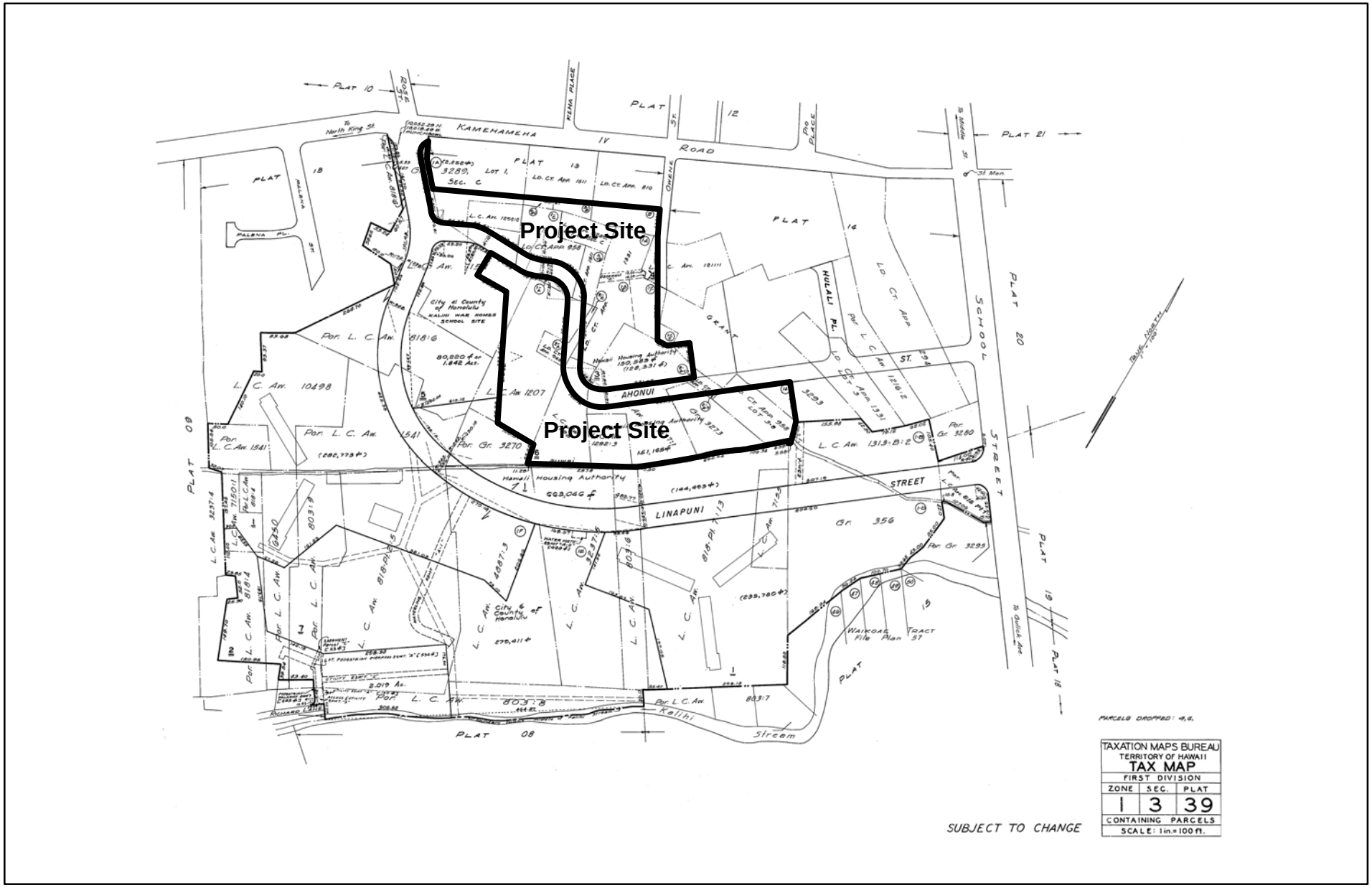
HPHA No. 1007 - Kūhiō Homes (AMP 40)

Figure 1 - Project Location Map

Honolulu, O'ahu

1,500 FT

HHF PLANNERS
places for people



HPHA No. 1007 - Kūhiō Homes (AMP 40)

Figure 2 - TMK Map

Honolulu, O'ahu

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

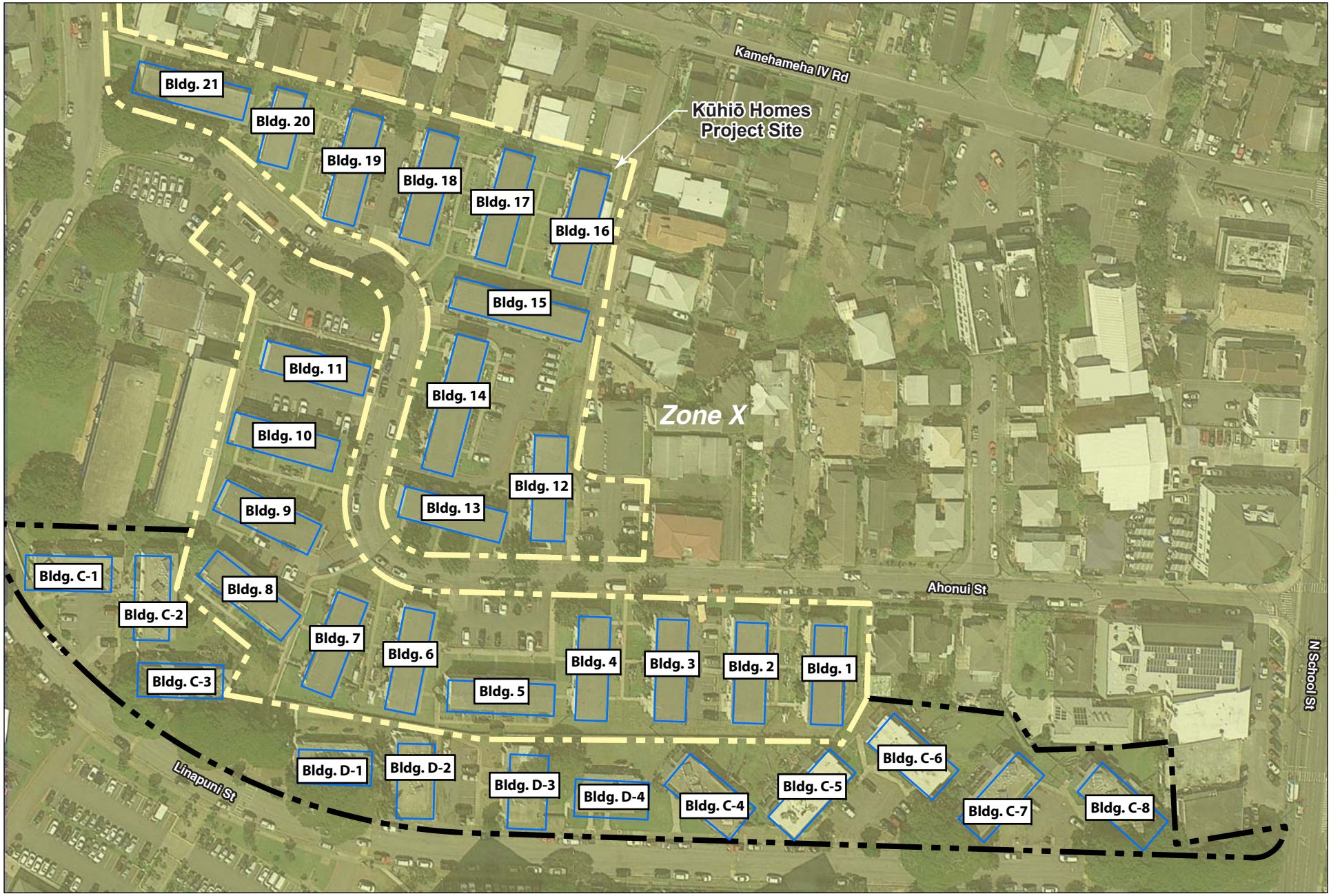
HPHA No. 1007 - Kūhiō Homes (AMP 40)

Figure 3 - Site Map

Honolulu, O'ahu

100 FEET

HHF PLANNERS
places for people



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

LEGEND

Zone X - Outside the 0.2% Annual Chance of Flood

HPHA No. 1007 - Kūhiō Homes (AMP 40)

Figure 4 - Flood Map

Honolulu, O'ahu

100 FEET

HHF PLANNERS
places for people

KŪHIŌ HOMES
SITE PHOTOS

School Street entrance and (east) guard station

Kamehameha IV Road entrance and (west) guard station

Ahonui Street provides sole vehicle access to project site

Project's northern boundary, facing east, near Buidling 19

Project's eastern boundary, facing south. Kuhio Park Terrace (high-rise) in background.

Concrete lined drain carries surface runoff toward the street

KŪHIŌ HOMES
SITE PHOTOS

Near Building 15, concrete lined drainage ditch appears to be blocked with overgrown weeds and may not drain to the street

Culvert diverts runoff below walkways

Stormwater catch basins at Ahonui Street was clogged with trash and needs to be cleaned out

Stormwater catch basins at Ahonui Street was clogged with trash and needs to be cleaned out

Small quantities of gasoline for lawn equipment

Latex paint storage area

EXHIBIT B

EDR Radius Map Report

Kuhio Homes
1441 Ahonui St.
Honolulu, HI 96819

Inquiry Number: 4237094.154s
March 18, 2015

EDR Summary Radius Map Report

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

FORM-NULL-PVC

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

1441 AHONUI ST.
HONOLULU County, HI 96819

COORDINATES

Latitude (North):	21.3392000 - 21' 20' 21.12''
Longitude (West):	157.8762000 - 157' 52' 34.32''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	616536.7
UTM Y (Meters):	2359965.5
Elevation:	92 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	USGS 7.5 min quad index

Target Property:	E
Source:	USGS 7.5 min quad index

MAPPED SITES SUMMARY

Target Property Address:
1441 AHONUI ST.
, HI 96819

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
1	KUHIO HOMES PUBLIC H	1410 THRU 1529 AHONU	RCRA NonGen / NLR, FINDS		TP
Reg	FORT SHAFTER		DOD	Same	1 ft.
A2	KUHIO PARK TERRACE T	LINAPUNI ST	SHWS, ENG CONTROLS, INST CONTROL, BROWNFIELDS	Lower	270, South
A3	KUHIO PARK TERRACE	1518 LINAPUNI STREET	US BROWNFIELDS	Lower	296, SSE
4	KUHIO PARK TERRACE C	1475 LINAPUNI ST	SHWS, ENG CONTROLS, INST CONTROL	Higher	668, West
B5		1419 KAMEHAMEHA IV	EDR US Hist Auto Stat	Higher	718, WNW
B6		1415 KAMEHAMEHA IV	EDR US Hist Auto Stat	Higher	735, WNW
C7	SHELL SERVICE STATIO	2239 N SCHOOL ST	UST	Higher	847, NE
C8	IMM KAM IV	2314 N SCHOOL ST	LUST, UST, Financial Assurance	Higher	872, NE
C9		2314 N SCHOOL ST	EDR US Hist Auto Stat	Higher	873, NE
10		1532 AMELIA ST	EDR US Hist Auto Stat	Lower	920, ESE
D11	CHANG-CHOW PROPERTY,	2161 N SCHOOL ST	SHWS	Lower	979, East
D12	CHANG CHOW PROPERTIE	2161 N SCHOOL ST	UST	Lower	995, East
13	7-11 KAM IV 0166	2404 N SCHOOL ST	LUST, UST, Financial Assurance	Higher	1096, NNE
E14	KANE'S AUTO REPAIR	1325 MIDDLE ST	LUST, UST	Lower	1493, WNW
E15	BENTON'S MIDDLE STRE	1305 MIDDLE ST	LUST, UST, Financial Assurance	Lower	1538, WNW
16	C&CH BOARD OF WATER	2442 KINI PLACE	LUST, UST, Financial Assurance	Higher	1735, NNE
17	FORT SHAFTER	BLDG 535/EXCHANGE MA	LUST, UST	Higher	2056, NW
18	FORT SHAFTER	BLDG 422 TANK 7A 7B	LUST, UST	Lower	2116, WNW
19	U.S. ARMY ADMINISTRA	BLDG 430	LUST, UST	Lower	2188, WNW
20	KALIHI STREAM CHEVRO	2160 N. KING ST.	LUST, UST, Financial Assurance	Lower	2229, SW
21	KUHIO PARK TERRACE	1600 HAUPU PL	US BROWNFIELDS	Higher	2285, ESE
22	KSC SERVICE L-4210	2295 N KING ST	LUST, UST	Lower	2370, WSW
23	2343 NORTH KING STRE	2343 N KING ST	SHWS, INST CONTROL	Lower	2510, WSW
F24	FACTORY STREET SITE	2003 N. KING STREET	CERC-NFRAP	Lower	2573, SSW
F25	FACTORY STREET LEAD	2003 N KING ST	SHWS, SPILLS, ENG CONTROLS, INST CONTROL	Lower	2573, SSW
G26	C&CH KALIHI-UKA FIRE	1861 KAMEHAMEHA IV H	LUST, UST, Financial Assurance	Higher	2576, NE
G27	KALIHI POLICE STATIO	1865 KAMEHAMEHA IV R	LUST, UST, Financial Assurance	Higher	2594, NE
28	KAPALAMA INCINERATOR	757 KOKEA ST	RCRA-SQG, SHWS, SPILLS, INST CONTROL	Lower	3077, SSW
29	FARRINGTON HIGH SCHO	1564 N KING ST	FTTS, HIST FTTS, SHWS, SPILLS	Lower	3292, SSE
30	KAMEHAMEHA SCOOLS	1887 MAKUAKANE ST	RCRA-CESQG, FINDS, SHWS, SPILLS, ENG CONTROLS,...	Higher	3532, East
31	OTS BUS UNIT REPAIR	811 MIDDLE ST	SHWS, LUST, UST, Financial Assurance	Lower	3637, WSW
32	2147 AOAO STREET	2147 AOAO ST	SHWS, SPILLS	Higher	3698, NE
33	FORT SHAFTER BOLLARD	1557 PASS ST	SHWS, SPILLS	Lower	3917, West
34	HAWAII MEAT COMPANY	711 MIDDLE ST	SHWS, SPILLS, ENG CONTROLS, INST CONTROL	Lower	4076, WSW
35	LENAKONA DEVELOPMENT	2305 KAMEHAMEHA HWY	SHWS, LUST, UST	Lower	4224, SW
36	DILLINGHAM BOULEVARD	DILLINGHAM BLVD & MO	SHWS, ENG CONTROLS, INST CONTROL	Lower	4316, SSW
37	YEE HOP PROPERTY	621 MIDDLE ST	SHWS, SPILLS	Lower	4361, WSW
38	HAWAII DAIRY HOLDING	2277 KAMEHAMEHA HWY	SHWS, LUST, UST, VCP, Financial Assurance	Lower	4506, SW

MAPPED SITES SUMMARY

Target Property Address:
1441 AHONUI ST.
, HI 96819

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
39	611 MIDDLE STREET WA	611 MIDDLE ST	SHWS, SPILLS, ENG CONTROLS, INST CONTROL	Lower	4555, WSW
40	2326 KALIHI STREET U	2326 KALIHI ST	SHWS, SPILLS, ENG CONTROLS, INST CONTROL	Higher	5014, ENE
41	TAKAMIYA PROPERTY	850 MOOWAA ST	SHWS, SPILLS	Lower	5091, SSE
42	ROSS TRUSTS	819 MOOWAA ST	SHWS, VCP	Lower	5156, SSE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 7 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
KUHIO HOMES PUBLIC H 1410 THRU 1529 AHONU HONOLULU, HI 96819	RCRA NonGen / NLR FINDS	HID984469478

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal CERCLIS NFRAP site List

CERC-NFRAP: A review of the CERC-NFRAP list, as provided by EDR, and dated 10/25/2013 has revealed that there is 1 CERC-NFRAP site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
FACTORY STREET SITE	2003 N. KING STREET	SSW 1/4 - 1/2 (0.487 mi.)	F24	12

State- and tribal - equivalent CERCLIS

SHWS: A review of the SHWS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 20 SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
KUHIO PARK TERRACE C	***1475 LINAPUNI ST***	***W 1/8 - 1/4 (0.127 mi.)***	***4***	***7***
KAMEHAMEHA SCOOLS	***1887 MAKUAKANE ST***	***E 1/2 - 1 (0.669 mi.)***	***30***	***14***
2147 AOAO STREET	***2147 AOAO ST***	***NE 1/2 - 1 (0.700 mi.)***	***32***	***14***
2326 KALIHI STREET U	***2326 KALIHI ST***	***ENE 1/2 - 1 (0.950 mi.)***	***40***	***16***

Lower Elevation	Address	Direction / Distance	Map ID	Page
KUHIO PARK TERRACE T	***LINAPUNI ST***	***S 0 - 1/8 (0.051 mi.)***	***A2***	***7***

Lower Elevation	Address	Direction / Distance	Map ID	Page
CHANG-CHOW PROPERTY,	2161 N SCHOOL ST	E 1/8 - 1/4 (0.185 mi.)	D11	9
2343 NORTH KING STRE	***2343 N KING ST***	***WSW 1/4 - 1/2 (0.475 mi.)***	***23***	***12***
FACTORY STREET LEAD	***2003 N KING ST***	***SSW 1/4 - 1/2 (0.487 mi.)***	***F25***	***12***
KAPALAMA INCINERATOR	***757 KOKEA ST***	***SSW 1/2 - 1 (0.583 mi.)***	***28***	***13***
FARRINGTON HIGH SCHO	***1564 N KING ST***	***SSE 1/2 - 1 (0.623 mi.)***	***29***	***13***
OTS BUS UNIT REPAIR	***811 MIDDLE ST***	***WSW 1/2 - 1 (0.689 mi.)***	***31***	***14***
FORT SHAFTER BOLLARD	***1557 PASS ST***	***W 1/2 - 1 (0.742 mi.)***	***33***	***14***
HAWAII MEAT COMPANY	***711 MIDDLE ST***	***WSW 1/2 - 1 (0.772 mi.)***	***34***	***15***
LENAKONA DEVELOPMENT	***2305 KAMEHAMEHA HWY***	***SW 1/2 - 1 (0.800 mi.)***	***35***	***15***
DILLINGHAM BOULEVARD	***DILLINGHAM BLVD & MO***	***SSW 1/2 - 1 (0.817 mi.)***	***36***	***15***
YEE HOP PROPERTY	***621 MIDDLE ST***	***WSW 1/2 - 1 (0.826 mi.)***	***37***	***15***
HAWAII DAIRY HOLDING	***2277 KAMEHAMEHA HWY***	***SW 1/2 - 1 (0.853 mi.)***	***38***	***15***
611 MIDDLE STREET WA	***611 MIDDLE ST***	***WSW 1/2 - 1 (0.863 mi.)***	***39***	***16***
TAKAMIYA PROPERTY	***850 MOOWAA ST***	***SSE 1/2 - 1 (0.964 mi.)***	***41***	***16***
ROSS TRUSTS	***819 MOOWAA ST***	***SSE 1/2 - 1 (0.977 mi.)***	***42***	***16***

State and tribal leaking storage tank lists

LUST: A review of the LUST list, as provided by EDR, and dated 03/02/2015 has revealed that there are 12 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
IMM KAM IV	***2314 N SCHOOL ST***	***NE 1/8 - 1/4 (0.165 mi.)***	***C8***	***8***
Facility Status: Site Cleanup Completed (NFA)				
7-11 KAM IV 0166	***2404 N SCHOOL ST***	***NNE 1/8 - 1/4 (0.208 mi.)***	***13***	***9***
Facility Status: Site Cleanup Completed (NFA)				
C&CH BOARD OF WATER	***2442 KINI PLACE***	***NNE 1/4 - 1/2 (0.329 mi.)***	***16***	***10***
Facility Status: Site Cleanup Completed (NFA)				
FORT SHAFTER	***BLDG 535/EXCHANGE MA***	***NW 1/4 - 1/2 (0.389 mi.)***	***17***	***10***
Facility Status: Site Cleanup Completed (NFA)				
C&CH KALIHI-UKA FIRE	***1861 KAMEHAMEHA IV H***	***NE 1/4 - 1/2 (0.488 mi.)***	***G26***	***13***
Facility Status: Site Cleanup Completed (NFA)				
KALIHI POLICE STATIO	***1865 KAMEHAMEHA IV R***	***NE 1/4 - 1/2 (0.491 mi.)***	***G27***	***13***
Facility Status: Site Cleanup Completed (NFA)				

Lower Elevation	Address	Direction / Distance	Map ID	Page
KANE'S AUTO REPAIR	***1325 MIDDLE ST***	***WNW 1/4 - 1/2 (0.283 mi.)***	***E14***	***9***
Facility Status: Site Cleanup Completed (NFA)				
BENTON'S MIDDLE STRE	***1305 MIDDLE ST***	***WNW 1/4 - 1/2 (0.291 mi.)***	***E15***	***10***
Facility Status: Site Cleanup Completed (NFA)				
FORT SHAFTER	***BLDG 422 TANK 7A 7B***	***WNW 1/4 - 1/2 (0.401 mi.)***	***18***	***11***
Facility Status: Site Cleanup Completed (NFA)				
U.S. ARMY ADMINISTRA	***BLDG 430***	***WNW 1/4 - 1/2 (0.414 mi.)***	***19***	***11***
Facility Status: Site Cleanup Completed (NFA)				
KALIHI STREAM CHEVRO	***2160 N. KING ST.***	***SW 1/4 - 1/2 (0.422 mi.)***	***20***	***11***
Facility Status: Site Cleanup Completed (NFA)				
KSC SERVICE L-4210	***2295 N KING ST***	***WSW 1/4 - 1/2 (0.449 mi.)***	***22***	***12***
Facility Status: Site Cleanup Completed (NFA)				

State and tribal registered storage tank lists

UST: A review of the UST list, as provided by EDR, and dated 03/02/2015 has revealed that there are 4 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SHELL SERVICE STATIO	2239 N SCHOOL ST	NE 1/8 - 1/4 (0.160 mi.)	C7	8
IMM KAM IV	***2314 N SCHOOL ST***	***NE 1/8 - 1/4 (0.165 mi.)***	***C8***	***8***
7-11 KAM IV 0166	***2404 N SCHOOL ST***	***NNE 1/8 - 1/4 (0.208 mi.)***	***13***	***9***

Lower Elevation	Address	Direction / Distance	Map ID	Page
CHANG CHOW PROPERTIE	2161 N SCHOOL ST	E 1/8 - 1/4 (0.188 mi.)	D12	9

State and tribal institutional control / engineering control registries

ENG CONTROLS: A review of the ENG CONTROLS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 3 ENG CONTROLS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
KUHIO PARK TERRACE C	***1475 LINAPUNI ST***	***W 1/8 - 1/4 (0.127 mi.)***	***4***	***7***

Lower Elevation	Address	Direction / Distance	Map ID	Page
KUHIO PARK TERRACE T	***LINAPUNI ST***	***S 0 - 1/8 (0.051 mi.)***	***A2***	***7***
FACTORY STREET LEAD	***2003 N KING ST***	***SSW 1/4 - 1/2 (0.487 mi.)***	***F25***	***12***

INST CONTROL: A review of the INST CONTROL list, as provided by EDR, and dated 12/02/2014 has revealed that there are 4 INST CONTROL sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
KUHIO PARK TERRACE C	***1475 LINAPUNI ST***	***W 1/8 - 1/4 (0.127 mi.)***	***4***	***7***

Lower Elevation	Address	Direction / Distance	Map ID	Page
KUHIO PARK TERRACE T	***LINAPUNI ST***	***S 0 - 1/8 (0.051 mi.)***	***A2***	***7***
2343 NORTH KING STRE	***2343 N KING ST***	***WSW 1/4 - 1/2 (0.475 mi.)***	***23***	***12***
FACTORY STREET LEAD	***2003 N KING ST***	***SSW 1/4 - 1/2 (0.487 mi.)***	***F25***	***12***

State and tribal Brownfields sites

BROWNFIELDS: A review of the BROWNFIELDS list, as provided by EDR, and dated 12/02/2014 has revealed

EXECUTIVE SUMMARY

that there is 1 BROWNFIELDS site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
KUHIO PARK TERRACE T	***LINAPUNI ST***	***S 0 - 1/8 (0.051 mi.)***	***A2***	***7***

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A review of the US BROWNFIELDS list, as provided by EDR, and dated 12/22/2014 has revealed that there are 2 US BROWNFIELDS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
KUHIO PARK TERRACE	1600 HAUPU PL	ESE 1/4 - 1/2 (0.433 mi.)	21	12

Lower Elevation	Address	Direction / Distance	Map ID	Page
KUHIO PARK TERRACE	1518 LINAPUNI STREET	SSE 0 - 1/8 (0.056 mi.)	A3	7

Other Ascertainable Records

DOD: A review of the DOD list, as provided by EDR, and dated 12/31/2005 has revealed that there is 1 DOD site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
FORT SHAFTER		0 - 1/8 (0.000 mi.)	0	7

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Auto Stat: A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there are 4 EDR US Hist Auto Stat sites within approximately 0.25 miles of the target property.

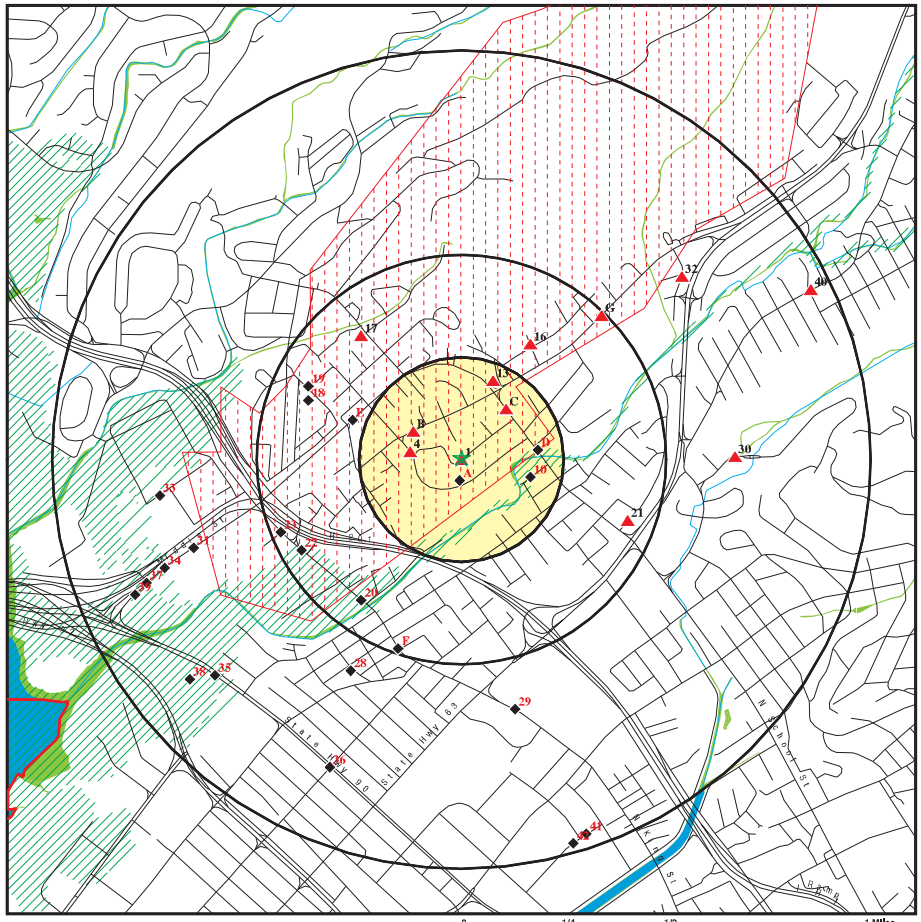
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	1419 KAMEHAMEHA IV	WNW 1/8 - 1/4 (0.136 mi.)	B5	8
Not reported	1415 KAMEHAMEHA IV	WNW 1/8 - 1/4 (0.139 mi.)	B6	8
Not reported	2314 N SCHOOL ST	NE 1/8 - 1/4 (0.165 mi.)	C9	8

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	1532 AMELIA ST	ESE 1/8 - 1/4 (0.174 mi.)	10	9

Count: 10 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
FORT SHAFTER	S109842046	FORT SHAFTER	BONNIE LOOP	96858	LUST
HONOLULU	S117391417	1339 SCHOOL STREET	1339, 1341, 1343 N SCHOOL ST		SHWS, ENG CONTROLS, INST CONT
HONOLULU	S108008549	KALANI, HART, MOKUAEA STREET, HONO	HART ST & KALANI ST & MOKUAEA		SHWS
HONOLULU	S115488703	KALIHI AND KALAEPAA INTERSECTION	KALAEPAA DR AND KALIHI ST		SHWS, SPILLS
HONOLULU	1006820337	ABC DISPOSAL COMPANY	2760 KAMEHAMEHA HWY	96819	SHWS
HONOLULU	S111704706	FORMER KAPALAMA MILITARY RESERVATI	N NIMITZ HWY		SHWS
HONOLULU	S108008765	CITIZENS ENERGY SERVICES PIER 38	NIMITZ HWY		SHWS, SPILLS, ENG CONTROLS, IN CONTROL
HONOLULU	S106819311	NIMITZ HIGHWAY WATER IMPROVEMENT P	N NIMITZ HWY	96817	SHWS
HONOLULU	1006820220	DLNR BURIED DRUM SITE	SAND ISLAND ACCESS RD	96819	SHWS, SPILLS, INST CONTROL
HONOLULU	S108859926	KOKUA KALIHI VALLEY ACTIVE LIVING	UPPER KALIHI ST		SHWS, BROWNFIELDS

OVERVIEW MAP - 4237094.154S



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Kuhio Homes ADDRESS: 1441 Ahonui St. Honolulu HI 96819 LAT/LONG: 21.3392 / 157.8762	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.154s DATE: March 18, 2015 7:51 am

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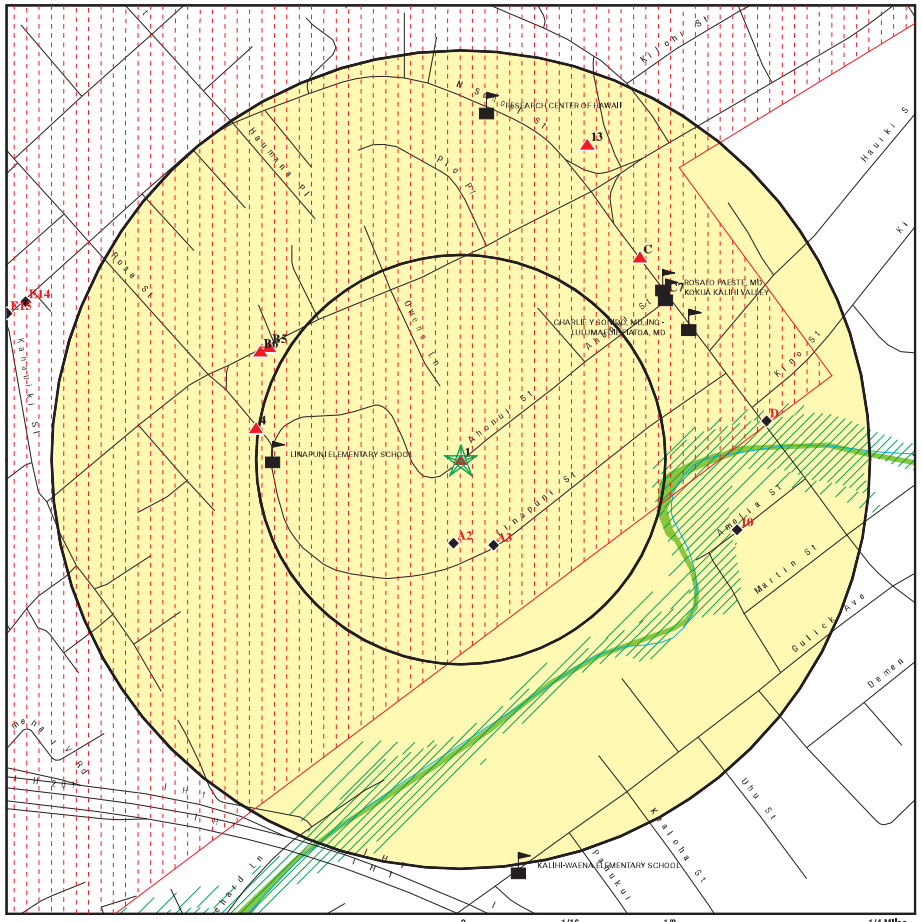
DETAIL MAP - 4237094.154S



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Kuhio Homes ADDRESS: 1441 Ahonui St. Honolulu HI 96819 LAT/LONG: 21.3392 / 157.8762	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.154s DATE: March 18, 2015 7:52 am

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	1	NR	NR	1
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
SHWS	1.000		1	2	2	15	NR	20
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	2	10	NR	NR	12
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250		0	4	NR	NR	NR	4

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		1	1	1	NR	NR	3
INST CONTROL	0.500		1	1	2	NR	NR	4
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		1	0	0	NR	NR	1
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		1	0	1	NR	NR	2
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250	1	0	0	NR	NR	NR	1
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		1	0	0	0	NR	1
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP	1	NR	NR	NR	NR	NR	1
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		0	4	NR	NR	NR	4
EDR US Hist Cleaners	0.250		0	0	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
RGA HWS	TP		NR	NR	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
1 **Target Property** **Actual:** **92 ft.**	**KUHIO HOMES PUBLIC HOUSING PROJECT** **1410 THRU 1529 AHONUI ST** **HONOLULU, HI 96819** **RCRA NonGen / NLR** Click here for full text details EPA Id: HID984469478	**RCRA NonGen / NLR** **FINDS**	**1000823288** **HID984469478**
DOD **Region** **< 1/8** **1 ft.**	**FORT SHAFTER** **FORT SHAFTER (County), HI** Click here for full text details	**DOD**	**CUSA147753** **N/A**
A2 **South** **< 1/8** **0.051 mi.** **270 ft.** **Relative:** **Lower**	**KUHIO PARK TERRACE TOWERS** **LINAPUNI ST** **HONOLULU, HI 96819** Click here for full text details	**SHWS** **ENG CONTROLS** **INST CONTROL** **BROWNFIELDS**	**S108008570** **N/A**
A3 **SSE** **< 1/8** **0.056 mi.** **296 ft.** **Relative:** **Lower**	**KUHIO PARK TERRACE** **1518 LINAPUNI STREET** **HONOLULU, HI 96819** Click here for full text details	**US BROWNFIELDS**	**1014697060** **N/A**
4 **West** **1/8-1/4** **0.127 mi.** **668 ft.** **Relative:** **Higher**	**KUHIO PARK TERRACE COMMUNITY CENTER** **1475 LINAPUNI ST** **HONOLULU, HI 96819** Click here for full text details	**SHWS** **ENG CONTROLS** **INST CONTROL**	**S115488710** **N/A**

B5
WNW
1/8-1/4
0.136 mi.
718 ft.
Relative: Higher

1419 KAMEHAMEHA IV RD
HONOLULU, HI 96819

EDR US Hist Auto Stat **1015224912**
N/A

Click here for full text details

B6
WNW
1/8-1/4
0.139 mi.
735 ft.
Relative: Higher

1415 KAMEHAMEHA IV RD
HONOLULU, HI 96819

EDR US Hist Auto Stat **1015224213**
N/A

Click here for full text details

C7
NE
1/8-1/4
0.160 mi.
847 ft.
Relative: Higher

SHELL SERVICE STATION
2239 N SCHOOL ST
HONOLULU, HI 96819

UST **U001235341**
N/A

Click here for full text details

UST
Tank Status: Permanently Out of Use
Facility Id: 9-101027

C8
NE
1/8-1/4
0.165 mi.
872 ft.
Relative: Higher

IMM KAM IV
2314 N SCHOOL ST
HONOLULU, HI 96819

LUST **U001235610**
UST **N/A**
Financial Assurance

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-101867

UST
Tank Status: Currently In Use
Facility Id: 9-101867

C9
NE
1/8-1/4
0.165 mi.
873 ft.
Relative: Higher

2314 N SCHOOL ST
HONOLULU, HI 96819

EDR US Hist Auto Stat **1015346496**
N/A

Click here for full text details

10
ESE
1/8-1/4
0.174 mi.
920 ft.
Relative: Lower

1532 AMELIA ST
HONOLULU, HI 96819

EDR US Hist Auto Stat **1015244366**
N/A

Click here for full text details

D11
East
1/8-1/4
0.185 mi.
979 ft.
Relative: Lower

CHANG-CHOW PROPERTY, NORTH SCHOOL STREET
2161 N SCHOOL ST
HONOLULU, HI 96817

SHWS **1006820024**
N/A

Click here for full text details

D12
East
1/8-1/4
0.188 mi.
995 ft.
Relative: Lower

CHANG CHOW PROPERTIES
2161 N SCHOOL ST
HONOLULU, HI 96817

UST **U003154843**
N/A

Click here for full text details

UST
Tank Status: Permanently Out of Use
Facility Id: 9-103133

13
NNE
1/8-1/4
0.208 mi.
1096 ft.
Relative: Higher

7-11 KAM IV 0166
2404 N SCHOOL ST
HONOLULU, HI 96819

LUST **U004223404**
UST **N/A**
Financial Assurance

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-101187

UST
Tank Status: Currently in Use
Tank Status: Permanently out of Use
Facility Id: 9-101187

E14
WNW
1/4-1/2
0.283 mi.
1493 ft.
Relative: Lower

KANE'S AUTO REPAIR
1325 MIDDLE ST
HONOLULU, HI 96819

LUST **U001235924**
UST **N/A**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-102478

KANE'S AUTO REPAIR (Continued) **U001235924**

UST
Tank Status: Permanently Out of Use
Facility Id: 9-102478

E15
WNW
1/4-1/2
0.291 mi.
1538 ft.

Relative: Lower

BENTON'S MIDDLE STREET CHEVRON — **LUST** — **1000601384**
1305 MIDDLE ST — **UST** — **N/A**
HONOLULU, HI 96819 — **Financial Assurance**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-101110

UST
Tank Status: Currently In Use
Tank Status: Currently in Use
Tank Status: Permanently Out of Use
Facility Id: 9-101110

16
NNE
1/4-1/2
0.329 mi.
1735 ft.

Relative: Higher

C&CH BOARD OF WATER SUPPLY KALIHI CORP YD — **LUST** — **U001235058**
2442 KINI PLACE — **UST** — **N/A**
HONOLULU, HI 96819 — **Financial Assurance**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100119

UST
Tank Status: Currently in Use
Tank Status: Permanently Out of Use
Facility Id: 9-100119

17
NW
1/4-1/2
0.389 mi.
2056 ft.

Relative: Higher

FORT SHAFTER — **LUST** — **U003541792**
BLDG 535/EXCHANGE MAINTENANCE SHOP — **UST** — **N/A**
FORT SHAFTER, HI 96858

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-102920

UST
Tank Status: Permanently Out of Use

FORT SHAFTER (Continued) **U003541792**

Facility Id: 9-102920

18
WNW
1/4-1/2
0.401 mi.
2116 ft.

Relative: Lower

FORT SHAFTER — **LUST** — **U001235668**
BLDG 422 TANK 7A 7B — **UST** — **N/A**
FORT SHAFTER, HI 96858

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-102007

UST
Tank Status: Permanently Out of Use
Facility Id: 9-102007

19
WNW
1/4-1/2
0.414 mi.
2188 ft.

Relative: Lower

U.S. ARMY ADMINISTRAIVE FACILITY — **LUST** — **U003221841**
BLDG 430 — **UST** — **N/A**
FORT SHAFTER, HI 96858

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-102858

UST
Tank Status: Permanently Out of Use
Facility Id: 9-102858

20
SW
1/4-1/2
0.422 mi.
2229 ft.

Relative: Lower

KALIHI STREAM CHEVRON — **LUST** — **1000316728**
2160 N. KING ST. — **UST** — **N/A**
HONOLULU, HI 96813 — **Financial Assurance**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-101225

UST
Tank Status: Currently In Use
Tank Status: Permanently Out of Use
Facility Id: 9-101225

21 ESE 1/4-1/2 0.433 mi. 2285 ft.
Relative: Higher

KUHIO PARK TERRACE
1600 HAUPU PL
KALIHI, OAHU, HI 96819

US BROWNFIELDS — **1014949094** / **N/A**

Click here for full text details

---

22 WSW 1/4-1/2 0.449 mi. 2370 ft.
Relative: Lower

KSC SERVICE L-4210
2295 N KING ST
HONOLULU, HI 96819

LUST, **UST** — **U001235008** / **N/A**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100031

UST
Tank Status: Permanently Out of Use
Facility Id: 9-100031

---

23 WSW 1/4-1/2 0.475 mi. 2510 ft.
Relative: Lower

2343 NORTH KING STREET
2343 N KING ST
HONOLULU, HI 96819

SHWS, **INST CONTROL** — **S115488667** / **N/A**

Click here for full text details

F24 SSW 1/4-1/2 0.487 mi. 2573 ft.
Relative: Lower

FACTORY STREET SITE
2003 N. KING STREET
HONOLULU, HI 96812

CERC-NFRAP — **1003879898** / **HI0000049775**

Click here for full text details

CERC-NFRAP
EPA Id: HI0000049775

F25 SSW 1/4-1/2 0.487 mi. 2573 ft.
Relative: Lower

FACTORY STREET LEAD
2003 N KING ST
HONOLULU, HI 96819

SHWS, **SPILLS**, **ENG CONTROLS**, **INST CONTROL** — **1006820199** / **N/A**

Click here for full text details

G26 NE 1/4-1/2 0.488 mi. 2576 ft.
Relative: Higher

C&CH KALIHI-UKA FIRE STATION
1861 KAMEHAMEHA IV HWY
HONOLULU, HI 96819

LUST, **UST**, **Financial Assurance** — **U004109519** / **N/A**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-102891

UST
Tank Status: Permanently Out of Use
Facility Id: 9-102891

G27 NE 1/4-1/2 0.491 mi. 2594 ft.
Relative: Higher

KALIHI POLICE STATION
1865 KAMEHAMEHA IV RD
HONOLULU, HI 96819

LUST, **UST**, **Financial Assurance** — **U004187912** / **N/A**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100117

UST
Tank Status: Currently In Use
Tank Status: Permanently Out of Use
Facility Id: 9-100117

---

28 SSW 1/2-1 0.583 mi. 3077 ft.
Relative: Lower

KAPALAMA INCINERATOR
757 KOKEA ST
HONOLULU, HI 96817

RCRA-SQG, **SHWS**, **SPILLS**, **INST CONTROL** — **1001116173** / **HIR000001008**

Click here for full text details

RCRA-SQG
EPA Id: HIR000001008

---

29 SSE 1/2-1 0.623 mi. 3292 ft.
Relative: Lower

FARRINGTON HIGH SCHOOL
1564 N KING ST
HONOLULU, HI 96817

FTTS, **HIST FTTS**, **SHWS**, **SPILLS** — **1007277849** / **N/A**

Click here for full text details

30 East 1/2-1 0.669 mi. 3532 ft. Relative: Higher

KAMEHAMEHA SCOOLS
1887 MAKUAKANE ST
HONOLULU, HI 96817

RCRA-CESQG, FINDS, SHWS, SPILLS, ENG CONTROLS, INST CONTROL
1000202706
HID981616469

Click here for full text details

RCRA-CESQG
EPA Id: HID981616469

---

31 WSW 1/2-1 0.689 mi. 3637 ft. Relative: Lower

OTS BUS UNIT REPAIR SHOP
811 MIDDLE ST
HONOLULU, HI 96819

SHWS, LUST, UST, Financial Assurance
U003541805
N/A

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-102498
Facility Id: 9-101884

UST
Tank Status: Permanently Out of Use
Tank Status: Currently in Use
Facility Id: 9-101884
Facility Id: 9-103189
Facility Id: 9-102498

---

32 NE 1/2-1 0.700 mi. 3698 ft. Relative: Higher

2147 AOAO STREET
2147 AOAO ST
HONOLULU, HI 96819

SHWS, SPILLS
S106815333
N/A

Click here for full text details

---

33 West 1/2-1 0.742 mi. 3917 ft. Relative: Lower

FORT SHAFTER BOLLARD
1557 PASS ST
FORT SHAFTER, HI 96858

SHWS, SPILLS
S108008801
N/A

Click here for full text details

34 WSW 1/2-1 0.772 mi. 4076 ft. Relative: Lower

HAWAII MEAT COMPANY LTD
711 MIDDLE ST
HONOLULU, HI 96819

SHWS, SPILLS, ENG CONTROLS, INST CONTROL
1006820927
N/A

Click here for full text details

---

35 SW 1/2-1 0.800 mi. 4224 ft. Relative: Lower

LENAKONA DEVELOPMENT, LTD
2305 KAMEHAMEHA HWY
HONOLULU, HI 96800

SHWS, LUST, UST
U001237397
N/A

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-102588

UST
Tank Status: Permanently Out of Use
Facility Id: 9-102588

---

36 SSW 1/2-1 0.817 mi. 4316 ft. Relative: Lower

DILLINGHAM BOULEVARD & MOKAUEA STREET
DILLINGHAM BLVD & MOKAUEA ST
HONOLULU, HI 96819

SHWS, ENG CONTROLS, INST CONTROL
S106816881
N/A

Click here for full text details

---

37 WSW 1/2-1 0.826 mi. 4361 ft. Relative: Lower

YEE HOP PROPERTY
621 MIDDLE ST
HONOLULU, HI 96819

SHWS, SPILLS
1006819624
N/A

Click here for full text details

---

38 SW 1/2-1 0.853 mi. 4506 ft. Relative: Lower

HAWAII DAIRY HOLDINGS, INC DBA FOREMOST DAIRIES
2277 KAMEHAMEHA HWY
HONOLULU, HI 96819

SHWS, LUST, UST, VCP, Financial Assurance
1000934769
N/A

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100210

UST

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
	HAWAII DAIRY HOLDINGS, INC DBA FOREMOST DAIRIES (Continued)		**1000934769**
	Tank Status: Permanently Out of Use Facility Id: 9-100210		
39 **WSW** **1/2-1** **0.863 mi.** **4555 ft.** **Relative:** **Lower**	**611 MIDDLE STREET WAREHOUSE** **611 MIDDLE ST** **HONOLULU, HI 96819** Click here for full text details	**SHWS** **SPILLS** **ENG CONTROLS** **INST CONTROL**	**S106815670** **N/A**
40 **ENE** **1/2-1** **0.950 mi.** **5014 ft.** **Relative:** **Higher**	**2326 KALIHI STREET UST** **2326 KALIHI ST** **HONOLULU, HI 96819** Click here for full text details	**SHWS** **SPILLS** **ENG CONTROLS** **INST CONTROL**	**S106815373** **N/A**
41 **SSE** **1/2-1** **0.964 mi.** **5091 ft.** **Relative:** **Lower**	**TAKAMIYA PROPERTY** **850 MOOWAA ST** **HONOLULU, HI 96817** Click here for full text details	**SHWS** **SPILLS**	**S106820561** **N/A**
42 **SSE** **1/2-1** **0.977 mi.** **5156 ft.** **Relative:** **Lower**	**ROSS TRUSTS** **819 MOOWAA ST** **HONOLULU, HI 96817** Click here for full text details	**SHWS** **VCP**	**S103290154** **N/A**

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
HI	AIRS	List of Permitted Facilities	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	BROWNFIELDS	Brownfields Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	CDL	Clandestine Drug Lab Listing	Department of Health	08/04/2010	09/10/2010	10/22/2010
HI	DRYCLEANERS	Permitted Drycleaner Facility Listing	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	ENG CONTROLS	Engineering Control Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	Financial Assurance	Financial Assurance Information Listing	Department of Health	12/01/2014	12/19/2014	01/28/2015
HI	INST CONTROL	Sites with Institutional Controls	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	LUST	Leaking Underground Storage Tank Database	Department of Health	03/02/2015	03/04/2015	03/17/2015
HI	RGA HWS	Recovered Government Archive State Hazardous Waste Facilitie	Department of Health		07/01/2013	01/08/2014
HI	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Health		07/01/2013	01/17/2014
HI	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	Department of Health		07/01/2013	01/03/2014
HI	SHWS	Sites List	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	SPILLS	Release Notifications	Department of Health	12/02/2014	12/22/2014	01/28/2015
HI	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	03/10/2012	01/03/2013	02/11/2013
HI	SWF/LF	Permitted Landfills in the State of Hawaii	Department of Health	09/17/2012	04/03/2013	05/10/2013
HI	UIC	Underground Injection Wells Listing	Department of Health	02/07/2013	02/12/2013	04/09/2013
HI	UST	Underground Storage Tank Database	Department of Health	03/02/2015	03/04/2015	03/17/2015
HI	VCP	Voluntary Response Program Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	04/22/2013	03/03/2015	03/09/2015
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2011	02/26/2013	04/19/2013
US	CERCLIS	Comprehensive Environmental Response, Compensation, and Liab	EPA	10/25/2013	11/11/2013	02/13/2014
US	CERCLIS-NFRAP	CERCLIS No Further Remedial Action Planned	EPA	10/25/2013	11/11/2013	02/13/2014
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	07/01/2014	09/10/2014	10/20/2014
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	01/23/2015	02/13/2015	03/09/2015
US	CORRACTS	Corrective Action Report	EPA	12/09/2014	12/29/2014	01/29/2015
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DELISTED NPL	National Priority List Deletions	EPA	12/16/2014	01/08/2015	02/09/2015
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	07/31/2012	08/07/2012	09/18/2012
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EDR US Hist Auto Stat	EDR Exclusive Historic Gas Stations	EDR, Inc.			
US	EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	09/29/2014	09/30/2014	11/06/2014
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	07/21/2014	10/07/2014	10/20/2014
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
US	FEMA UST	Underground Storage Tank Listing	FEMA	01/01/2010	02/16/2010	04/12/2010
US	FINDS	Facility Index System/Facility Registry System	EPA	08/16/2014	09/10/2014	10/20/2014
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	06/06/2014	09/10/2014	09/18/2014
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	12/29/2014	12/30/2014	03/09/2015
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	01/23/2015	02/06/2015	03/09/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	02/01/2013	05/01/2013	11/01/2013

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	01/30/2015	02/05/2015	03/09/2015
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/10/2015	03/13/2015
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	01/28/2015	01/30/2015	03/13/2015
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	01/08/2015	01/08/2015	02/09/2015
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2005	12/08/2006	01/11/2007
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	02/01/2013	05/01/2013	01/27/2014
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	01/30/2015	02/05/2015	03/13/2015
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/13/2015	03/13/2015
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	01/29/2015	01/30/2015	03/13/2015
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	12/14/2014	02/13/2015	03/13/2015
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	09/29/2014	10/01/2014	11/06/2014
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	11/25/2014	11/26/2014	01/29/2015
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	02/18/2014	03/18/2014	04/24/2014
US	LUCIS	Land Use Control Information System	Department of the Navy	12/03/2014	12/12/2014	01/29/2015
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	12/29/2014	01/08/2015	01/29/2015
US	NPL	National Priority List	EPA	12/16/2014	01/08/2015	02/09/2015
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	07/01/2014	10/15/2014	11/17/2014
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	02/01/2011	10/19/2011	01/10/2012
US	PRP	Potentially Responsible Parties	EPA	10/25/2013	10/17/2014	10/20/2014
US	Proposed NPL	Proposed National Priority List Sites	EPA	12/16/2014	01/08/2015	02/09/2015
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	10/07/2014	10/08/2014	10/20/2014
US	RCRA NonGen / NLR	RCRA - Non Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RMP	Risk Management Plans	Environmental Protection Agency	08/01/2014	08/12/2014	11/06/2014
US	ROD	Records Of Decision	EPA	11/25/2013	12/12/2013	02/24/2014
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	03/07/2011	03/09/2011	05/02/2011
US	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2011	07/31/2013	09/13/2013
US	TSCA	Toxic Substances Control Act	EPA	12/31/2012	01/15/2015	01/29/2015
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	09/14/2010	10/07/2011	03/01/2012
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/16/2014	10/31/2014	11/17/2014
US	US AIRS MINOR	Air Facility System Data	EPA	10/16/2014	10/31/2014	11/17/2014

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	12/22/2014	12/22/2014	01/29/2015
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	11/19/2014	11/21/2014	01/29/2015
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	12/30/2014	12/31/2014	01/29/2015
US	Oil/Gas Pipelines	GeoData Digital Line Graphs from 1:100,000-Scale Maps	USGS			
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
US	USGS 7.5' Topographic Map	Scanned Digital USGS 7.5' Topographic Map (DRG)	USGS			

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

KUHIO HOMES
1441 AHONUI ST.
HONOLULU, HI 96819

TARGET PROPERTY COORDINATES

Latitude (North):	21.3392 - 21' 20' 21.12''
Longitude (West):	157.8762 - 157' 52' 34.32''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	616536.7
UTM Y (Meters):	2359965.5
Elevation:	92 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	21157-C8 PEARL HARBOR, HI
Most Recent Revision:	Not reported
East Map:	21157-C7 HONOLULU, HI
Most Recent Revision:	Not reported

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

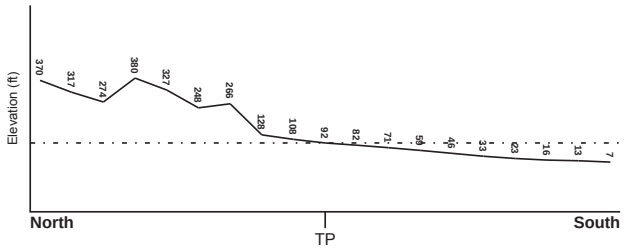
TOPOGRAPHIC INFORMATION

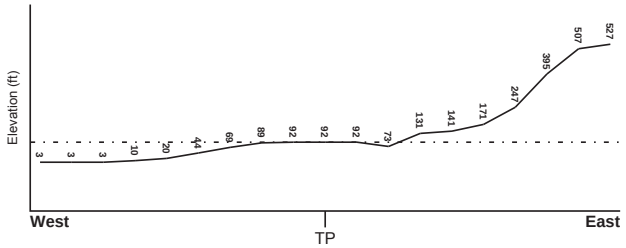
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General South

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 92 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
HONOLULU, HI	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 15003C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
NOT AVAILABLE	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

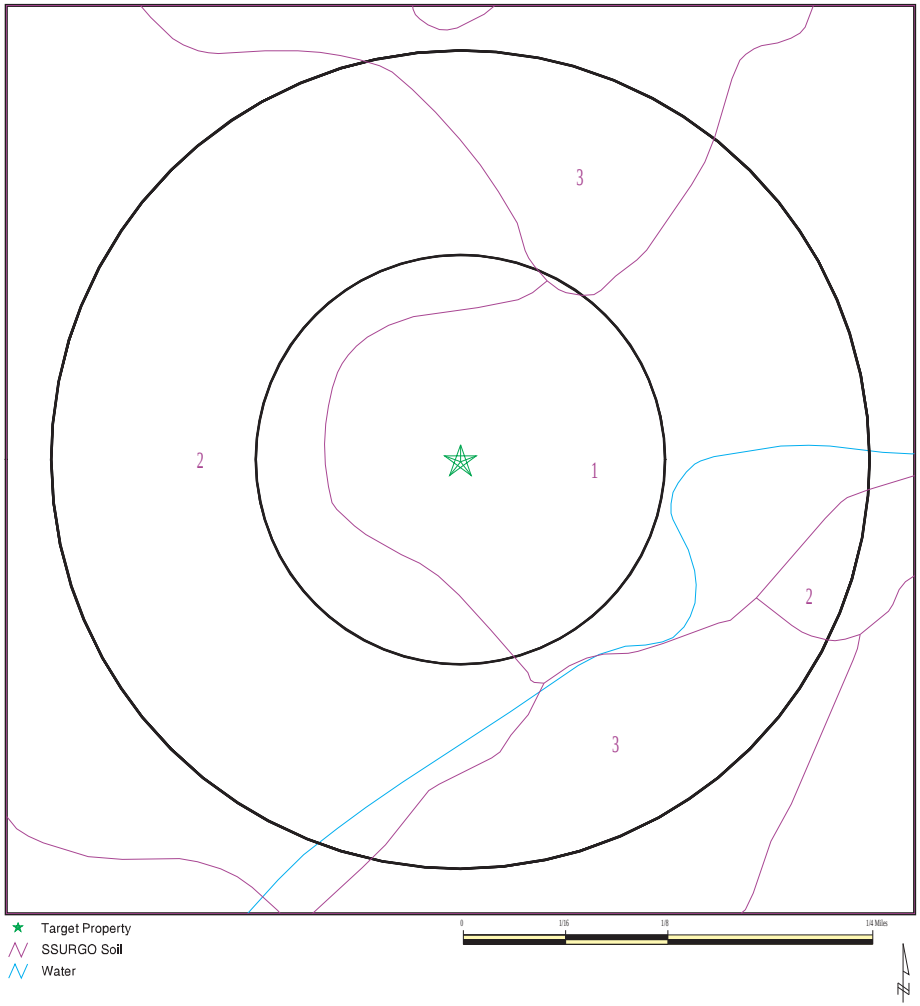
Era: -
System: -
Series: -
Code: N/A *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: -

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4237094.154s



★ Target Property
SSURGO Soil
Water

SITE NAME: Kuhio Homes ADDRESS: 1441 Ahonui St. Honolulu HI 96819 LAT/LONG: 21.3392 / 157.8762	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.154s DATE: March 18, 2015 7:52 am

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Kaena

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Poorly drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 107 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		Soil Reaction (pH)
1	0 inches	9 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4.23 Min: 0.42	Max: 7.3 Min: 6.6
2	9 inches	37 inches	stony clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 7.3 Min: 6.6
3	37 inches	53 inches	stony clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 7.3 Min: 6.6

Soil Map ID: 2

Soil Component Name: Makiki

Soil Surface Texture: stony clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	20 inches	stony clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 42 Min: 4.23	Max: 5.5 Min: 5.1
2	20 inches	29 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14.11 Min: 4.23	Max: 6 Min: 5.6
3	29 inches	59 inches	paragravelly clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.14 Min: 14.11	Max: 6 Min: 5.6

Soil Map ID: 3

Soil Component Name: Ewa

Soil Surface Texture: silty clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	18 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6
2	18 inches	59 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
B5	USGS40000269939	1/4 - 1/2 Mile SW
C7	USGS40000269908	1/4 - 1/2 Mile SSW
D10	USGS40000269910	1/2 - 1 Mile SSW
E11	USGS40000269998	1/2 - 1 Mile WNW

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
E12	USGS40000269999	1/2 - 1 Mile WNW
E15	USGS40000270000	1/2 - 1 Mile WNW
F19	USGS40000269977	1/2 - 1 Mile West
G22	USGS40000269945	1/2 - 1 Mile WSW
H23	USGS40000269919	1/2 - 1 Mile ESE
J26	USGS40000269900	1/2 - 1 Mile SSE
I28	USGS40000269889	1/2 - 1 Mile SSW
H29	USGS40000269923	1/2 - 1 Mile ESE
H31	USGS40000269937	1/2 - 1 Mile ESE
I33	USGS40000269880	1/2 - 1 Mile SSW
J35	USGS40000269894	1/2 - 1 Mile SSE
K36	USGS40000269913	1/2 - 1 Mile SW
L39	USGS40000269940	1/2 - 1 Mile WSW
N43	USGS40000269893	1/2 - 1 Mile SE
45	USGS40000269997	1/2 - 1 Mile WNW
46	USGS40000269904	1/2 - 1 Mile WSW
O56	USGS40000269867	1/2 - 1 Mile SSE
O57	USGS40000269866	1/2 - 1 Mile SSE
O58	USGS40000269865	1/2 - 1 Mile SSE
O59	USGS40000269868	1/2 - 1 Mile SSE
O60	USGS40000269871	1/2 - 1 Mile SSE
O61	USGS40000269870	1/2 - 1 Mile SSE
O62	USGS40000269869	1/2 - 1 Mile SSE
P63	USGS40000270021	1/2 - 1 Mile NW
O64	USGS40000269864	1/2 - 1 Mile SSE
Q67	USGS40000269881	1/2 - 1 Mile SW
O68	USGS40000269855	1/2 - 1 Mile SSE
R69	USGS40000269899	1/2 - 1 Mile SE
R72	USGS40000269888	1/2 - 1 Mile SE
S73	USGS40000269856	1/2 - 1 Mile SW
S74	USGS40000269857	1/2 - 1 Mile SW
S75	USGS40000269858	1/2 - 1 Mile SW

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A3	HI0000331	1/4 - 1/2 Mile NNE

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

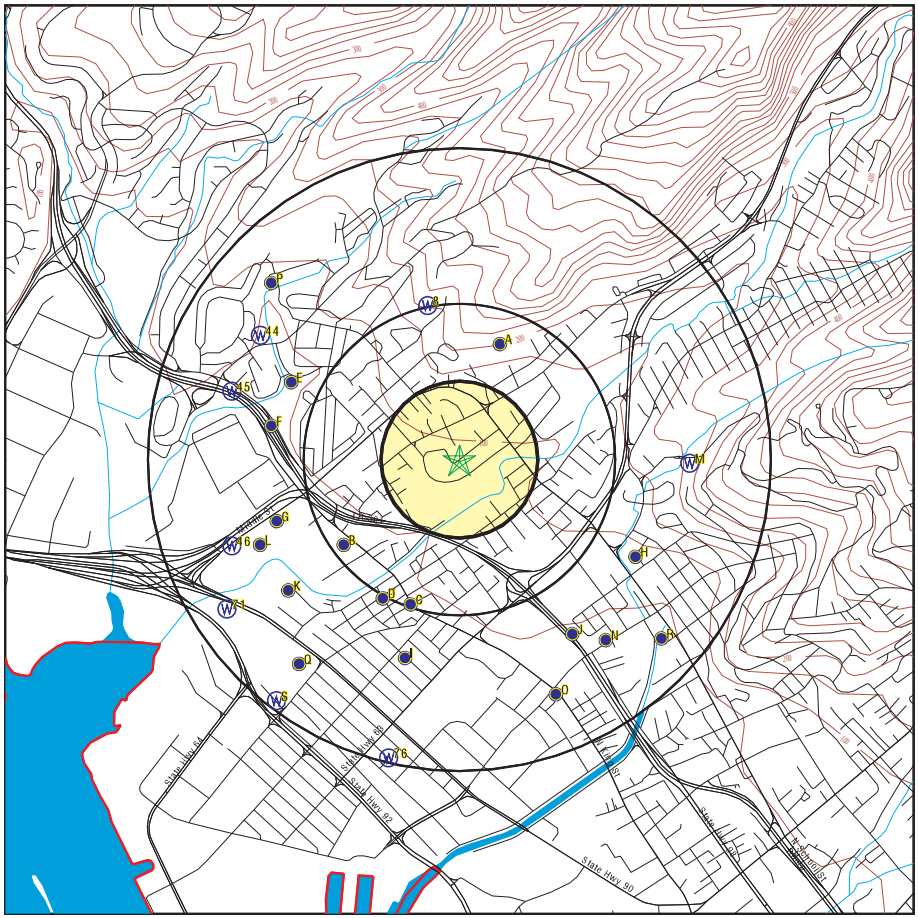
MAP ID	WELL ID	LOCATION FROM TP
A1	HI8000000002622	1/4 - 1/2 Mile NNE
A2	HI8000000002625	1/4 - 1/2 Mile NNE
B4	HI8000000002540	1/4 - 1/2 Mile SW
C6	HI8000000002496	1/4 - 1/2 Mile SSW
8	HI8000000002634	1/2 - 1 Mile NNW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
D9	HI8000000002501	1/2 - 1 Mile SSW
E13	HI8000000002604	1/2 - 1 Mile WNW
E14	HI8000000002608	1/2 - 1 Mile WNW
E16	HI8000000002603	1/2 - 1 Mile WNW
E17	HI8000000002605	1/2 - 1 Mile WNW
F18	HI8000000002591	1/2 - 1 Mile West
G20	HI8000000002547	1/2 - 1 Mile WSW
H21	HI8000000002519	1/2 - 1 Mile ESE
I24	HI8000000002471	1/2 - 1 Mile SSW
J25	HI8000000002484	1/2 - 1 Mile SE
H27	HI8000000002534	1/2 - 1 Mile ESE
H30	HI8000000002537	1/2 - 1 Mile ESE
I32	HI8000000002461	1/2 - 1 Mile SSW
J34	HI8000000002477	1/2 - 1 Mile SSE
K37	HI8000000002502	1/2 - 1 Mile SW
L38	HI8000000002539	1/2 - 1 Mile WSW
M40	HI8000000002579	1/2 - 1 Mile East
M41	HI8000000002565	1/2 - 1 Mile East
N42	HI8000000002478	1/2 - 1 Mile SE
44	HI8000000002629	1/2 - 1 Mile WNW
O47	HI8000000002441	1/2 - 1 Mile SSE
O48	HI8000000002442	1/2 - 1 Mile SSE
O49	HI8000000002439	1/2 - 1 Mile SSE
O50	HI8000000002440	1/2 - 1 Mile SSE
O51	HI8000000002443	1/2 - 1 Mile SSE
O52	HI8000000002446	1/2 - 1 Mile SSE
O53	HI8000000002447	1/2 - 1 Mile SSE
O54	HI8000000002444	1/2 - 1 Mile SSE
O55	HI8000000002445	1/2 - 1 Mile SSE
Q65	HI8000000002460	1/2 - 1 Mile SW
P66	HI8000000002636	1/2 - 1 Mile NW
R70	HI8000000002481	1/2 - 1 Mile SE
71	HI8000000002494	1/2 - 1 Mile WSW
76	HI8000000002412	1/2 - 1 Mile SSW

PHYSICAL SETTING SOURCE MAP - 4237094.154s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location

SITE NAME: Kuhio Homes ADDRESS: 1441 Ahonui St. Honolulu HI 96819 LAT/LONG: 21.3392 / 157.8762	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.154s DATE: March 18, 2015 7:52 am

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
A1 **NNE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002622**
A2 **NNE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002625**
A3 **NNE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FRDS PWS**	**HI0000331**
B4 **SW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002540**
B5 **SW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269939**
C6 **SSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002496**
C7 **SSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269908**
8 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002634**
D9 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002501**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
D10 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269910**
E11 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269998**
E12 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269999**
E13 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002604**
E14 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002608**
E15 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270000**
E16 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002603**
E17 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002605**
F18 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002591**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
F19 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269977**
G20 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002547**
H21 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002519**
G22 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269945**
H23 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269919**
I24 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002471**
J25 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002484**
J26 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269900**
H27 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002534**

Map ID Direction Distance Elevation		Database	EDR ID Number
I28 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269889**
H29 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269923**
H30 **ESE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002537**
H31 **ESE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269937**
I32 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002461**
I33 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269880**
J34 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002477**
J35 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269894**
K36 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269913**

Map ID Direction Distance Elevation		Database	EDR ID Number
K37 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002502**
L38 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002539**
L39 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269940**
M40 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002579**
M41 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002565**
N42 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002478**
N43 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269893**
44 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002629**
45 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269997**

Map ID Direction Distance Elevation		Database	EDR ID Number
46 WSW 1/2 - 1 Mile Lower	Click here for full text details	**FED USGS**	**USGS40000269904**
O47 SSE 1/2 - 1 Mile Lower	Click here for full text details	**HI WELLS**	**HI8000000002441**
O48 SSE 1/2 - 1 Mile Lower	Click here for full text details	**HI WELLS**	**HI8000000002442**
O49 SSE 1/2 - 1 Mile Lower	Click here for full text details	**HI WELLS**	**HI8000000002439**
O50 SSE 1/2 - 1 Mile Lower	Click here for full text details	**HI WELLS**	**HI8000000002440**
O51 SSE 1/2 - 1 Mile Lower	Click here for full text details	**HI WELLS**	**HI8000000002443**
O52 SSE 1/2 - 1 Mile Lower	Click here for full text details	**HI WELLS**	**HI8000000002446**
O53 SSE 1/2 - 1 Mile Lower	Click here for full text details	**HI WELLS**	**HI8000000002447**
O54 SSE 1/2 - 1 Mile Lower	Click here for full text details	**HI WELLS**	**HI8000000002444**

Map ID Direction Distance Elevation		Database	EDR ID Number
O55 SSE 1/2 - 1 Mile Lower	Click here for full text details	**HI WELLS**	**HI8000000002445**
O56 SSE 1/2 - 1 Mile Lower	Click here for full text details	**FED USGS**	**USGS40000269867**
O57 SSE 1/2 - 1 Mile Lower	Click here for full text details	**FED USGS**	**USGS40000269866**
O58 SSE 1/2 - 1 Mile Lower	Click here for full text details	**FED USGS**	**USGS40000269865**
O59 SSE 1/2 - 1 Mile Lower	Click here for full text details	**FED USGS**	**USGS40000269868**
O60 SSE 1/2 - 1 Mile Lower	Click here for full text details	**FED USGS**	**USGS40000269871**
O61 SSE 1/2 - 1 Mile Lower	Click here for full text details	**FED USGS**	**USGS40000269870**
O62 SSE 1/2 - 1 Mile Lower	Click here for full text details	**FED USGS**	**USGS40000269869**
P63 NW 1/2 - 1 Mile Lower	Click here for full text details	**FED USGS**	**USGS40000270021**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
O64 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269864**
Q65 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002460**
P66 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002636**
Q67 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269881**
O68 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269855**
R69 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269899**
R70 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002481**
71 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002494**
R72 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269888**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
S73 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269856**
S74 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269857**
S75 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269858**
76 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002412**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for HONOLULU County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 96819

Number of sites tested: 4

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	-0.475 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	0.050 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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EXHIBIT C

Section 106 Consultation &

Architectural Inventory Survey Information

DAVID Y. IGE
GOVERNOR OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

KEKOA KALUHIWA
FIRST DEPUTY

JEFFREY T. PEARSON
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

December 11, 2015

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
P.O. Box 17907
Honolulu, HI 96817

LOG: 2015.02939, 2015.03575
DOC: 1511JLP42
Architecture, Archaeology
History and Culture

SUBJECT: **Chapter 6E-8 and National Historic Preservation Act Section (NHPA) Section 106 Consultation – Department of Housing and Urban Development (HUD) Repair and Rehabilitation Project Department of Human Services, Hawai‘i Public Housing Authority (HPHA) Kuhio Homes Rehabilitation Project – 1430 and 1449 Ahonui Street Honolulu Ahupua‘a, Kona District, Island of O‘ahu TMK: (1) 1-3-039:003 and 006**

Thank you for your initial submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services (DHS), Hawaii Public Housing Authority (HPHA) consultation with SHPD in accordance with 36 CFR 800.3 and Hawaii Revised Statutes (HRS), Chapter 6E. We received your another submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience.

The submittal indicates that the HPHA is requesting the State Historic Preservation Officer's (SHPO) concurrence with a determination of "no effect" for the proposed HUD repair and rehabilitation improvement projects involving 43 existing public housing developments located throughout the State over the next five (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 consultation on their behalf.

This letter addresses Kuhio Homes Rehabilitation Project, 1430 Ahonui Street and 1449 Ahonui Street. The HPHA has identified the area of potential effects (APE) as the 2.94 acre area parcel owned by the State (HPHA) which is identified as TMK: (1) 1-3-039:003 and 006. DHS/HPHA have indicated at this stage of the planning process, they are unclear whether the subject 2.94-acre project area will require any ground disturbances.

Our records indicate that no archaeological inventory survey has been conducted within the subject parcel and that no historic properties have been identified. However, based on nearby studies potential exists to encounter subsurface traditional Hawaiian and/or historic properties within the subject parcel.

The SHPD has reviewed the undertaking at 1430 Ahonui Street and 1449 Ahonui Street, and the SHPO's determination is **no adverse effect** pursuant to NHPA Section 106 and **no historic properties affected** pursuant to HRS §6E-8 within the APE **provided the following conditions are met:**

- If ground disturbing activity is anticipated, DHS must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation;
- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;
- Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;

- Submit a TMK map showing the full extent of the project area within the affected parcel/s;
- Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Summary of land use history, such as previous intensive cultivation, grubbing or grading;
- Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions regarding archaeological resources or concerns please contact Susan Lebo at (808) 692-8019 or at Susan.A.Lebo@hawaii.gov. For any history and cultural concerns please contact Kaʻāhiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov. Please contact Jessica Puff at Jessica.L.Puff@hawaii.gov or (808) 692-8023 for any questions regarding architectural concerns or this letter.

Sincerely,

Susan A. Lebo

Signed for

Alan A. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

3. Kuhio Homes

a. Historic Context

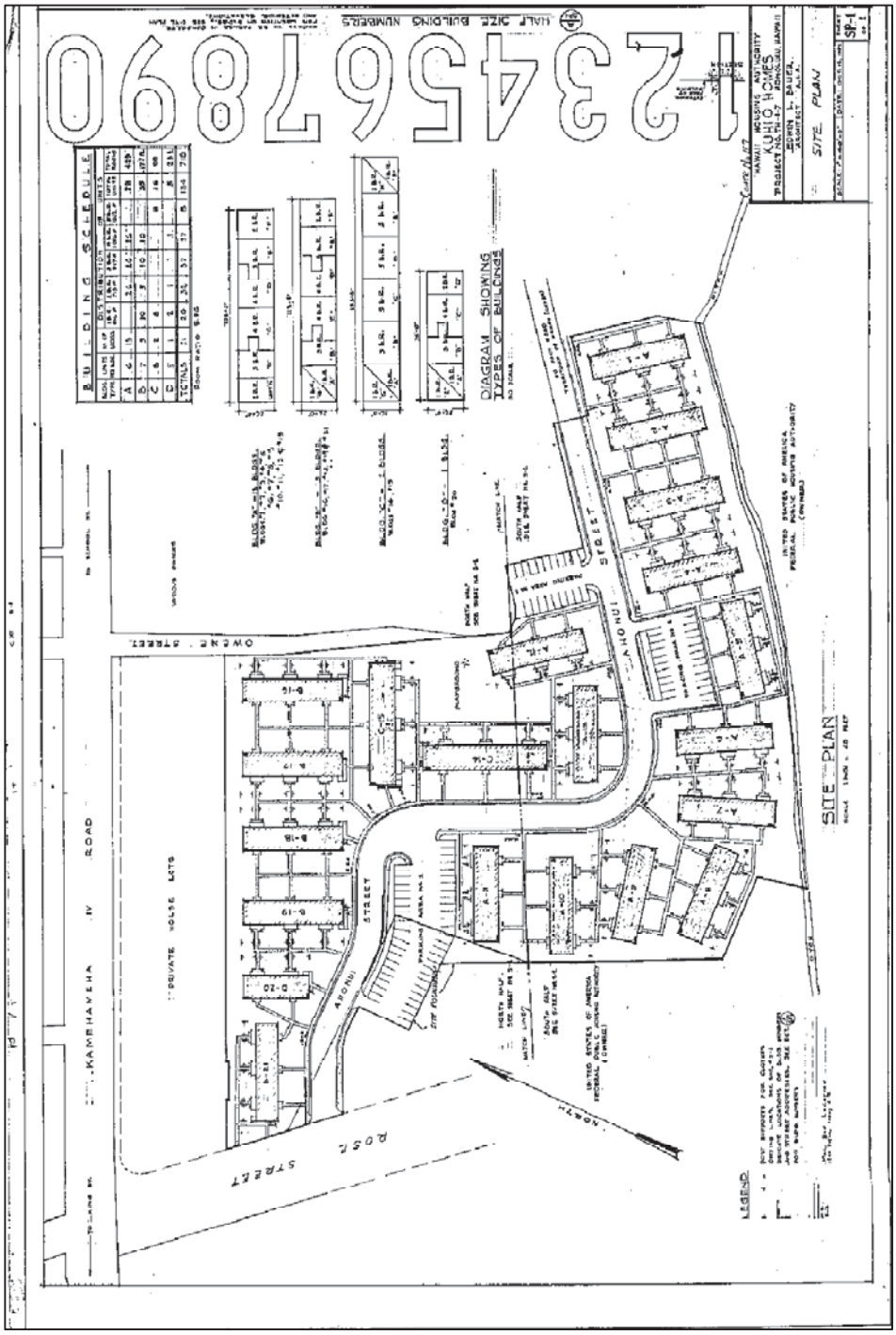
Kuhio Homes (Project TH-1-7) was completed in late 1953, and had an initial move-in date of November 16, 1953. The project consisted of 134 units of housing in 21 two-story buildings (HHA, 1954). The homes were built adjacent to the Kalihi War Homes temporary housing project that had been constructed to help alleviate the wartime housing shortage. Kuhio Homes was built as a part of the ongoing early 1950s attempts to provide enough affordable housing for Hawai'i's lower-income residents, including recently discharged veterans and young families.

The architect for this project was Edwin L. Bauer, who designed a number of notable buildings during the 1950s; the resort hotels Breakers, Hawaiiana Hotel, and Henry J. Kaiser's original Hawaiian Village in Waikiki. He also designed St. Elizabeth's Church on North King Street, and Holy Trinity Church on North School Street. In 1959 Bauer received an honors award from the American Institute of Architects for the Kilauea Catholic Mission Church that he designed on Kauai. In addition, in 1957, he designed the Palolo Homes housing project (Phase II) for HHA.

b. Description

The buildings at Kuhio Homes are two-story concrete structures with flat roofs and cantilevered overhanging eaves. The interior partition walls are concrete masonry units. The buildings are arranged generally parallel to one another, in a winding fashion along and around a curving street and parking cul-de-sacs. The buildings have parking areas, grassy areas and concrete walkways between them, as well as clotheslines in many areas. The front sides of the buildings have main entries to the living areas of the units. Cantilevered concrete canopies extend over the shared front lanai, protecting the entry door and living room windows of two adjacent units. The rear sides of the buildings have laundry areas outside the kitchens. There is a shared water heater closet between adjacent units, and the roof of this projecting room is extended over the rear doors and continues, with a narrower projection, over the kitchen windows of adjacent units.

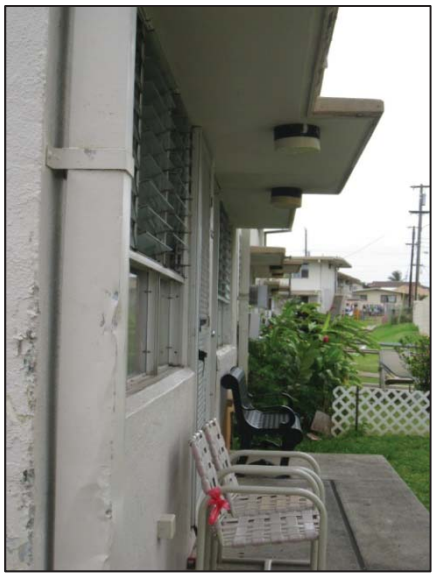
The buildings at Kuhio Homes have been altered somewhat over the years. The original windows have been replaced with aluminum-frame fixed-pane and jalousie windows. Original exterior flush wood doors have been replaced, primarily with metal-clad doors. Screen doors have been replaced as well. The original asphalt tiles on the floors have been covered with new vinyl composition tile. Interior panel doors have been replaced with flush ones, although original transom panels remain above the interior doors. Kitchens and bathrooms have been renovated with laminate countertops, and newer cabinets, with newer plumbing fixtures in the bathrooms as well. When individual electric meters were installed for each unit, numerous metal conduits were attached to the exterior of the buildings.



Kuhio Homes original site plan showing location of all buildings.

See the following page for the one-page historic assessment and photographs.

c. Historic Assessment: Kuhio Homes (1953)



Clockwise from top left: Typical building with connecting walkways, lanai with concrete canopy, typical bathroom, interior ceiling slope at second-story following low roof pitch.

Project	Kuhio Homes
Date	1953
Significance	Kuhio Homes is associated with public housing in Hawaii and with the social history of Hawaii. The project represents the housing reform movement of the Territory and the State.
Integrity	Buildings have been altered. Retain integrity of location, setting, and association. Integrity of design, materials, feeling and workmanship has been greatly compromised.
Character Defining Features	Low-slope roof with overhanging eaves, cantilevered canopies
Alterations	Windows replaced, exterior and interior doors replaced, multiple electrical conduits installed on exterior of buildings.
National Register Eligibility	**Not eligible**

HAWAII PUBLIC HOUSING AUTHORITY

ENVIRONMENTAL REVIEW

KŪHIŌ PARK TERRACE (LOW-RISE)

Honolulu, O`ahu

AMP 40
HPHA No. 1010

Prepared for:

State of Hawaii
Hawaii Public Housing Authority

Prepared by:

HHF PLANNERS
places for people

U.S. Department of Housing and Urban Development
451 Seventh Street, SW
Washington, DC 20410
www.hud.gov

espanol.hud.gov

Environmental Review for Activity/Project that is Categorically Excluded Subject to Section 58.5

Pursuant to 24 CFR 58.35(a)

Project Information

Project Name: Kūhiō Park Terrace Low-Rise (AMP 40)

Responsible Entity: Hawaii Public Housing Authority
1002 North School Street
Honolulu, HI 96817

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

State/Local Identifier: State of Hawai‘i

Preparer: Mr. Scott Ezer, Vice President
HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawai‘i 96813

Certifying Officer Name and Title: Mr. David Y. Ige
Governor, State of Hawai‘i

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

Consultant (if applicable): HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawai‘i 96813

Direct Comments to: Mr. Hakim Ouansafi, Executive Director
Hawaii Public Housing Authority
1002 North School Street
Honolulu, Hawai‘i 96817

Project Location: 1580 Linapuni Street
Honolulu, Hawai‘i 96819

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]**:**

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a "major construction activity" and would involve one or a combination of several HUD designated categories of actions.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent;
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons;
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland;
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation;
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls);
7. Interior and exterior renovations and rehabilitation;
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site;
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Level of Environmental Review Determination:

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.5. Compliance with and completion of conformance determinations for other statute, executive order, or regulation has been completed and support the Categorical Exclusion.

Funding Information

Grant Number	HUD Program	Funding Amount
To be determined	Capital Fund	To be determined
To be determined	Economic Development Initiative Special Project Grant	To be determined
To be determined	Other Grants	To be determined

Estimated Total HUD Funded Amount:

To be determined by HUD using a formula and based upon federal budget.

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]**:**

Depends upon funds available.

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	*The project is not within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.*
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☒	*The State of Hawai'i does not have any designated coastal barrier resource units. (http://www.fws.gov/CBRA/Maps/Mapper.html)*
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes ☐ No ☒	*As indicated in the Flood Insurance Rate Panel 15003C0353G, Revised November 05, 2014, this housing project is located in Flood Hazard Zone X (areas determined to be outside the 0.2% annual chance floodplain). A field inspection and information obtained from the site manager confirmed no major flooding issues within the site. Based on its description, this project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.*

STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5		
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes ☐ No ☒	*The State of Hawai'i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. EPA's Green Book for currently designated "nonattainment areas" as of June 2015. Planned repair and rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.*
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes ☐ No ☒	*Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai'i's Coastal Zone Management (CZM) program.*
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☐ No ☒	*There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.*
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes ☒ No ☐	*The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices, while project-specific mitigation measures are identified in the following section.*
Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes ☐ No ☒	*There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.*

Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes ☐ No ☒	*The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.*
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes ☐ No ☒	*The project site is located in Zone X, an area of minimal flooding (i.e., 0.2% annual chance flood), and is located outside the 500-year flood zone. A field inspection and information obtained from AMP Manager confirmed no major flooding issues within the project site. The project is in compliance with Executive Order 11988.*
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes ☒ No ☐	*The Kūhiō Park Terrace Low-Rise project was originally constructed in 1965 as part of the larger Kūhiō Park Terrace development (included High-Rise housing portion), and includes 40 low-rise units in 12 duplex and row house buildings. The row houses are numbered C1 to C8 and the duplexes numbered D1 to D4. A Historical Property Evaluation (HPE) Update study (June 2015) determined that all buildings, except Building D1, in this housing project are eligible. In a letter dated November 30, 2015, the State Historic Preservation Officer concurred with the HPHA's determination that repair and rehabilitation improvements for this housing project would have "no adverse effect" on historic properties pursuant to NHPA Section 106 and subject to certain mitigative measures*
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes ☐ No ☒	*The project site is not situated along a highway that has a high volume of vehicular traffic. The HUD noise calculator estimated noise levels at the project site to be 41.6 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.*
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes ☐ No ☒	*The housing project is located within the O'ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed*

		under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation.
Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☐ No ☒	*There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.* *(http://www.fws.gov/wetlands/data/mapper.HTML)*
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes ☐ No ☒	*There are no Wild and Scenic Rivers in Hawai'i, which excludes this project from mitigation or formal consultation requirements (http://www.rivers.gov/map.php)*
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes ☐ No ☒	*Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, these improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects on minority populations and low-income populations. Improvements should benefit low-income and minority populations living within this housing project.*

Field Inspection (Date and completed by)**:** June 23, 2015
Questor Lau
HHF Planners

Summary of Findings and Conclusions:

Repair and rehabilitation improvements implemented for this existing housing project by HPHA should not result in significant environmental impacts based upon research data collected, a field inspection, consultation with the site manager and maintenance staff, consultation with pertinent resource agencies, and prior HPHA experience implementing repair and rehabilitation improvements. Therefore, repair and rehabilitation improvements would comply and be consistent with the statutes, executive orders, and regulations addressed. Furthermore, HPHA would evaluate improvements planned to ensure the work is consistent with the designated categories of actions described under the project description section. Compliance with these factors evaluated are further addressed in the attached Source Documentation Statutory Worksheet along with relevant technical reports/assessments.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Law, Authority, or Factor	Mitigation Measure
Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	*Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.* *Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved land site at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed upon completion of work, and no contamination of adjacent habitats shall be allowed from project-related activities.* *Hawaiian Hoary Bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.* *Hawaiian Goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season (September through March). A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.* *Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo'i, impoundments or other vegetated water bodies.* *1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols.* *2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.* *3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human*

	activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area. *In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.* *<u>Additional Measures</u>: The following additional measures would be implemented:* *1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.*
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	*1. When considering rehabilitation improvements or building modifications: 1) the buildings' character-defining features shall be retained to the extent practicable; and 2) the renovations shall adhere to the Secretary of the Interior's (SOI) Standards for Rehabilitation.* *2. If rehabilitation improvements or building modifications cannot retain the character-defining features or adhere to the SOI's Standards, a Historic American Buildings Survey (HABS) will be conducted subject to the following conditions:* *a. Level II HABS documentation will be conducted in accordance with the National Park Service standards; and* *b. A representative sample of multiple building types would be selected for HABS documentation due to the multiple types of buildings constructed for housing projects.* *3. If ground disturbing activity is anticipated, HPHA must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation.* *a. Submit detailed plans, specifications and a detailed scope of work once the plans have been developed.* *b. Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation.* *c. Submit a TMK map showing the full extent of the project area within the affected parcel/s.* *d. Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area.* *e. Summary of land use history, such as previous intensive cultivation, grubbing or grading.* *f. Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.* *In addition to these mitigation measures, the HPHA would enter into a Programmatic Agreement with the SHPO to address the*

	implementation of future repair and rehabilitation improvements to State housing projects after the current Section 106 review process is completed and prior to the next environmental review process in approximately five years. Furthermore, should subsurface human remains or other traces of human activity greater than 50 years old be encountered during construction, all work in the vicinity of the find would immediately stop and the SHPD would be promptly notified. The treatment of any human remains that are encountered would be conducted in accordance with applicable requirements of Chapter 6E, Hawai'i Revised Statutes (Historic Preservation) and Chapter 13-300, Hawai'i Administrative Rules (Rules of Practice and Procedure Relating to Burial Sites and Human Remains).

Determination:

☐ This categorically excluded activity/project converts to **EXEMPT** per Section 58.34(a)(12), because it does not require any mitigation for compliance with any listed statutes or authorities, nor requires any formal permit or license; **Funds may be committed and drawn down after certification of this part** for this (now) EXEMPT project; OR

☒ This categorically excluded activity/project cannot convert to Exempt status because one or more statutes or authorities listed at Section 58.5 requires formal consultation or mitigation. Complete consultation/mitigation protocol requirements, **publish NOI/RROF and obtain "Authority to Use Grant Funds"** (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR

☐ This project is not categorically excluded OR, if originally categorically excluded, is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

Preparer Signature: Scott Ezer Date: 11-10-15

Name/Title/Organization: Mr. Scott Ezer, Vice President
HHF Planners

Responsible Entity Agency Official Signature:

David Y. Ige Date: APR 28 2016

Name/Title: Mr. David Y. Ige, Governor

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

Kūhiō Park Terrace Low-Rise (HA # 1010)

TMK: (1) 1-3-039:008

Hawai‘i Public Housing Authority (HPHA) Environmental Review

SOURCE DOCUMENTATION (SD) STATUTORY WORKSHEET

Site Visit Date: June 23, 2015
Prepared By: Questor Lau

PROJECT DESCRIPTION

The Kūhiō Park Terrace (KPT) Low-Rise housing project is located in the Kalihi community of Honolulu on the island of O‘ahu. Kalihi is an urban neighborhood situated west of downtown Honolulu and east of Fort Shafter.

The housing site is positioned along Linapuni Street and is bordered to the north by the Kūhiō Homes housing project, and to the south by the KPT High-Rise housing project. This housing project is within HPHA’s Asset Management Project (AMP) 40 which includes the Kūhiō Homes housing project.

KPT Low-Rise was first occupied in 1965 and has a street address of 1580 Linapuni Street. This property consists of 3.36 acres, and it is identified as Tax Map Key (TMK) No. (1) 1-03-039: 008. The housing project is comprised of eight 2-story townhouses and four 1-story duplexes, all with four-bedroom units. The State’s land use designation for the property is the “Urban District.” The City’s zoning for the parcel is A-2 Medium-Density Apartment.

The project site is not located within a tsunami evacuation zone, and the entire site is located in Flood Zone X, an area of minimal flood hazard (Flood Insurance Rate Map Panel 15003C0353G, Revised November 05, 2014).

The following figures in Exhibit A provide supporting information on this housing project:

Figure 1: Location Map
Figure 2: TMK Map
Figure 3: Site Map
Figure 4: Flood Map

COMPLIANCE FACTORS

I. AIRPORT CLEAR ZONES AND ACCIDENT POTENTIAL ZONES (24 CFR PART 51D)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The housing project does not lie within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: 24 CFR 51 (D).

Honolulu International Airport Master Plan - 2010 (August 1994), State Department of Transportation, Airports Division;

*Hawai`i Airports and Flying Safety Guide (2012-13, Fifth Edition, Revision 1)* Hawai`i Department of Transportation, Airports Division; and

http://hidot.hawaii.gov/airports/files/2013/01/Airport-Safety-Guide-2012-2013-5rev1.pdf

II. COASTAL BARRIER RESOURCES (COASTAL BARRIER IMPROVEMENT ACT OF 1990 [16 USC 3501])

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i does not have any designated coastal barrier resource units.

SUPPORTING DOCUMENTATION:

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/cbra/maps/mapper.html (Date accessed: 6/30/15).

III. FLOOD INSURANCE (FLOOD DISASTER PROTECTION ACT OF 1973 AND NATIONAL FLOOD INSURANCE REFORM ACT OF 1994 [42 USC 4001-4128 AND 42 USC 5154a])

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program.

As indicated in the Flood Insurance Rate Panel 15003C0353G, Revised November 05, 2014, this housing project is located in Flood Hazard Zone X (areas determined to be outside the 0.2% annual chance floodplain). A field inspection and information obtained from the site manager confirmed no major flooding issues within the site. Based on its description, this project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal signs of flooding problems. An interview with the AMP Manager also determined that major ponding or flooding issues are currently not an issue for the project site.

Printed: Flood Insurance Rate Map, Community Panel Number 15003C0353G, Revised November 05, 2014.

Hawai`i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 7/27/15)

IV. CLEAN AIR ACT (40 CFR PARTS 6, 51, 93)

SUPPORTING DOCUMENTS	
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. Environmental Protection Agency's Green Book for currently designated "nonattainment areas" as of June 2015. Planned rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.

SUPPORTING DOCUMENTATION:

Printed: *State of Hawai‘i Annual Summary 2013 Air Quality Data*. State of Hawai'i, Department of Health, July 2014.

U.S. Environmental Protection Agency website at: http://epa.gov/airquality/greenbk/

V. COASTAL ZONE MANAGEMENT ACT (16 USC 1451, SECTIONS 307 (C), (D)

CONTACT:

Mr. John Nakagawa
Office of Planning
Department of Business, Economic Development & Tourism
State of Hawai‘i
P.O. Box 2359
Honolulu, Hawai'i, 96804-2359

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai‘i's Coastal Zone Management (CZM) program.

SUPPORTING DOCUMENTATION:

Contact: In an email to the Office of Planning (OP) dated July 27, 2015, the HPHA determined that the use of HUD funds for the implementation of repair and rehabilitation improvements does not require review for consistency with Hawai‘i's CZM program. The OP confirmed this determination in an email dated July 28, 2015 and it is included in the Appendices.

Experience: Previous reviews conducted by OP in 2003, 2005, and 2010 determined that projects receiving federal funds from HUD do not require CZM federal consistency review. OP's current determination confirms this condition is still applicable. Copies of these prior documentations are included in the Appendices.

VI. CONTAMINATION AND TOXIC SUBSTANCES (24 CFR PART 50.3 & 58.5(I)(2))

SUPPORTING DOCUMENTS

X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Project Not Affected.

There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.

SUPPORTING DOCUMENTATION:

Field: A site inspection and interview with the Asset Management Project (AMP) Manager revealed no presence of any toxic or radioactive materials on the project site that warrant concern.

Study: Environmental Data Resources, Inc. (EDR), conducted a search of available environmental records and prepared a Radius Map Report (Inquiry Number 4237094.154s, March 18, 2015). EDR reviewed more than 25 federal and statewide regulatory databases for information regarding the treatment, storage, disposal and release of toxic chemicals at the project site and within specific radii (generally 1 mile) of the site. A Detail Map within the EDR report documents those sites identified within a 0.25 mile radius of the project site. The EDR report in Exhibit B includes the results of their research findings.

The EDR report notes the following activities within a 0.125 mile radius from the center of the project site. This housing project along with existing surrounding areas area within the Fort Shafter Army Department of Defense region. This project site was not identified as a Formerly Used Defense Site (FUDS) by the U.S. Army Corps of Engineers and is not subject to any cleanup actions for Department of Defense-generated contamination.

The subject housing project site is classified as a Non-Generator (Handler) that does not generate hazardous waste, and no violations were found. The adjacent KPT High-Rise housing project (now known as Kūhiō Park Terrace Towers), is listed as a brownfield. The site is registered with the State Department of Health and its hazard priority is “no further work” as potential hazards are managed with controls. Lead under the building (specific building not identified) and asphalt were addressed.

Restrictions with the KPT High-Rise include prohibiting any activity that may disturb the integrity of the capping system, and reassess this system if the asphalt or building are disturbed. Also, elevated levels of dieldrin (insecticide) were also reported found around the perimeter of the buildings. The assessment and response to this is ongoing and it has a medium priority. Controls are required to manage the contamination. The report also notes that this site was used for agricultural purposes until developed for residential homes

in the 1940s. The Kūhiō Park Terrace Community Center is also a site is registered with the State Department of Health and its hazard priority is "no further work" as potential hazards are managed with controls. Lead under the building and asphalt were addressed, controls are required to manage the contamination, but no restrictions were identified.

VII. ENDANGERED SPECIES (50 CFR PART 402)

CONTACT:
Mr. Loyal Mehrhoff, Field Supervisor
Pacific Islands Administrator
Fish and Wildlife Services
U.S. Department of the Interior
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawai'i 96813
Tel. #: 792-9400

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Adverse Effect Subject to Mitigation

The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received by the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices.

SUPPORTING DOCUMENTATION:

Contact: A letter from the HPHA dated July 24, 2015 was submitted to the Pacific Island Administrator for the FWS determining that repair and rehabilitation improvements that may be implemented using HUD funds for this housing project would have no likelihood of effect on any listed species or proposed species, or existing or proposed designated critical habitat subject to certain measures. Concurrence of this determination along with proposed minimization and avoidance measures was received from the FWS in a letter dated September 28, 2015 which is included in the Appendices. This housing project is subject to the following measures.

Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.

Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved land site at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed upon completion of work, and no contamination of adjacent habitats shall be allowed from project-related activities.

Hawaiian Hoary Bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.

Hawaiian Goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season (September through March). A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.

Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro loʻi, impoundments or other vegetated water bodies.

1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols.
2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.
3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.

In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.

Additional Measures: The following additional measures would be implemented:

1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.

Experience: The FWS was previously consulted as part of environmental reviews that were completed in 2005 (39 housing projects) and 2010 (70 housing projects) which supported the determination that repair and rehabilitation improvements would either: 1) have no likelihood of effect for certain housing projects; or 2) not likely adversely affect federally listed species or critical habitat for certain housing projects subject to mitigative measures. A summary of these consultation efforts follows.

2005 Consultation: In a letter dated July 15, 2005, the Housing and Community Development Corporation of Hawaiʻi (predecessor to the HPHA), determined that the implementation of minor repair and rehabilitation improvements for 39 housing projects would not have an adverse effect on federally-listed species or critical habitat. In a letter dated August 11, 2005, the FWS concurred with the HCDCH determination.

2010 Consultation: In a letter dated May 17, 2010, the HPHA informed the FWS that HUD funds would be used to immediately implement repair and rehabilitation

improvements for six housing projects on O‘ahu and the island of Hawai`i. In a subsequent letter dated May 21, 2010, the FWS was informed that HPHA would be using HUD funds to implement minor repair and rehabilitation improvements for 64 projects throughout the State. In both letters, the HPHA determined that the repair and rehabilitation improvements were not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat. Based on further consultation and a meeting with FWS staff on June 24, 2010, the HPHA determined that repair and rehabilitation improvements for most of their housing projects would not likely adversely affect any listed or proposed species, or existing or proposed designated habitat, subject to various mitigative measures for certain housing projects.

VIII. EXPLOSIVE AND FLAMMABLE OPERATIONS (24 CFR PART 51C)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

SUPPORTING DOCUMENTATION:

Field: Field inspection was limited to the exterior of residential buildings and associated structures for this housing project. No above-ground explosive or flammable material storage containers in excess of 100 gallons were observed at the site.

Printed: 24 CFR Part 51, Subpart C addresses acceptable separation distance from above-ground explosive or flammable fuels or chemical containers. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

IX. FARMLANDS PROTECTION (7 CFR PART 658)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. Since the property consists of an existing housing development within an urbanized area, no farmlands would be impacted by the implementation of repair and rehabilitation improvements.

Printed: The property is designated for "Urban" use by the State Land Use Commission and the County's zoning for the parcel is RD-3.75 Double-Family Residential District.

Hawai`i Office of Planning website at: http://planning.hawaii.gov/gis/
(Date accessed: 6/30/2015)

X. FLOODPLAIN MANAGEMENT (EXECUTIVE ORDER 11988, 24 CFR PART 55)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program

The project site is located in Zone X, an area of minimal flooding (i.e., 0.2% annual chance flood), and is located outside the 500-year flood zone. A field inspection and information obtained from AMP Manager confirmed no major flooding issues within the project site.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal signs of previous flooding problems. An interview with the AMP Manager also determined that no major ponding or flooding issues occur on the project site. Building C-2 was noted to have ponding water adjacent to the building due to a downspout that was discharging runoff adjacent to the foundation. No other drainage problems noted during site visit.

Printed: Flood Hazard Assessment Report, FIRM Panel: 15003C0353G, Revised November 05, 2014

Hawai`i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/ (Date accessed7/21/15)

XI. HISTORIC PRESERVATION (NATIONAL HISTORIC PRESERVATION ACT OF 1966; SECTIONS 106 AND 110; 36 CFR, PART 800)

CONTACT:

Ms. Suzanne Case, Chairperson
Department of Land and Natural Resources (DLNR)
State of Hawai'i
1151 Punchbowl Street
Honolulu, Hawai'i 96813
Tel. #: 587-0400

SUPPORTING DOCUMENTS	
X	Field
X	Contact
X	Printed
X	Experience
X	Study

DETERMINATION:

Status Category: No Adverse Effect on Historic Properties with Mitigation.

The Kūhiō Park Terrace Low-Rise project was originally occupied in 1965 as part of the larger Kūhiō Park Terrace development (included High-Rise housing portion), and includes 40 low-rise units in 12 duplex and row house buildings. The row houses are numbered C1 to C8 and the duplexes numbered D1 to D4. A Historical Property Evaluation (HPE) Update study was conducted by Mason Architects, Inc. in June 2015 to determine if this project meets National Register of Historic Places (NRHP) eligibility criteria. The HPE determined that all buildings, except Building D1, in this housing project are eligible. In a letter to the State Historic Preservation Officer (SHPO) dated August 20, 2015, the HPHA determined that repair and rehabilitation improvements for this housing project would have "no adverse effect" on historic properties subject to certain mitigative measures. In a letter dated November 30, 2015, the SHPO concurred with the HPHA's determination and provided additional conditions for ground-disturbing activities. In responding to this letter, the HPHA concurred with the conditions set forth by the SHPO.

SUPPORTING DOCUMENTATION:

Field: A site inspection of this housing project did not locate any existing or potential archaeological sites (e.g., heiau) or cultural features on the property. An interview with the AMP Manager indicates that no known sites or features are present on the property.

Contact: Based on the findings and recommendations of the 2015 AIS, the HPHA submitted a letter to the State Historic Preservation Officer dated August 20, 2015 regarding 28 housing projects, which is included in the Appendix. Of this total, 15 housing projects did not meet National Register eligibility criteria, therefore, a "no historic properties affected" determination was proposed for these repair and rehabilitation improvements. Repair and

rehabilitation improvements for the other 13 housing projects (including Kūhiō Park Terrace Low-Rise) were determined to meet National Register eligibility criteria and were proposed to have "no adverse effect" on historic properties subject to certain mitigative measures.

In a letter dated November 30, 2011, the SHPO concurred with the HPHA's determination that repair and rehabilitation improvements for this housing project would have "no adverse effect" on historic properties pursuant to NHPA Section 106 and subject to the following mitigative measures. . In response to this letter, the HPHA concurred with the conditions set forth by the SHPO. A copy of these letters are included in Exhibit C.

1. When considering rehabilitation improvements or building modifications: 1) the buildings' character-defining features shall be retained to the extent practicable; and 2) the renovations shall adhere to the Secretary of the Interior's (SOI) Standards for Rehabilitation.

2. If rehabilitation improvements or building modifications cannot retain the character-defining features or adhere to the SOI's Standards, a Historic American Buildings Survey (HABS) will be conducted subject to the following conditions:

    a. Level II HABS documentation will be conducted in accordance with the National Park Service standards; and

    b. A representative sample of multiple building types would be selected for HABS documentation due to the multiple types of buildings constructed for housing projects.

3. If ground disturbing activity is anticipated, HPHA must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation.

    a. Submit detailed plans, specifications and a detailed scope of work once the plans have been developed.

    b. Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation.

    c. Submit a TMK map showing the full extent of the project area within the affected parcel/s.

    d. Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area.

    e. Summary of land use history, such as previous intensive cultivation, grubbing or grading.

    f. Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

In addition to these mitigation measures, the HPHA would enter into a Programmatic Agreement with the SHPO to address the implementation of future repair and rehabilitation improvements to State housing projects after the current Section 106 review process is

completed and prior to the next environmental review process in approximately five years. Furthermore, should subsurface human remains or other traces of human activity greater than 50 years old be encountered during construction, all work in the vicinity of the find would immediately stop and the SHPD would be promptly notified. The treatment of any human remains that are encountered would be conducted in accordance with applicable requirements of Chapter 6E, Hawai‘i Revised Statutes (Historic Preservation) and Chapter 13-300, Hawai‘i Administrative Rules (Rules of Practice and Procedure Relating to Burial Sites and Human Remains).

Printed: A review of the U.S. National Parks Service website for the National Register of Historic Places did not identify any historic properties within the limits of this housing project. A similar review of the State DLNR website for the State Register of Historic Places revealed that there are no historic properties within the project site.

National Register: U.S. National Park Service website at:
http://www.nps.gov/nr/research/ (Date accessed: 7/2/15).

State Register: Hawai`i Department of Land and Natural Resources website at:
http://dlnr.hawaii.gov/shpd/state-register/ (Date accessed: 7/2/15).

Experience: In a letter to the SHPD dated July 15, 2005, the Housing and Community Development Corporation of Hawai`i (HCDCH), a predecessor to the HPHA, proposed minor repair and rehabilitation improvement at 39 public housing projects throughout Hawai‘i and believed the work would have “no effect” on significant historic sites. This included the Kūhiō Park Terrace of which the High-Rise and Low-Rise phases were one housing project at the time. The HCDCH also asked the SHPD to: (1) define the area of potential effect for the housing projects; (2) identify and evaluate historic properties within the housing projects; and (3) assess and resolve any adverse effects of the housing projects per Section 106 of the National Historic Preservation Act of 1966.
In a letter to the HCDCH dated September 27, 2005, the SHPO responded by requesting that a programmatic agreement (PA) with the HCDCH be developed that would also address the recordation of housing projects that have not yet reached the 50-year milestone but may face possible adverse effects from the proposed work.

Based on follow up discussions with the SHPD, Mason Architects prepared a historic property evaluation (HPE) on behalf of the HCDCH in April 2006 for six public housing projects on Hawai‘i Island and O‘ahu (included Kūhiō Park Terrace). The six projects covered by the HPE met, or would soon meet, the 50-year age criteria to become eligible for listing in the NRHP. At the time, only two of the projects were over 50 years old and only two met NRHP eligibility criteria. The KPT project did not meet NRHP eligibility criteria. The HPE was submitted to the SHPD for review and comment on June 6, 2006. No comments or objections were received from the SHPO on the 2006 HPE or the “no effect” determination that was set forth in the HCDCH letter dated July 15, 2005.

Study: A Historic Property Evaluation (HPE) Update study was conducted by Mason Architects, Inc. in June 2015 for Kūhiō Park Terrace (KPT) that included both the High-Rise and Low-Rise phases that are now managed as separate HPHA housing projects. The KPT Low-Rise project was originally constructed in 1965, and includes 40 low-rise units in 12 duplex and row house buildings. The row houses are numbered C1 to C8 and the duplexes numbered D1 to D4. KPT was the State’s first and last attempt to house low-income families in publicly-owned high-rise buildings. The project included both high-rise and low-rise buildings in a campus-like setting. The complex originally featured large grassy areas

between buildings and numerous community amenities including a pool with bathhouse, park building, basketball and volleyball courts, a softball field, and a community building.

Character defining features of Row-House Buildings (C1 through C-8) include low-rise buildings separated by open grassy areas. Flat roofs, wide eaves, concrete wing walls at building corners, and as exterior dividers between units. Most set at 45 degree angle to street, and perpendicular to each other with shared yards. Glass jalousie windows, metal countertops and wood cabinets, wood staircases with wood and metal balustrades. Despite having some screen doors removed and two buildings re-roofed, these buildings retain their historic integrity.

Character defining features of the Duplex Buildings (D-1 through D4) include one-story buildings with flat roofs. Wide overhanging eaves and wing-walls, glass jalousie windows, metal countertops and wood cabinets. Alterations that have been made to these buildings include: rear lanais have been incorporated into the units as interior space (D2 and D3), rear yard enclosures removed. Two buildings (D1 and D2) converted for office and storage use. One building (D2) has minimal alterations, while one unit in D1 has many interior walls removed. Most buildings have relatively minor alterations, retains integrity of location, setting, feeling, and association. Integrity of design, materials and workmanship have been compromised, most significantly at building D1. Therefore, buildings D2 through D4 were determined to be NRHP eligible while building D1 is not eligible.

XII. NOISE ABATEMENT CONTROL (24 CFR PART 51B)

	SUPPORTING DOCUMENTS
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Within HUD Noise Standards

The project site is not situated along a highway that has a high volume of vehicular traffic. The HUD noise calculator estimated noise levels at the project site to be 41.6 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

SUPPORTING DOCUMENTATION:

Field: No significant noise generating sources were identified within the project site during the site inspection. The subject housing lots are located within an urban residential neighborhood, along Linapuni Street. Linapuni Street is expected to have low volumes of traffic because access to the project site is managed primarily for residential use, and is gated at both entrances into the housing project site and staffed with security guards. Therefore, traffic in this area would primarily be to the existing project site. Furthermore, an interview with the AMP Manager did not identify any loud noise producing sources in

the area. As a result, notable noise sources are predominantly associated with vehicular traffic along adjacent streets. Traffic noise did not appear significant during the site visit.

Study: The HUD day/night noise level calculator was used to estimate approximate traffic noise levels at the project site. Middle Street is a primary County roadway. Middle Street serves vehicular traffic entering and exiting Kalihi along with providing access to other surrounding urban areas. Traffic counts were based on 2013 Hawai'i State Department of Transportation data and applied to a distance of 500 feet from the project site. Using this HUD calculator, the estimated noise levels at the project site is 41.6 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

XIII. SOLE SOURCE AQUIFER (40 CFR PART 149)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact on Sole Source Aquifer

The housing project is located within the O'ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation. However, if exceptional circumstances require compliance steps with any of these authorities, such compliance must be established and documented prior to approving the site-specific loan or grant.

SUPPORTING DOCUMENTATION:

Printed: This determination was based upon review of the Sole Source Aquifer Memorandum of 4/30/90 (Sections II.B.1 and II.B.2) and consideration of the type of rehabilitation related improvements that would be conducted for this project.

XIV. WETLANDS PROTECTION (EXECUTIVE ORDER 11990)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the property did not identify the presence of any wetlands.

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/wetlands/data/mapper.html (Date accessed 7/23/2015).

XV. WILD AND SCENIC RIVERS ACT (16 USC 1271, SECTION 7 (B), (C))

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no Wild and Scenic Rivers in Hawai‘i, which excludes this project from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: National Wild and Scenic Rivers System website at: http://www.rivers.gov/index.php (Date accessed: 6/30/2015).

XVI. ENVIRONMENTAL JUSTICE (EXECUTIVE ORDER NO. 12898)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Conflict with Requirements

Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing

project. Therefore, repair and rehabilitation improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations. Repair and rehabilitation improvements should benefit low-income and minority populations living within this housing project.

SUPPORTING DOCUMENTATION:

Printed: Executive Order 12898.

U.S. Department of Housing and Urban Development website at:
https://www.hudexchange.info/environmental-review/environmental-justice/

EXHIBIT A

Location Map, TMK Map, Site Map, Flood Map, and Site Photos

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

HONOLULU RAIL TRANSIT

Transit Corridor

Transit Station

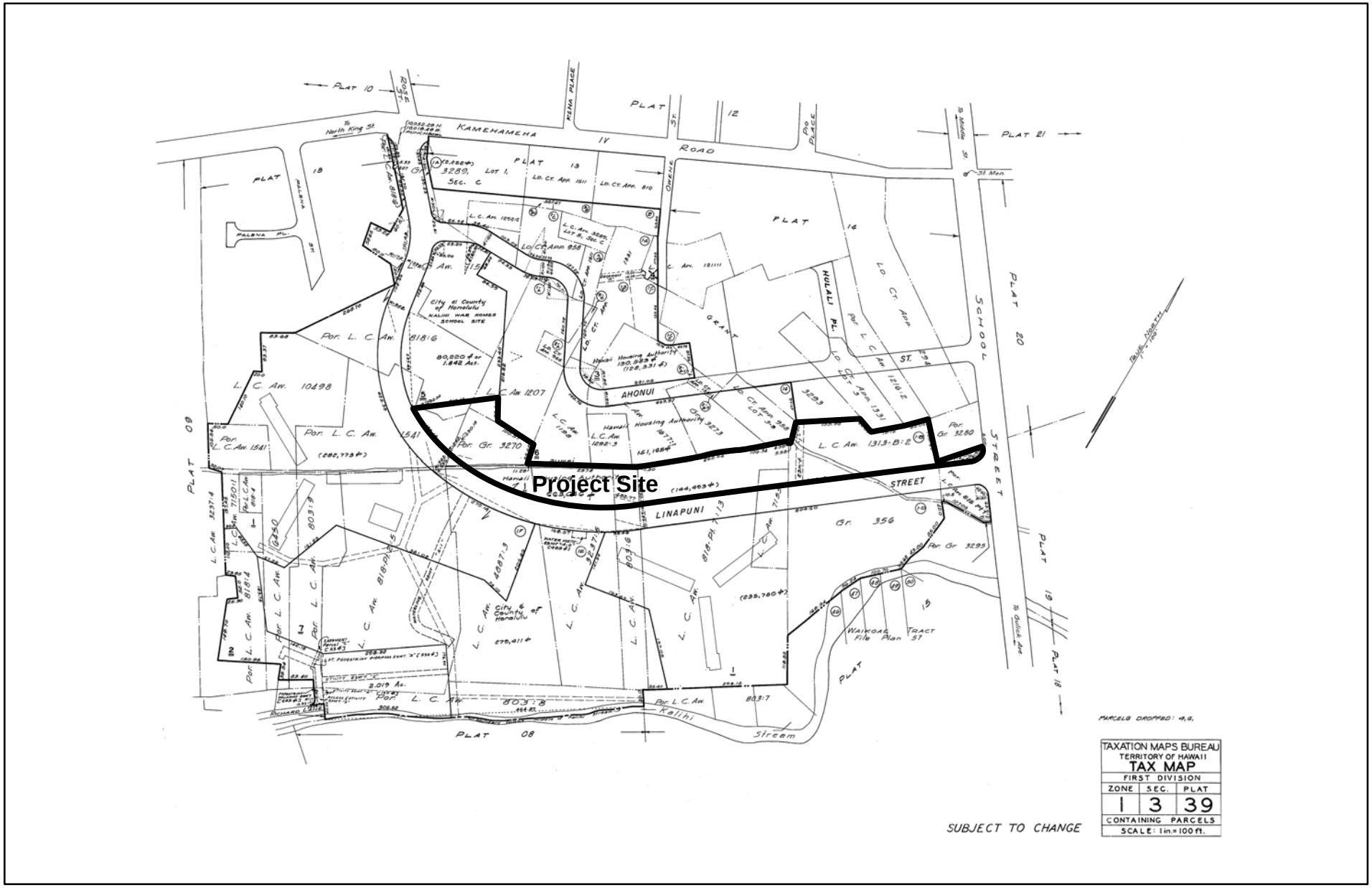
HPHA No. 1010 - Kūhiō Park Terrace Lowrise (AMP 40)

Figure 1 - Project Location Map

Honolulu, O'ahu

1,500 FT

HHF PLANNERS
places for people



HPHA No. 1010 - Kūhiō Park Terrace Lowrise (AMP 40)

Figure 2 - TMK Map

Honolulu, O'ahu

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

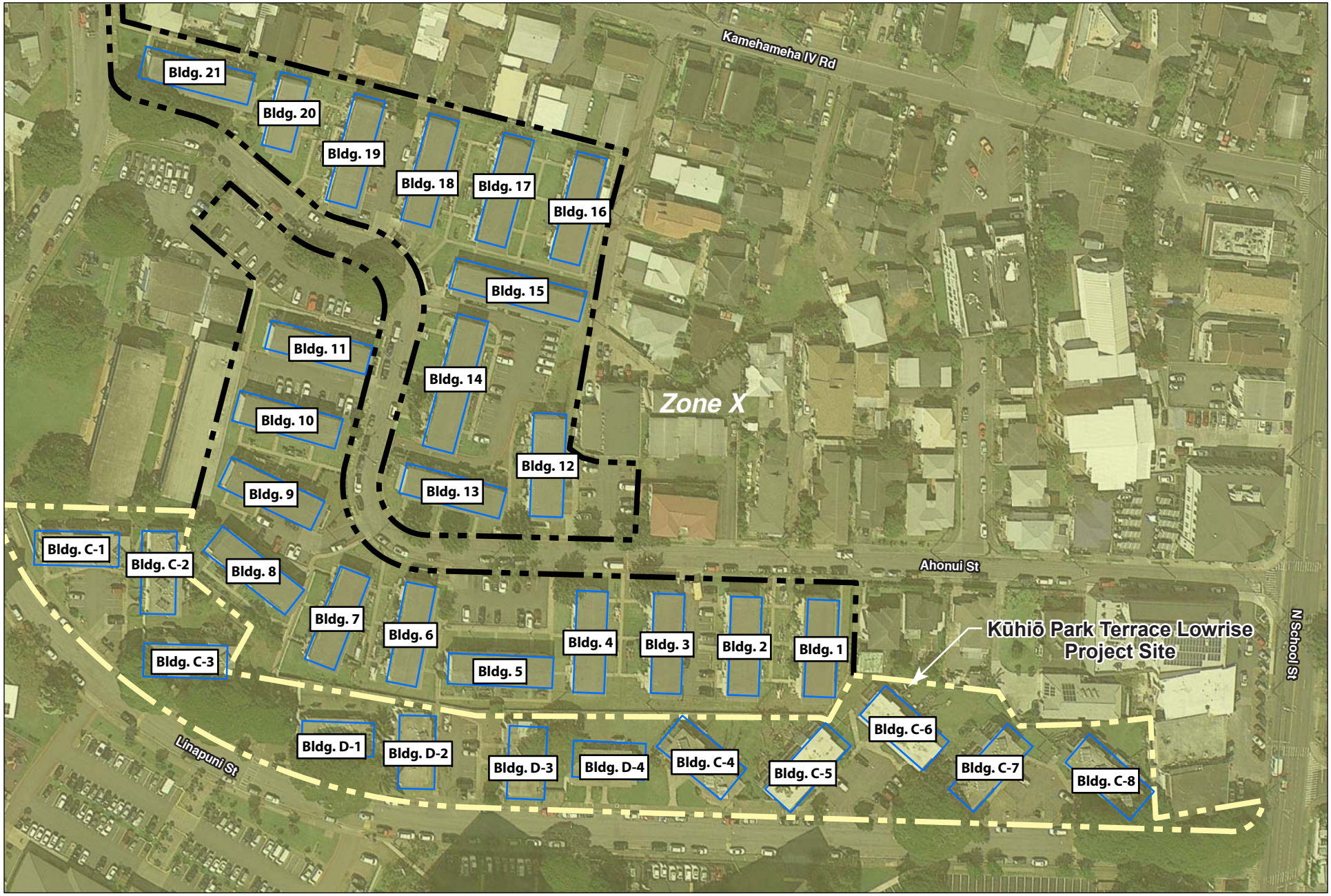
HPHA No. 1010 - Kūhiō Park Terrace Lowrise (AMP 40)

Figure 3 - Site Map

Honolulu, O'ahu

100 FEET

HHF PLANNERS
places for people



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

LEGEND

Zone X - Outside the 0.2% Annual Chance of Flood

HPHA No. 1010 - Kūhiō Park Terrace Lowrise (AMP 40)

Figure 4 - Flood Map

Honolulu, O'ahu

100 FEET

HHF PLANNERS
places for people

SITE PHOTOS

School Street entrance and (east) guard station

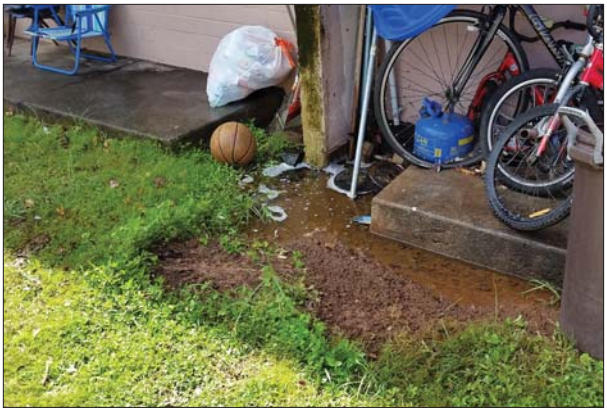
Guard station (west) off of Kamehameha IV Road

Linapuni Street (facing east) with subject housing units on the left

Linapuni Street (facing west) with subject housing units on the right (Kuhio Park Towers high-rise in background)

Project's northern boundary. Subject housing site on the left; Kuhio Homes housing project to the right (behind chain link fencing)

Project's northern boundary, facing west, near Buidling C-6



Downspout at Building C-2 discharges runoff adjacent to foundation

Project's eastern boundary, facing south, has a concrete lined drainage swale to keep runoff away from building

Project's northern boundary, facing east. Linapuni Elementary School behind fence, project site to the right

Building D-1 boarded up and scheduled for demolition; not eligible for NRHP

Small quantities of gasoline for lawn equipment

Latex paint storage area

EXHIBIT B

EDR Radius Map Report

Kuhio Homes
1441 Ahonui St.
Honolulu, HI 96819

Inquiry Number: 4237094.154s
March 18, 2015

EDR Summary Radius Map Report

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

FORM-NULL-PVC

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

1441 AHONUI ST.
HONOLULU County, HI 96819

COORDINATES

Latitude (North):	21.3392000 - 21' 20' 21.12''
Longitude (West):	157.8762000 - 157' 52' 34.32''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	616536.7
UTM Y (Meters):	2359965.5
Elevation:	92 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	USGS 7.5 min quad index

Target Property:	E
Source:	USGS 7.5 min quad index

MAPPED SITES SUMMARY

Target Property Address:
1441 AHONUI ST.
, HI 96819

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
1	KUHIO HOMES PUBLIC H	1410 THRU 1529 AHONU	RCRA NonGen / NLR, FINDS		TP
Reg	FORT SHAFTER		DOD	Same	1 ft.
A2	KUHIO PARK TERRACE T	LINAPUNI ST	SHWS, ENG CONTROLS, INST CONTROL, BROWNFIELDS	Lower	270, South
A3	KUHIO PARK TERRACE	1518 LINAPUNI STREET	US BROWNFIELDS	Lower	296, SSE
4	KUHIO PARK TERRACE C	1475 LINAPUNI ST	SHWS, ENG CONTROLS, INST CONTROL	Higher	668, West
B5		1419 KAMEHAMEHA IV	EDR US Hist Auto Stat	Higher	718, WNW
B6		1415 KAMEHAMEHA IV	EDR US Hist Auto Stat	Higher	735, WNW
C7	SHELL SERVICE STATIO	2239 N SCHOOL ST	UST	Higher	847, NE
C8	IMM KAM IV	2314 N SCHOOL ST	LUST, UST, Financial Assurance	Higher	872, NE
C9		2314 N SCHOOL ST	EDR US Hist Auto Stat	Higher	873, NE
10		1532 AMELIA ST	EDR US Hist Auto Stat	Lower	920, ESE
D11	CHANG-CHOW PROPERTY,	2161 N SCHOOL ST	SHWS	Lower	979, East
D12	CHANG CHOW PROPERTIE	2161 N SCHOOL ST	UST	Lower	995, East
13	7-11 KAM IV 0166	2404 N SCHOOL ST	LUST, UST, Financial Assurance	Higher	1096, NNE
E14	KANE'S AUTO REPAIR	1325 MIDDLE ST	LUST, UST	Lower	1493, WNW
E15	BENTON'S MIDDLE STRE	1305 MIDDLE ST	LUST, UST, Financial Assurance	Lower	1538, WNW
16	C&CH BOARD OF WATER	2442 KINI PLACE	LUST, UST, Financial Assurance	Higher	1735, NNE
17	FORT SHAFTER	BLDG 535/EXCHANGE MA	LUST, UST	Higher	2056, NW
18	FORT SHAFTER	BLDG 422 TANK 7A 7B	LUST, UST	Lower	2116, WNW
19	U.S. ARMY ADMINISTRA	BLDG 430	LUST, UST	Lower	2188, WNW
20	KALIHI STREAM CHEVRO	2160 N. KING ST.	LUST, UST, Financial Assurance	Lower	2229, SW
21	KUHIO PARK TERRACE	1600 HAUPU PL	US BROWNFIELDS	Higher	2285, ESE
22	KSC SERVICE L-4210	2295 N KING ST	LUST, UST	Lower	2370, WSW
23	2343 NORTH KING STRE	2343 N KING ST	SHWS, INST CONTROL	Lower	2510, WSW
F24	FACTORY STREET SITE	2003 N. KING STREET	CERC-NFRAP	Lower	2573, SSW
F25	FACTORY STREET LEAD	2003 N KING ST	SHWS, SPILLS, ENG CONTROLS, INST CONTROL	Lower	2573, SSW
G26	C&CH KALIHI-UKA FIRE	1861 KAMEHAMEHA IV H	LUST, UST, Financial Assurance	Higher	2576, NE
G27	KALIHI POLICE STATIO	1865 KAMEHAMEHA IV R	LUST, UST, Financial Assurance	Higher	2594, NE
28	KAPALAMA INCINERATOR	757 KOKEA ST	RCRA-SQG, SHWS, SPILLS, INST CONTROL	Lower	3077, SSW
29	FARRINGTON HIGH SCHO	1564 N KING ST	FTTS, HIST FTTS, SHWS, SPILLS	Lower	3292, SSE
30	KAMEHAMEHA SCOOLS	1887 MAKUAKANE ST	RCRA-CESQG, FINDS, SHWS, SPILLS, ENG CONTROLS,...	Higher	3532, East
31	OTS BUS UNIT REPAIR	811 MIDDLE ST	SHWS, LUST, UST, Financial Assurance	Lower	3637, WSW
32	2147 AOAO STREET	2147 AOAO ST	SHWS, SPILLS	Higher	3698, NE
33	FORT SHAFTER BOLLARD	1557 PASS ST	SHWS, SPILLS	Lower	3917, West
34	HAWAII MEAT COMPANY	711 MIDDLE ST	SHWS, SPILLS, ENG CONTROLS, INST CONTROL	Lower	4076, WSW
35	LENAKONA DEVELOPMENT	2305 KAMEHAMEHA HWY	SHWS, LUST, UST	Lower	4224, SW
36	DILLINGHAM BOULEVARD	DILLINGHAM BLVD & MO	SHWS, ENG CONTROLS, INST CONTROL	Lower	4316, SSW
37	YEE HOP PROPERTY	621 MIDDLE ST	SHWS, SPILLS	Lower	4361, WSW
38	HAWAII DAIRY HOLDING	2277 KAMEHAMEHA HWY	SHWS, LUST, UST, VCP, Financial Assurance	Lower	4506, SW

MAPPED SITES SUMMARY

Target Property Address:
1441 AHONUI ST.
, HI 96819

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
39	611 MIDDLE STREET WA	611 MIDDLE ST	SHWS, SPILLS, ENG CONTROLS, INST CONTROL	Lower	4555, WSW
40	2326 KALIHI STREET U	2326 KALIHI ST	SHWS, SPILLS, ENG CONTROLS, INST CONTROL	Higher	5014, ENE
41	TAKAMIYA PROPERTY	850 MOOWAA ST	SHWS, SPILLS	Lower	5091, SSE
42	ROSS TRUSTS	819 MOOWAA ST	SHWS, VCP	Lower	5156, SSE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 7 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
KUHIO HOMES PUBLIC H 1410 THRU 1529 AHONU HONOLULU, HI 96819	RCRA NonGen / NLR FINDS	HID984469478

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal CERCLIS NFRAP site List

CERC-NFRAP: A review of the CERC-NFRAP list, as provided by EDR, and dated 10/25/2013 has revealed that there is 1 CERC-NFRAP site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
FACTORY STREET SITE	2003 N. KING STREET	SSW 1/4 - 1/2 (0.487 mi.)	F24	12

State- and tribal - equivalent CERCLIS

SHWS: A review of the SHWS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 20 SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
KUHIO PARK TERRACE C	***1475 LINAPUNI ST***	***W 1/8 - 1/4 (0.127 mi.)***	***4***	***7***
KAMEHAMEHA SCOOLS	***1887 MAKUAKANE ST***	***E 1/2 - 1 (0.669 mi.)***	***30***	***14***
2147 AOAO STREET	***2147 AOAO ST***	***NE 1/2 - 1 (0.700 mi.)***	***32***	***14***
2326 KALIHI STREET U	***2326 KALIHI ST***	***ENE 1/2 - 1 (0.950 mi.)***	***40***	***16***

Lower Elevation	Address	Direction / Distance	Map ID	Page
KUHIO PARK TERRACE T	***LINAPUNI ST***	***S 0 - 1/8 (0.051 mi.)***	***A2***	***7***

Lower Elevation	Address	Direction / Distance	Map ID	Page
CHANG-CHOW PROPERTY,	2161 N SCHOOL ST	E 1/8 - 1/4 (0.185 mi.)	D11	9
2343 NORTH KING STRE	***2343 N KING ST***	***WSW 1/4 - 1/2 (0.475 mi.)***	***23***	***12***
FACTORY STREET LEAD	***2003 N KING ST***	***SSW 1/4 - 1/2 (0.487 mi.)***	***F25***	***12***
KAPALAMA INCINERATOR	***757 KOKEA ST***	***SSW 1/2 - 1 (0.583 mi.)***	***28***	***13***
FARRINGTON HIGH SCHO	***1564 N KING ST***	***SSE 1/2 - 1 (0.623 mi.)***	***29***	***13***
OTS BUS UNIT REPAIR	***811 MIDDLE ST***	***WSW 1/2 - 1 (0.689 mi.)***	***31***	***14***
FORT SHAFTER BOLLARD	***1557 PASS ST***	***W 1/2 - 1 (0.742 mi.)***	***33***	***14***
HAWAII MEAT COMPANY	***711 MIDDLE ST***	***WSW 1/2 - 1 (0.772 mi.)***	***34***	***15***
LENAKONA DEVELOPMENT	***2305 KAMEHAMEHA HWY***	***SW 1/2 - 1 (0.800 mi.)***	***35***	***15***
DILLINGHAM BOULEVARD	***DILLINGHAM BLVD & MO***	***SSW 1/2 - 1 (0.817 mi.)***	***36***	***15***
YEE HOP PROPERTY	***621 MIDDLE ST***	***WSW 1/2 - 1 (0.826 mi.)***	***37***	***15***
HAWAII DAIRY HOLDING	***2277 KAMEHAMEHA HWY***	***SW 1/2 - 1 (0.853 mi.)***	***38***	***15***
611 MIDDLE STREET WA	***611 MIDDLE ST***	***WSW 1/2 - 1 (0.863 mi.)***	***39***	***16***
TAKAMIYA PROPERTY	***850 MOOWAA ST***	***SSE 1/2 - 1 (0.964 mi.)***	***41***	***16***
ROSS TRUSTS	***819 MOOWAA ST***	***SSE 1/2 - 1 (0.977 mi.)***	***42***	***16***

State and tribal leaking storage tank lists

LUST: A review of the LUST list, as provided by EDR, and dated 03/02/2015 has revealed that there are 12 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
IMM KAM IV	***2314 N SCHOOL ST***	***NE 1/8 - 1/4 (0.165 mi.)***	***C8***	***8***
Facility Status: Site Cleanup Completed (NFA)				
7-11 KAM IV 0166	***2404 N SCHOOL ST***	***NNE 1/8 - 1/4 (0.208 mi.)***	***13***	***9***
Facility Status: Site Cleanup Completed (NFA)				
C&CH BOARD OF WATER	***2442 KINI PLACE***	***NNE 1/4 - 1/2 (0.329 mi.)***	***16***	***10***
Facility Status: Site Cleanup Completed (NFA)				
FORT SHAFTER	***BLDG 535/EXCHANGE MA***	***NW 1/4 - 1/2 (0.389 mi.)***	***17***	***10***
Facility Status: Site Cleanup Completed (NFA)				
C&CH KALIHI-UKA FIRE	***1861 KAMEHAMEHA IV H***	***NE 1/4 - 1/2 (0.488 mi.)***	***G26***	***13***
Facility Status: Site Cleanup Completed (NFA)				
KALIHI POLICE STATIO	***1865 KAMEHAMEHA IV R***	***NE 1/4 - 1/2 (0.491 mi.)***	***G27***	***13***
Facility Status: Site Cleanup Completed (NFA)				

Lower Elevation	Address	Direction / Distance	Map ID	Page
KANE'S AUTO REPAIR	***1325 MIDDLE ST***	***WNW 1/4 - 1/2 (0.283 mi.)***	***E14***	***9***
Facility Status: Site Cleanup Completed (NFA)				
BENTON'S MIDDLE STRE	***1305 MIDDLE ST***	***WNW 1/4 - 1/2 (0.291 mi.)***	***E15***	***10***
Facility Status: Site Cleanup Completed (NFA)				
FORT SHAFTER	***BLDG 422 TANK 7A 7B***	***WNW 1/4 - 1/2 (0.401 mi.)***	***18***	***11***
Facility Status: Site Cleanup Completed (NFA)				
U.S. ARMY ADMINISTRA	***BLDG 430***	***WNW 1/4 - 1/2 (0.414 mi.)***	***19***	***11***
Facility Status: Site Cleanup Completed (NFA)				
KALIHI STREAM CHEVRO	***2160 N. KING ST.***	***SW 1/4 - 1/2 (0.422 mi.)***	***20***	***11***
Facility Status: Site Cleanup Completed (NFA)				
KSC SERVICE L-4210	***2295 N KING ST***	***WSW 1/4 - 1/2 (0.449 mi.)***	***22***	***12***
Facility Status: Site Cleanup Completed (NFA)				

State and tribal registered storage tank lists

UST: A review of the UST list, as provided by EDR, and dated 03/02/2015 has revealed that there are 4 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SHELL SERVICE STATIO	2239 N SCHOOL ST	NE 1/8 - 1/4 (0.160 mi.)	C7	8
IMM KAM IV	***2314 N SCHOOL ST***	***NE 1/8 - 1/4 (0.165 mi.)***	***C8***	***8***
7-11 KAM IV 0166	***2404 N SCHOOL ST***	***NNE 1/8 - 1/4 (0.208 mi.)***	***13***	***9***

Lower Elevation	Address	Direction / Distance	Map ID	Page
CHANG CHOW PROPERTIE	2161 N SCHOOL ST	E 1/8 - 1/4 (0.188 mi.)	D12	9

State and tribal institutional control / engineering control registries

ENG CONTROLS: A review of the ENG CONTROLS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 3 ENG CONTROLS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
KUHIO PARK TERRACE C	***1475 LINAPUNI ST***	***W 1/8 - 1/4 (0.127 mi.)***	***4***	***7***

Lower Elevation	Address	Direction / Distance	Map ID	Page
KUHIO PARK TERRACE T	***LINAPUNI ST***	***S 0 - 1/8 (0.051 mi.)***	***A2***	***7***
FACTORY STREET LEAD	***2003 N KING ST***	***SSW 1/4 - 1/2 (0.487 mi.)***	***F25***	***12***

INST CONTROL: A review of the INST CONTROL list, as provided by EDR, and dated 12/02/2014 has revealed that there are 4 INST CONTROL sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
KUHIO PARK TERRACE C	***1475 LINAPUNI ST***	***W 1/8 - 1/4 (0.127 mi.)***	***4***	***7***

Lower Elevation	Address	Direction / Distance	Map ID	Page
KUHIO PARK TERRACE T	***LINAPUNI ST***	***S 0 - 1/8 (0.051 mi.)***	***A2***	***7***
2343 NORTH KING STRE	***2343 N KING ST***	***WSW 1/4 - 1/2 (0.475 mi.)***	***23***	***12***
FACTORY STREET LEAD	***2003 N KING ST***	***SSW 1/4 - 1/2 (0.487 mi.)***	***F25***	***12***

State and tribal Brownfields sites

BROWNFIELDS: A review of the BROWNFIELDS list, as provided by EDR, and dated 12/02/2014 has revealed

EXECUTIVE SUMMARY

that there is 1 BROWNFIELDS site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
KUHIO PARK TERRACE T	***LINAPUNI ST***	***S 0 - 1/8 (0.051 mi.)***	***A2***	***7***

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A review of the US BROWNFIELDS list, as provided by EDR, and dated 12/22/2014 has revealed that there are 2 US BROWNFIELDS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
KUHIO PARK TERRACE	1600 HAUPU PL	ESE 1/4 - 1/2 (0.433 mi.)	21	12

Lower Elevation	Address	Direction / Distance	Map ID	Page
KUHIO PARK TERRACE	1518 LINAPUNI STREET	SSE 0 - 1/8 (0.056 mi.)	A3	7

Other Ascertainable Records

DOD: A review of the DOD list, as provided by EDR, and dated 12/31/2005 has revealed that there is 1 DOD site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
FORT SHAFTER		0 - 1/8 (0.000 mi.)	0	7

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Auto Stat: A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there are 4 EDR US Hist Auto Stat sites within approximately 0.25 miles of the target property.

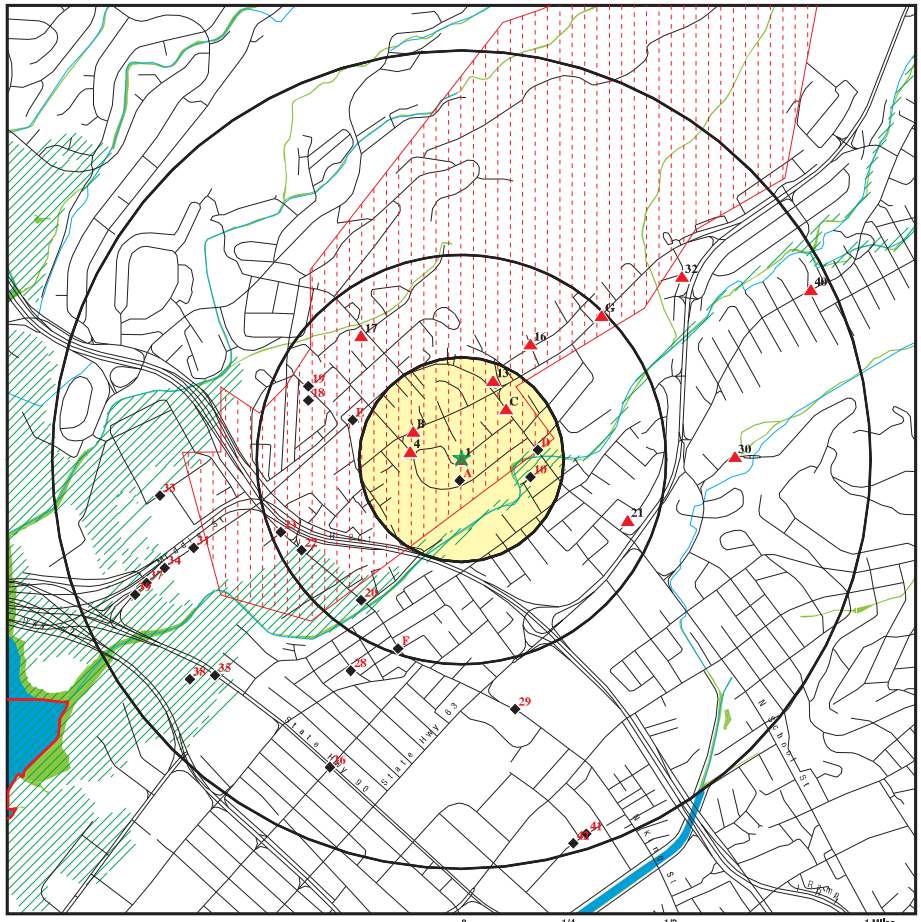
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	1419 KAMEHAMEHA IV	WNW 1/8 - 1/4 (0.136 mi.)	B5	8
Not reported	1415 KAMEHAMEHA IV	WNW 1/8 - 1/4 (0.139 mi.)	B6	8
Not reported	2314 N SCHOOL ST	NE 1/8 - 1/4 (0.165 mi.)	C9	8

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	1532 AMELIA ST	ESE 1/8 - 1/4 (0.174 mi.)	10	9

Count: 10 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
FORT SHAFTER	S109842046	FORT SHAFTER	BONNIE LOOP	96858	LUST
HONOLULU	S117391417	1339 SCHOOL STREET	1339, 1341, 1343 N SCHOOL ST		SHWS, ENG CONTROLS, INST CONT
HONOLULU	S108008549	KALANI, HART, MOKUAEA STREET, HONO	HART ST & KALANI ST & MOKUAEA		SHWS
HONOLULU	S115488703	KALIHI AND KALAEPAA INTERSECTION	KALAEPAA DR AND KALIHI ST		SHWS, SPILLS
HONOLULU	1006820337	ABC DISPOSAL COMPANY	2760 KAMEHAMEHA HWY	96819	SHWS
HONOLULU	S111704706	FORMER KAPALAMA MILITARY RESERVATI	N NIMITZ HWY		SHWS
HONOLULU	S108008765	CITIZENS ENERGY SERVICES PIER 38	NIMITZ HWY		SHWS, SPILLS, ENG CONTROLS, IN CONTROL
HONOLULU	S106819311	NIMITZ HIGHWAY WATER IMPROVEMENT P	N NIMITZ HWY	96817	SHWS
HONOLULU	1006820220	DLNR BURIED DRUM SITE	SAND ISLAND ACCESS RD	96819	SHWS, SPILLS, INST CONTROL
HONOLULU	S108859926	KOKUA KALIHI VALLEY ACTIVE LIVING	UPPER KALIHI ST		SHWS, BROWNFIELDS

OVERVIEW MAP - 4237094.154S



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Kuhio Homes ADDRESS: 1441 Ahonui St. Honolulu HI 96819 LAT/LONG: 21.3392 / 157.8762	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.154s DATE: March 18, 2015 7:51 am

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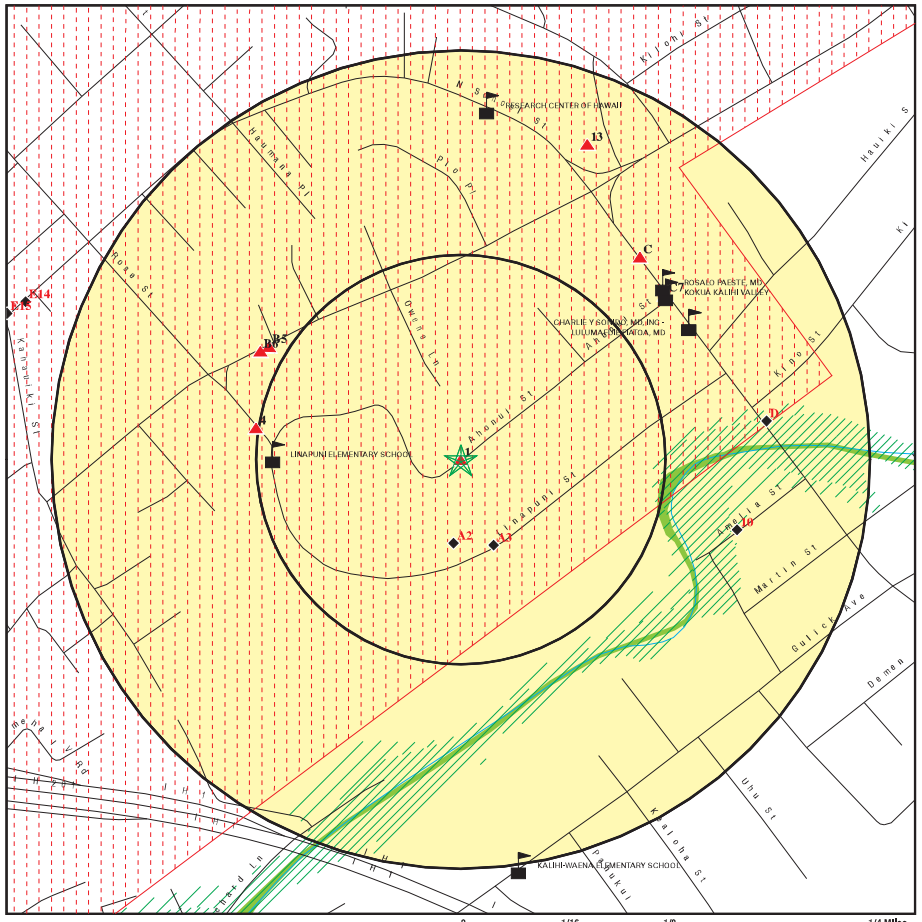
DETAIL MAP - 4237094.154S



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Kuhio Homes ADDRESS: 1441 Ahonui St. Honolulu HI 96819 LAT/LONG: 21.3392 / 157.8762	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.154s DATE: March 18, 2015 7:52 am

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	1	NR	NR	1
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
SHWS	1.000		1	2	2	15	NR	20
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	2	10	NR	NR	12
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250		0	4	NR	NR	NR	4

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		1	1	1	NR	NR	3
INST CONTROL	0.500		1	1	2	NR	NR	4
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		1	0	0	NR	NR	1
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		1	0	1	NR	NR	2
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250	1	0	0	NR	NR	NR	1
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		1	0	0	0	NR	1
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP	1	NR	NR	NR	NR	NR	1
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		0	4	NR	NR	NR	4
EDR US Hist Cleaners	0.250		0	0	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
RGA HWS	TP		NR	NR	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
1 **Target Property** **Actual:** **92 ft.**	**KUHIO HOMES PUBLIC HOUSING PROJECT** **1410 THRU 1529 AHONUI ST** **HONOLULU, HI 96819** **RCRA NonGen / NLR** Click here for full text details EPA Id: HID984469478	**RCRA NonGen / NLR** **FINDS**	**1000823288** **HID984469478**
DOD **Region** **< 1/8** **1 ft.**	**FORT SHAFTER** **FORT SHAFTER (County), HI** Click here for full text details	**DOD**	**CUSA147753** **N/A**
A2 **South** **< 1/8** **0.051 mi.** **270 ft.** **Relative:** **Lower**	**KUHIO PARK TERRACE TOWERS** **LINAPUNI ST** **HONOLULU, HI 96819** Click here for full text details	**SHWS** **ENG CONTROLS** **INST CONTROL** **BROWNFIELDS**	**S108008570** **N/A**
A3 **SSE** **< 1/8** **0.056 mi.** **296 ft.** **Relative:** **Lower**	**KUHIO PARK TERRACE** **1518 LINAPUNI STREET** **HONOLULU, HI 96819** Click here for full text details	**US BROWNFIELDS**	**1014697060** **N/A**
4 **West** **1/8-1/4** **0.127 mi.** **668 ft.** **Relative:** **Higher**	**KUHIO PARK TERRACE COMMUNITY CENTER** **1475 LINAPUNI ST** **HONOLULU, HI 96819** Click here for full text details	**SHWS** **ENG CONTROLS** **INST CONTROL**	**S115488710** **N/A**

B5
WNW
1/8-1/4
0.136 mi.
718 ft.
Relative: Higher

1419 KAMEHAMEHA IV RD
HONOLULU, HI 96819

EDR US Hist Auto Stat **1015224912**
N/A

Click here for full text details

B6
WNW
1/8-1/4
0.139 mi.
735 ft.
Relative: Higher

1415 KAMEHAMEHA IV RD
HONOLULU, HI 96819

EDR US Hist Auto Stat **1015224213**
N/A

Click here for full text details

C7
NE
1/8-1/4
0.160 mi.
847 ft.
Relative: Higher

SHELL SERVICE STATION
2239 N SCHOOL ST
HONOLULU, HI 96819

UST **U001235341**
N/A

Click here for full text details

UST
Tank Status: Permanently Out of Use
Facility Id: 9-101027

C8
NE
1/8-1/4
0.165 mi.
872 ft.
Relative: Higher

IMM KAM IV
2314 N SCHOOL ST
HONOLULU, HI 96819

LUST **U001235610**
UST **N/A**
Financial Assurance

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-101867

UST
Tank Status: Currently In Use
Facility Id: 9-101867

C9
NE
1/8-1/4
0.165 mi.
873 ft.
Relative: Higher

2314 N SCHOOL ST
HONOLULU, HI 96819

EDR US Hist Auto Stat **1015346496**
N/A

Click here for full text details

10
ESE
1/8-1/4
0.174 mi.
920 ft.
Relative: Lower

1532 AMELIA ST
HONOLULU, HI 96819

EDR US Hist Auto Stat **1015244366**
N/A

Click here for full text details

D11
East
1/8-1/4
0.185 mi.
979 ft.
Relative: Lower

CHANG-CHOW PROPERTY, NORTH SCHOOL STREET
2161 N SCHOOL ST
HONOLULU, HI 96817

SHWS **1006820024**
N/A

Click here for full text details

D12
East
1/8-1/4
0.188 mi.
995 ft.
Relative: Lower

CHANG CHOW PROPERTIES
2161 N SCHOOL ST
HONOLULU, HI 96817

UST **U003154843**
N/A

Click here for full text details

UST
Tank Status: Permanently Out of Use
Facility Id: 9-103133

13
NNE
1/8-1/4
0.208 mi.
1096 ft.
Relative: Higher

7-11 KAM IV 0166
2404 N SCHOOL ST
HONOLULU, HI 96819

LUST **U004223404**
UST **N/A**
Financial Assurance

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-101187

UST
Tank Status: Currently in Use
Tank Status: Permanently out of Use
Facility Id: 9-101187

E14
WNW
1/4-1/2
0.283 mi.
1493 ft.
Relative: Lower

KANE'S AUTO REPAIR
1325 MIDDLE ST
HONOLULU, HI 96819

LUST **U001235924**
UST **N/A**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-102478

KANE'S AUTO REPAIR (Continued) **U001235924**

UST
Tank Status: Permanently Out of Use
Facility Id: 9-102478

E15
WNW
1/4-1/2
0.291 mi.
1538 ft.

Relative: Lower

BENTON'S MIDDLE STREET CHEVRON — **LUST** — **1000601384**
1305 MIDDLE ST — **UST** — **N/A**
HONOLULU, HI 96819 — **Financial Assurance**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-101110

UST
Tank Status: Currently In Use
Tank Status: Currently in Use
Tank Status: Permanently Out of Use
Facility Id: 9-101110

16
NNE
1/4-1/2
0.329 mi.
1735 ft.

Relative: Higher

C&CH BOARD OF WATER SUPPLY KALIHI CORP YD — **LUST** — **U001235058**
2442 KINI PLACE — **UST** — **N/A**
HONOLULU, HI 96819 — **Financial Assurance**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100119

UST
Tank Status: Currently in Use
Tank Status: Permanently Out of Use
Facility Id: 9-100119

17
NW
1/4-1/2
0.389 mi.
2056 ft.

Relative: Higher

FORT SHAFTER — **LUST** — **U003541792**
BLDG 535/EXCHANGE MAINTENANCE SHOP — **UST** — **N/A**
FORT SHAFTER, HI 96858

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-102920

UST
Tank Status: Permanently Out of Use

FORT SHAFTER (Continued) **U003541792**

Facility Id: 9-102920

18
WNW
1/4-1/2
0.401 mi.
2116 ft.

Relative: Lower

FORT SHAFTER — **LUST** — **U001235668**
BLDG 422 TANK 7A 7B — **UST** — **N/A**
FORT SHAFTER, HI 96858

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-102007

UST
Tank Status: Permanently Out of Use
Facility Id: 9-102007

19
WNW
1/4-1/2
0.414 mi.
2188 ft.

Relative: Lower

U.S. ARMY ADMINISTRAIVE FACILITY — **LUST** — **U003221841**
BLDG 430 — **UST** — **N/A**
FORT SHAFTER, HI 96858

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-102858

UST
Tank Status: Permanently Out of Use
Facility Id: 9-102858

20
SW
1/4-1/2
0.422 mi.
2229 ft.

Relative: Lower

KALIHI STREAM CHEVRON — **LUST** — **1000316728**
2160 N. KING ST. — **UST** — **N/A**
HONOLULU, HI 96813 — **Financial Assurance**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-101225

UST
Tank Status: Currently In Use
Tank Status: Permanently Out of Use
Facility Id: 9-101225

21 ESE 1/4-1/2 0.433 mi. 2285 ft.
Relative: Higher

KUHIO PARK TERRACE
1600 HAUPU PL
KALIHI, OAHU, HI 96819

US BROWNFIELDS — **1014949094** / **N/A**

Click here for full text details

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22 WSW 1/4-1/2 0.449 mi. 2370 ft.
Relative: Lower

KSC SERVICE L-4210
2295 N KING ST
HONOLULU, HI 96819

LUST, **UST** — **U001235008** / **N/A**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100031

UST
Tank Status: Permanently Out of Use
Facility Id: 9-100031

---

23 WSW 1/4-1/2 0.475 mi. 2510 ft.
Relative: Lower

2343 NORTH KING STREET
2343 N KING ST
HONOLULU, HI 96819

SHWS, **INST CONTROL** — **S115488667** / **N/A**

Click here for full text details

F24 SSW 1/4-1/2 0.487 mi. 2573 ft.
Relative: Lower

FACTORY STREET SITE
2003 N. KING STREET
HONOLULU, HI 96812

CERC-NFRAP — **1003879898** / **HI0000049775**

Click here for full text details

CERC-NFRAP
EPA Id: HI0000049775

F25 SSW 1/4-1/2 0.487 mi. 2573 ft.
Relative: Lower

FACTORY STREET LEAD
2003 N KING ST
HONOLULU, HI 96819

SHWS, **SPILLS**, **ENG CONTROLS**, **INST CONTROL** — **1006820199** / **N/A**

Click here for full text details

G26 NE 1/4-1/2 0.488 mi. 2576 ft.
Relative: Higher

C&CH KALIHI-UKA FIRE STATION
1861 KAMEHAMEHA IV HWY
HONOLULU, HI 96819

LUST, **UST**, **Financial Assurance** — **U004109519** / **N/A**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-102891

UST
Tank Status: Permanently Out of Use
Facility Id: 9-102891

G27 NE 1/4-1/2 0.491 mi. 2594 ft.
Relative: Higher

KALIHI POLICE STATION
1865 KAMEHAMEHA IV RD
HONOLULU, HI 96819

LUST, **UST**, **Financial Assurance** — **U004187912** / **N/A**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100117

UST
Tank Status: Currently In Use
Tank Status: Permanently Out of Use
Facility Id: 9-100117

---

28 SSW 1/2-1 0.583 mi. 3077 ft.
Relative: Lower

KAPALAMA INCINERATOR
757 KOKEA ST
HONOLULU, HI 96817

RCRA-SQG, **SHWS**, **SPILLS**, **INST CONTROL** — **1001116173** / **HIR000001008**

Click here for full text details

RCRA-SQG
EPA Id: HIR000001008

---

29 SSE 1/2-1 0.623 mi. 3292 ft.
Relative: Lower

FARRINGTON HIGH SCHOOL
1564 N KING ST
HONOLULU, HI 96817

FTTS, **HIST FTTS**, **SHWS**, **SPILLS** — **1007277849** / **N/A**

Click here for full text details

30 East 1/2-1 0.669 mi. 3532 ft. Relative: Higher

KAMEHAMEHA SCOOLS
1887 MAKUAKANE ST
HONOLULU, HI 96817

RCRA-CESQG, FINDS, SHWS, SPILLS, ENG CONTROLS, INST CONTROL
1000202706
HID981616469

Click here for full text details

RCRA-CESQG
EPA Id: HID981616469

---

31 WSW 1/2-1 0.689 mi. 3637 ft. Relative: Lower

OTS BUS UNIT REPAIR SHOP
811 MIDDLE ST
HONOLULU, HI 96819

SHWS, LUST, UST, Financial Assurance
U003541805
N/A

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-102498
Facility Id: 9-101884

UST
Tank Status: Permanently Out of Use
Tank Status: Currently in Use
Facility Id: 9-101884
Facility Id: 9-103189
Facility Id: 9-102498

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32 NE 1/2-1 0.700 mi. 3698 ft. Relative: Higher

2147 AOAO STREET
2147 AOAO ST
HONOLULU, HI 96819

SHWS, SPILLS
S106815333
N/A

Click here for full text details

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33 West 1/2-1 0.742 mi. 3917 ft. Relative: Lower

FORT SHAFTER BOLLARD
1557 PASS ST
FORT SHAFTER, HI 96858

SHWS, SPILLS
S108008801
N/A

Click here for full text details

34 WSW 1/2-1 0.772 mi. 4076 ft. Relative: Lower

HAWAII MEAT COMPANY LTD
711 MIDDLE ST
HONOLULU, HI 96819

SHWS, SPILLS, ENG CONTROLS, INST CONTROL
1006820927
N/A

Click here for full text details

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35 SW 1/2-1 0.800 mi. 4224 ft. Relative: Lower

LENAKONA DEVELOPMENT, LTD
2305 KAMEHAMEHA HWY
HONOLULU, HI 96800

SHWS, LUST, UST
U001237397
N/A

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-102588

UST
Tank Status: Permanently Out of Use
Facility Id: 9-102588

---

36 SSW 1/2-1 0.817 mi. 4316 ft. Relative: Lower

DILLINGHAM BOULEVARD & MOKAUEA STREET
DILLINGHAM BLVD & MOKAUEA ST
HONOLULU, HI 96819

SHWS, ENG CONTROLS, INST CONTROL
S106816881
N/A

Click here for full text details

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37 WSW 1/2-1 0.826 mi. 4361 ft. Relative: Lower

YEE HOP PROPERTY
621 MIDDLE ST
HONOLULU, HI 96819

SHWS, SPILLS
1006819624
N/A

Click here for full text details

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38 SW 1/2-1 0.853 mi. 4506 ft. Relative: Lower

HAWAII DAIRY HOLDINGS, INC DBA FOREMOST DAIRIES
2277 KAMEHAMEHA HWY
HONOLULU, HI 96819

SHWS, LUST, UST, VCP, Financial Assurance
1000934769
N/A

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-100210

UST

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
	HAWAII DAIRY HOLDINGS, INC DBA FOREMOST DAIRIES (Continued)		**1000934769**
	Tank Status: Permanently Out of Use Facility Id: 9-100210		
39 **WSW** **1/2-1** **0.863 mi.** **4555 ft.** **Relative:** **Lower**	**611 MIDDLE STREET WAREHOUSE** **611 MIDDLE ST** **HONOLULU, HI 96819** Click here for full text details	**SHWS** **SPILLS** **ENG CONTROLS** **INST CONTROL**	**S106815670** **N/A**
40 **ENE** **1/2-1** **0.950 mi.** **5014 ft.** **Relative:** **Higher**	**2326 KALIHI STREET UST** **2326 KALIHI ST** **HONOLULU, HI 96819** Click here for full text details	**SHWS** **SPILLS** **ENG CONTROLS** **INST CONTROL**	**S106815373** **N/A**
41 **SSE** **1/2-1** **0.964 mi.** **5091 ft.** **Relative:** **Lower**	**TAKAMIYA PROPERTY** **850 MOOWAA ST** **HONOLULU, HI 96817** Click here for full text details	**SHWS** **SPILLS**	**S106820561** **N/A**
42 **SSE** **1/2-1** **0.977 mi.** **5156 ft.** **Relative:** **Lower**	**ROSS TRUSTS** **819 MOOWAA ST** **HONOLULU, HI 96817** Click here for full text details	**SHWS** **VCP**	**S103290154** **N/A**

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
HI	AIRS	List of Permitted Facilities	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	BROWNFIELDS	Brownfields Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	CDL	Clandestine Drug Lab Listing	Department of Health	08/04/2010	09/10/2010	10/22/2010
HI	DRYCLEANERS	Permitted Drycleaner Facility Listing	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	ENG CONTROLS	Engineering Control Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	Financial Assurance	Financial Assurance Information Listing	Department of Health	12/01/2014	12/19/2014	01/28/2015
HI	INST CONTROL	Sites with Institutional Controls	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	LUST	Leaking Underground Storage Tank Database	Department of Health	03/02/2015	03/04/2015	03/17/2015
HI	RGA HWS	Recovered Government Archive State Hazardous Waste Facilitie	Department of Health		07/01/2013	01/08/2014
HI	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Health		07/01/2013	01/17/2014
HI	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	Department of Health		07/01/2013	01/03/2014
HI	SHWS	Sites List	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	SPILLS	Release Notifications	Department of Health	12/02/2014	12/22/2014	01/28/2015
HI	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	03/10/2012	01/03/2013	02/11/2013
HI	SWF/LF	Permitted Landfills in the State of Hawaii	Department of Health	09/17/2012	04/03/2013	05/10/2013
HI	UIC	Underground Injection Wells Listing	Department of Health	02/07/2013	02/12/2013	04/09/2013
HI	UST	Underground Storage Tank Database	Department of Health	03/02/2015	03/04/2015	03/17/2015
HI	VCP	Voluntary Response Program Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	04/22/2013	03/03/2015	03/09/2015
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2011	02/26/2013	04/19/2013
US	CERCLIS	Comprehensive Environmental Response, Compensation, and Liab	EPA	10/25/2013	11/11/2013	02/13/2014
US	CERCLIS-NFRAP	CERCLIS No Further Remedial Action Planned	EPA	10/25/2013	11/11/2013	02/13/2014
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	07/01/2014	09/10/2014	10/20/2014
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	01/23/2015	02/13/2015	03/09/2015
US	CORRACTS	Corrective Action Report	EPA	12/09/2014	12/29/2014	01/29/2015
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DELISTED NPL	National Priority List Deletions	EPA	12/16/2014	01/08/2015	02/09/2015
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	07/31/2012	08/07/2012	09/18/2012
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EDR US Hist Auto Stat	EDR Exclusive Historic Gas Stations	EDR, Inc.			
US	EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	09/29/2014	09/30/2014	11/06/2014
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	07/21/2014	10/07/2014	10/20/2014
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
US	FEMA UST	Underground Storage Tank Listing	FEMA	01/01/2010	02/16/2010	04/12/2010
US	FINDS	Facility Index System/Facility Registry System	EPA	08/16/2014	09/10/2014	10/20/2014
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	06/06/2014	09/10/2014	09/18/2014
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	12/29/2014	12/30/2014	03/09/2015
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	01/23/2015	02/06/2015	03/09/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	02/01/2013	05/01/2013	11/01/2013

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	01/30/2015	02/05/2015	03/09/2015
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/10/2015	03/13/2015
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	01/28/2015	01/30/2015	03/13/2015
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	01/08/2015	01/08/2015	02/09/2015
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2005	12/08/2006	01/11/2007
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	02/01/2013	05/01/2013	01/27/2014
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	01/30/2015	02/05/2015	03/13/2015
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/13/2015	03/13/2015
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	01/29/2015	01/30/2015	03/13/2015
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	12/14/2014	02/13/2015	03/13/2015
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	09/29/2014	10/01/2014	11/06/2014
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	11/25/2014	11/26/2014	01/29/2015
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	02/18/2014	03/18/2014	04/24/2014
US	LUCIS	Land Use Control Information System	Department of the Navy	12/03/2014	12/12/2014	01/29/2015
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	12/29/2014	01/08/2015	01/29/2015
US	NPL	National Priority List	EPA	12/16/2014	01/08/2015	02/09/2015
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	07/01/2014	10/15/2014	11/17/2014
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	02/01/2011	10/19/2011	01/10/2012
US	PRP	Potentially Responsible Parties	EPA	10/25/2013	10/17/2014	10/20/2014
US	Proposed NPL	Proposed National Priority List Sites	EPA	12/16/2014	01/08/2015	02/09/2015
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	10/07/2014	10/08/2014	10/20/2014
US	RCRA NonGen / NLR	RCRA - Non Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RMP	Risk Management Plans	Environmental Protection Agency	08/01/2014	08/12/2014	11/06/2014
US	ROD	Records Of Decision	EPA	11/25/2013	12/12/2013	02/24/2014
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	03/07/2011	03/09/2011	05/02/2011
US	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2011	07/31/2013	09/13/2013
US	TSCA	Toxic Substances Control Act	EPA	12/31/2012	01/15/2015	01/29/2015
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	09/14/2010	10/07/2011	03/01/2012
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/16/2014	10/31/2014	11/17/2014
US	US AIRS MINOR	Air Facility System Data	EPA	10/16/2014	10/31/2014	11/17/2014

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	12/22/2014	12/22/2014	01/29/2015
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	11/19/2014	11/21/2014	01/29/2015
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	12/30/2014	12/31/2014	01/29/2015
US	Oil/Gas Pipelines	GeoData Digital Line Graphs from 1:100,000-Scale Maps	USGS			
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
US	USGS 7.5' Topographic Map	Scanned Digital USGS 7.5' Topographic Map (DRG)	USGS			

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

KUHIO HOMES
1441 AHONUI ST.
HONOLULU, HI 96819

TARGET PROPERTY COORDINATES

Latitude (North):	21.3392 - 21' 20' 21.12''
Longitude (West):	157.8762 - 157' 52' 34.32''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	616536.7
UTM Y (Meters):	2359965.5
Elevation:	92 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	21157-C8 PEARL HARBOR, HI
Most Recent Revision:	Not reported
East Map:	21157-C7 HONOLULU, HI
Most Recent Revision:	Not reported

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

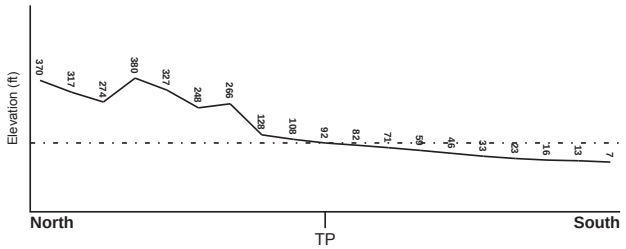
TOPOGRAPHIC INFORMATION

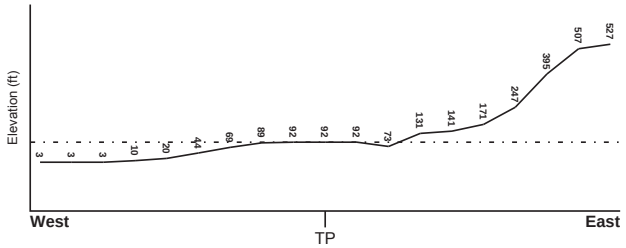
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General South

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 92 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
HONOLULU, HI	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 15003C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
NOT AVAILABLE	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

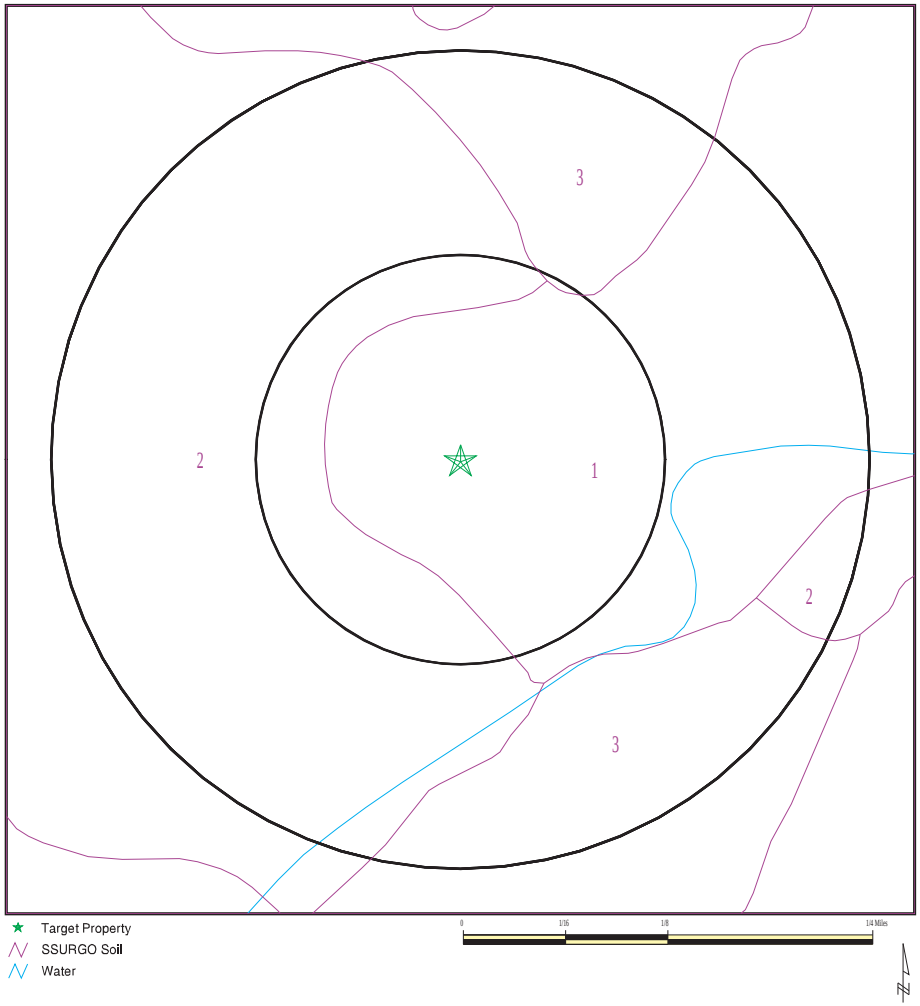
Era: -
System: -
Series: -
Code: N/A *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: -

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4237094.154s



★ Target Property
SSURGO Soil
Water

SITE NAME: Kuhio Homes ADDRESS: 1441 Ahonui St. Honolulu HI 96819 LAT/LONG: 21.3392 / 157.8762	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.154s DATE: March 18, 2015 7:52 am

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Kaena

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Poorly drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 107 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		Soil Reaction (pH)
1	0 inches	9 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4.23 Min: 0.42	Max: 7.3 Min: 6.6
2	9 inches	37 inches	stony clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 7.3 Min: 6.6
3	37 inches	53 inches	stony clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 7.3 Min: 6.6

Soil Map ID: 2

Soil Component Name: Makiki

Soil Surface Texture: stony clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	20 inches	stony clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 42 Min: 4.23	Max: 5.5 Min: 5.1
2	20 inches	29 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14.11 Min: 4.23	Max: 6 Min: 5.6
3	29 inches	59 inches	paragravelly clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.14 Min: 14.11	Max: 6 Min: 5.6

Soil Map ID: 3

Soil Component Name: Ewa

Soil Surface Texture: silty clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	18 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6
2	18 inches	59 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
B5	USGS40000269939	1/4 - 1/2 Mile SW
C7	USGS40000269908	1/4 - 1/2 Mile SSW
D10	USGS40000269910	1/2 - 1 Mile SSW
E11	USGS40000269998	1/2 - 1 Mile WNW

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
E12	USGS40000269999	1/2 - 1 Mile WNW
E15	USGS40000270000	1/2 - 1 Mile WNW
F19	USGS40000269977	1/2 - 1 Mile West
G22	USGS40000269945	1/2 - 1 Mile WSW
H23	USGS40000269919	1/2 - 1 Mile ESE
J26	USGS40000269900	1/2 - 1 Mile SSE
I28	USGS40000269889	1/2 - 1 Mile SSW
H29	USGS40000269923	1/2 - 1 Mile ESE
H31	USGS40000269937	1/2 - 1 Mile ESE
I33	USGS40000269880	1/2 - 1 Mile SSW
J35	USGS40000269894	1/2 - 1 Mile SSE
K36	USGS40000269913	1/2 - 1 Mile SW
L39	USGS40000269940	1/2 - 1 Mile WSW
N43	USGS40000269893	1/2 - 1 Mile SE
45	USGS40000269997	1/2 - 1 Mile WNW
46	USGS40000269904	1/2 - 1 Mile WSW
O56	USGS40000269867	1/2 - 1 Mile SSE
O57	USGS40000269866	1/2 - 1 Mile SSE
O58	USGS40000269865	1/2 - 1 Mile SSE
O59	USGS40000269868	1/2 - 1 Mile SSE
O60	USGS40000269871	1/2 - 1 Mile SSE
O61	USGS40000269870	1/2 - 1 Mile SSE
O62	USGS40000269869	1/2 - 1 Mile SSE
P63	USGS40000270021	1/2 - 1 Mile NW
O64	USGS40000269864	1/2 - 1 Mile SSE
Q67	USGS40000269881	1/2 - 1 Mile SW
O68	USGS40000269855	1/2 - 1 Mile SSE
R69	USGS40000269899	1/2 - 1 Mile SE
R72	USGS40000269888	1/2 - 1 Mile SE
S73	USGS40000269856	1/2 - 1 Mile SW
S74	USGS40000269857	1/2 - 1 Mile SW
S75	USGS40000269858	1/2 - 1 Mile SW

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A3	HI0000331	1/4 - 1/2 Mile NNE

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

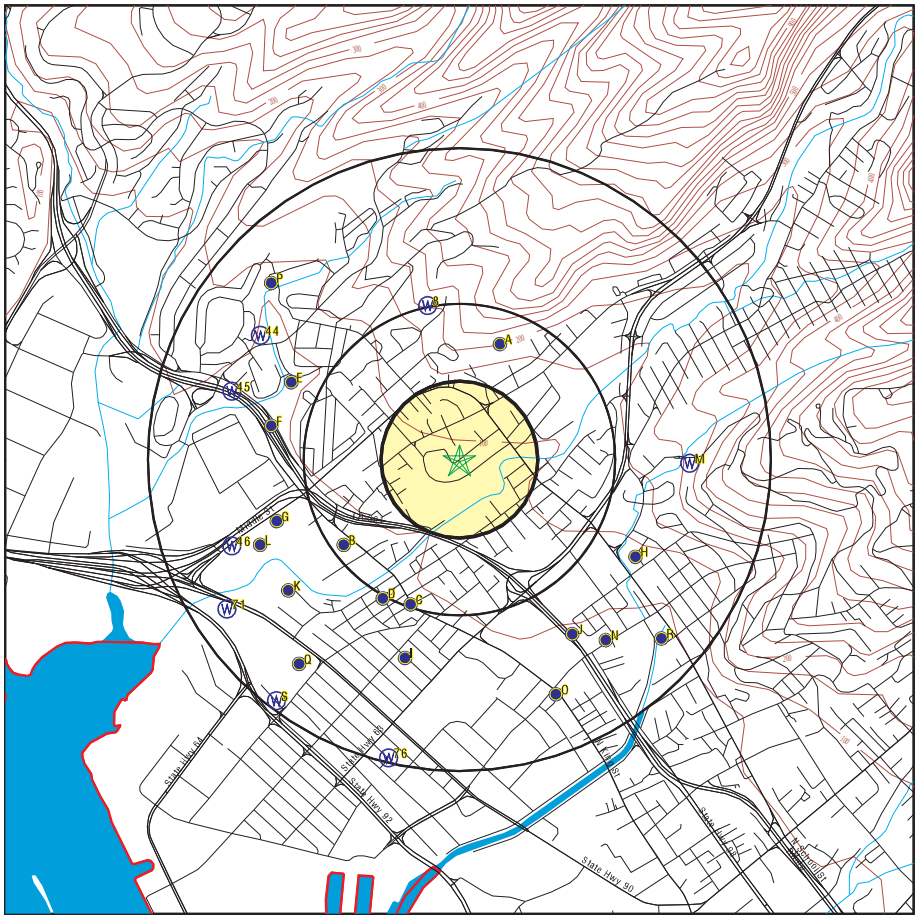
MAP ID	WELL ID	LOCATION FROM TP
A1	HI8000000002622	1/4 - 1/2 Mile NNE
A2	HI8000000002625	1/4 - 1/2 Mile NNE
B4	HI8000000002540	1/4 - 1/2 Mile SW
C6	HI8000000002496	1/4 - 1/2 Mile SSW
8	HI8000000002634	1/2 - 1 Mile NNW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
D9	HI8000000002501	1/2 - 1 Mile SSW
E13	HI8000000002604	1/2 - 1 Mile WNW
E14	HI8000000002608	1/2 - 1 Mile WNW
E16	HI8000000002603	1/2 - 1 Mile WNW
E17	HI8000000002605	1/2 - 1 Mile WNW
F18	HI8000000002591	1/2 - 1 Mile West
G20	HI8000000002547	1/2 - 1 Mile WSW
H21	HI8000000002519	1/2 - 1 Mile ESE
I24	HI8000000002471	1/2 - 1 Mile SSW
J25	HI8000000002484	1/2 - 1 Mile SE
H27	HI8000000002534	1/2 - 1 Mile ESE
H30	HI8000000002537	1/2 - 1 Mile ESE
I32	HI8000000002461	1/2 - 1 Mile SSW
J34	HI8000000002477	1/2 - 1 Mile SSE
K37	HI8000000002502	1/2 - 1 Mile SW
L38	HI8000000002539	1/2 - 1 Mile WSW
M40	HI8000000002579	1/2 - 1 Mile East
M41	HI8000000002565	1/2 - 1 Mile East
N42	HI8000000002478	1/2 - 1 Mile SE
44	HI8000000002629	1/2 - 1 Mile WNW
O47	HI8000000002441	1/2 - 1 Mile SSE
O48	HI8000000002442	1/2 - 1 Mile SSE
O49	HI8000000002439	1/2 - 1 Mile SSE
O50	HI8000000002440	1/2 - 1 Mile SSE
O51	HI8000000002443	1/2 - 1 Mile SSE
O52	HI8000000002446	1/2 - 1 Mile SSE
O53	HI8000000002447	1/2 - 1 Mile SSE
O54	HI8000000002444	1/2 - 1 Mile SSE
O55	HI8000000002445	1/2 - 1 Mile SSE
Q65	HI8000000002460	1/2 - 1 Mile SW
P66	HI8000000002636	1/2 - 1 Mile NW
R70	HI8000000002481	1/2 - 1 Mile SE
71	HI8000000002494	1/2 - 1 Mile WSW
76	HI8000000002412	1/2 - 1 Mile SSW

PHYSICAL SETTING SOURCE MAP - 4237094.154s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location

SITE NAME: Kuhio Homes ADDRESS: 1441 Ahonui St. Honolulu HI 96819 LAT/LONG: 21.3392 / 157.8762	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.154s DATE: March 18, 2015 7:52 am

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
A1 **NNE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002622**
A2 **NNE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002625**
A3 **NNE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FRDS PWS**	**HI0000331**
B4 **SW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002540**
B5 **SW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269939**
C6 **SSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002496**
C7 **SSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269908**
8 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002634**
D9 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002501**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
D10 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269910**
E11 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269998**
E12 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269999**
E13 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002604**
E14 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002608**
E15 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270000**
E16 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002603**
E17 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002605**
F18 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002591**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
F19 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269977**
G20 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002547**
H21 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002519**
G22 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269945**
H23 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269919**
I24 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002471**
J25 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002484**
J26 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269900**
H27 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002534**

Map ID Direction Distance Elevation		Database	EDR ID Number
I28 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269889**
H29 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269923**
H30 **ESE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002537**
H31 **ESE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269937**
I32 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002461**
I33 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269880**
J34 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002477**
J35 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269894**
K36 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269913**

Map ID Direction Distance Elevation		Database	EDR ID Number
K37 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002502**
L38 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002539**
L39 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269940**
M40 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002579**
M41 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002565**
N42 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002478**
N43 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269893**
44 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002629**
45 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269997**

Map ID Direction Distance Elevation		Database	EDR ID Number
46 WSW 1/2 - 1 Mile Lower	Click here for full text details	**FED USGS**	**USGS40000269904**
O47 SSE 1/2 - 1 Mile Lower	Click here for full text details	**HI WELLS**	**HI8000000002441**
O48 SSE 1/2 - 1 Mile Lower	Click here for full text details	**HI WELLS**	**HI8000000002442**
O49 SSE 1/2 - 1 Mile Lower	Click here for full text details	**HI WELLS**	**HI8000000002439**
O50 SSE 1/2 - 1 Mile Lower	Click here for full text details	**HI WELLS**	**HI8000000002440**
O51 SSE 1/2 - 1 Mile Lower	Click here for full text details	**HI WELLS**	**HI8000000002443**
O52 SSE 1/2 - 1 Mile Lower	Click here for full text details	**HI WELLS**	**HI8000000002446**
O53 SSE 1/2 - 1 Mile Lower	Click here for full text details	**HI WELLS**	**HI8000000002447**
O54 SSE 1/2 - 1 Mile Lower	Click here for full text details	**HI WELLS**	**HI8000000002444**

Map ID Direction Distance Elevation		Database	EDR ID Number
O55 SSE 1/2 - 1 Mile Lower	Click here for full text details	**HI WELLS**	**HI8000000002445**
O56 SSE 1/2 - 1 Mile Lower	Click here for full text details	**FED USGS**	**USGS40000269867**
O57 SSE 1/2 - 1 Mile Lower	Click here for full text details	**FED USGS**	**USGS40000269866**
O58 SSE 1/2 - 1 Mile Lower	Click here for full text details	**FED USGS**	**USGS40000269865**
O59 SSE 1/2 - 1 Mile Lower	Click here for full text details	**FED USGS**	**USGS40000269868**
O60 SSE 1/2 - 1 Mile Lower	Click here for full text details	**FED USGS**	**USGS40000269871**
O61 SSE 1/2 - 1 Mile Lower	Click here for full text details	**FED USGS**	**USGS40000269870**
O62 SSE 1/2 - 1 Mile Lower	Click here for full text details	**FED USGS**	**USGS40000269869**
P63 NW 1/2 - 1 Mile Lower	Click here for full text details	**FED USGS**	**USGS40000270021**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
O64 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269864**
Q65 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002460**
P66 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002636**
Q67 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269881**
O68 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269855**
R69 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269899**
R70 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002481**
71 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002494**
R72 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269888**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
S73 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269856**
S74 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269857**
S75 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269858**
76 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002412**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for HONOLULU County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 96819

Number of sites tested: 4

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	-0.475 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	0.050 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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EXHIBIT C

Section 106 Consultation &

Architectural Inventory Survey Information

DAVID Y. IGE
GOVERNOR OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555
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SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

KEKOA KALUHIWA
FIRST DEPUTY

JEFFREY T. PEARSON
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

November 30, 2015

IN REPLY REFER TO:
LOG: 2015.02939, 2015.03583
DOC: 1509JLP45
Architecture, Archaeology,
History and Culture

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
P.O. Box 17907
Honolulu, HI 96817

Dear Mr. Ouansafi,

SUBJECT: **Chapter 6E-8 and National Historic Preservation Act (NHPA) Section 106 Consultation - Department of Housing and Urban Development (HUD)**
Department of Human Services, Hawaii Public Housing Authority
Kuhio Park Terrace Low-Rise – 1474 Linapuni Street
Kalihi Ahupuaʻa, Kona District, Island of Oʻahu
TMK: (1) 1-3-039:008

Thank you for your submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services (DHS), Hawaii Public Housing Authority (HPHA) consultation with SHPD in accordance with 36 CFR 800.3, and pursuant to Hawaii Revised Statutes (HRS), Chapter 6E. SHPD received another submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience.

The submittal indicates that the HPHA is requesting the State Historic Preservation Officer's (SHPO) concurrence with a determination of "no effect" for the proposed HUD repair and rehabilitation improvement projects involving 43 existing public housing developments located throughout the State over the next five (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 consultation on their behalf.

This letter addresses the Kuhio Park terrace Low-Rises at 1474 Linapuni Street. The HPHA has identified the area of potential effects (APE) as the 3.36-acre area parcel owned by the State (HPHA) which is identified as TMK: (1) 1-3-039:008. DHS/HPHA have indicated at this stage of the planning process, they are unclear whether the subject 3.36-acre project area will require any ground disturbances.

Our records indicate that no archaeological inventory survey has been conducted within the subject parcel and that no historic properties have been identified. However, based on nearby studies potential exists to encounter subsurface traditional Hawaiian and/or historic properties within the subject parcel.

The SHPD has reviewed the undertaking at 1474 Linapuni Street, and the SHPO's determination is **no adverse effect** pursuant to NHPA Section 106 and **no historic properties affected** pursuant to HRS §6E-8 within the APE **provided the following conditions are met:**

- If ground disturbing activity is anticipated, DHS must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation;
- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;

- Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;
- Submit a TMK map showing the full extent of the project area within the affected parcel/s;
- Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Summary of land use history, such as previous intensive cultivation, grubbing or grading; and
- Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions regarding archaeological resources or concerns please contact Susan Lebo at (808) 692-8019 or at Susan.A.Lebo@hawaii.gov. For any history and cultural concerns please contact Kaʻāhiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov. Please contact Jessica Puff at Jessica.L.Puff@hawaii.gov or at (808) 692-8023 for any questions regarding architectural concerns or this letter.

Sincerely,

Alan A. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

Appendix A
Historic Property Evaluation Update
for
Kuhio Park Terrace – Honolulu

Prepared by
Mason Architects, Inc
119 Merchant Street, Suite 501
Honolulu, HI 96813

for
HHF Planners
and the
Housing and Community Development Corporation of Hawaii

June 2015

Appendix A – Kuhio Park Terrace High-Rise Historic Evaluation Update and Low-rise Initial Historic Evaluation 2015.

Introduction

The following National Register of Historic Places (NRHP) evaluation of Kuhio Park Terrace (KPT) was undertaken by Mason Architects, Inc. (MAI) in 2015, at the request of HHF Planners on behalf of the Hawaii Public Housing Authority (HPHA), a Hawaii State agency. It serves as a follow-up to the report written by MAI in 2006. In the years since the previous report was written, Kuhio Park Terrace has reached the fifty-year historic threshold, and thus needs to be re-evaluated for NRHP significance. In keeping with the intent of the original 2006 report, the contents of this appendix provide historic eligibility evaluations of individual buildings. Recommendations are also included for potential historic districts, in accordance with the State Historic Preservation Division's (SHPD) guidelines for inventory surveys. National Register nomination-level research into possible historic districts is not within the scope of this document.

Kuhio Park Terrace Background

Kuhio Park Terrace was the State's first and last attempt to house low-income families in publicly-owned high-rise buildings. The project included both high-rise and low-rise buildings in a campus-like setting. The complex originally featured large grassy areas between buildings and numerous community amenities including a pool with bathhouse, park building, basketball and volleyball courts, a softball field, and a community building. An elementary school was also opened the same year the project was completed, adjacent to the low-rise buildings and across the street from high-rise building A.

The low-rise buildings that are a part of the Kuhio Park Terrace complex originally made up approximately 14% of the total unit count for the complex, containing 42 residential four-bedroom units. Currently, there are 41 low-rise buildings total, with 37 in use as residences, while two duplex buildings with four total units have been converted to office and storage space, and one of the two single-family buildings has been demolished. They were designed and built at the same time as the high rise buildings, and community buildings and features, as part of an overall campus. All of the complex's four bedroom units are located in these low-rise buildings. The high-rise was intended to house smaller families, with larger families located in the low-rise four-bedroom units, which have yards of their own. This compromise may have developed out of community input that questioned the ability of mothers to supervise children playing from high floors.[1]

Originally, the high-rise and low-rise buildings that make up the Kuhio Park Terrace complex were a part of a single property, owned and managed by HPHA. More recently, the buildings were divided into two Asset Management Properties (AMP), with Linapuni Street dividing the two AMPs. This means that, though the one single-family unit is stylistically part of the low-rise group (AMP 40), it is actually included with the high-rise buildings in AMP 52 due to its location. Because of this separation of AMPs, HPHA's building counts differ slightly than those used in this report. HPHA's AMP 40 includes

[1] Fung Associates, Inc. *Architectural Inventory Survey Hawaii Public Housing Authority (Federal Projects)*. May 2015.

40 low-rise units, in 12 duplex and row-house buildings. AMP 52 includes the 1 single-family 4-bedroom unit, and all of the high-rise units, (572 units total, with 347 under HPHA and the remainder used as rentals through Michaels Development Company).

Historic Context

See historic context in the 2006 report for overall context.

Table 1: Summary of NR Eligibility Evaluation

Building Type	Building	Year Built	National Register Significance	National Register Integrity	National Register Eligible
High-Rises	A and B	1965	Yes	Yes	Yes
Low-Rises	Row Houses C1-C8	1965	Yes	Yes	Yes
Low-Rises	Duplexes D1-D4	1965	Yes	Yes (D2-D4)	Yes (D2-D4)
Low-Rises	Single-Family E2	1965	Yes	Yes	Yes
Community Buildings	Community Building Family Education Resource Center	1965, 1976, unknown, 2003	1965 Yes, 1976 No Unknown No 2003 No	Yes Yes Yes Yes	1965 Yes, 1976 No Unknown No 2003 No

Description

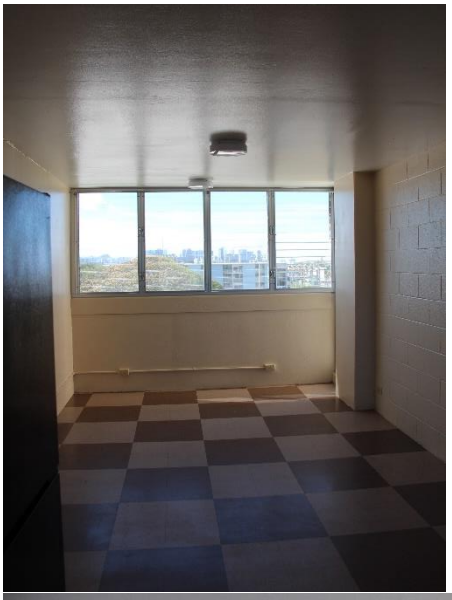
High-Rise Buildings:

The general description for the high-rise buildings remains similar to the 2006 report.

The following changes have been made to the building and apartments since the 2006 report was written:

- the original concrete masonry unit screens that sheltered the stairwells and central elevator lobbies have been removed and replaced with decorative metal railings;
- the original flat concrete entry awning has been replaced with an angled metal awning;
- the lanais on the opposite side of the buildings from the entry walkways have been enclosed as interior space in each apartment; and
- the apartments' kitchen windows have been replaced and their kitchen cabinets and counters have been renovated.

See the following page for the one-page historic assessment and photographs.



Project	Kuhio Park Terrace High-Rise Buildings
Date	1965
Significance	Kuhio Park Terrace is eligible for the NRHP under Criterion A as Hawaii's largest federally aided public housing complex, with 614 units, and illustrates the shift towards high-density high-rise projects, or "warehousing." KPT consisted of a mix of high-rise and low-rise housing with community amenities in a campus-like setting.
Character Defining Features	16-story high-rise buildings separated by large open grassy areas. 3-arm Radial plan, full length exterior walkways at apartment entrances side. Peg-board transoms above interior doors, tub/showers, jalousie windows.
Alterations	Concrete screens at stairwells and elevator lobbies removed, rear lanais enclosed, kitchen windows changed.
Integrity	Buildings have some alterations. Housing retains integrity of location, setting, feeling, and association. There have been changes to design, materials and workmanship.
National Register Eligibility	**Eligible**

Low-Rise Buildings

There are thirteen low-rise buildings including eight that are two-story row houses with four units, designated buildings C1 through C8, four that are one-story duplexes, designated D1-D4, and one that is one-story with only a single unit, E2. Originally there were two single-unit buildings, E1 and E2, but one was demolished sometime after 2010. The four bedroom units were laid out in six different floor plans in the original drawings; these were designated types 4-A though 4-F. The row houses include floor plan types 4-A through 4-D, while the duplexes include 4-E and 4F, and the single units appear to have been 4-E as well.

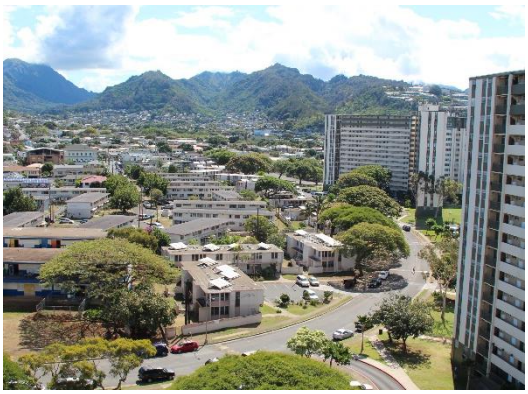
Row-House Buildings

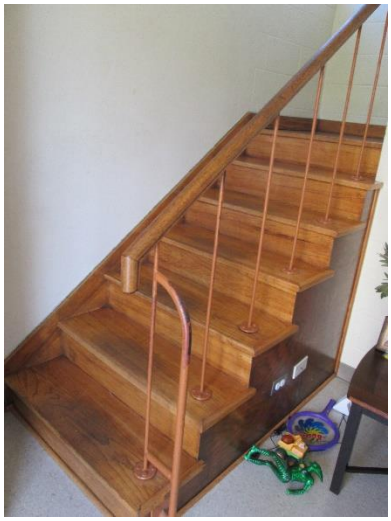
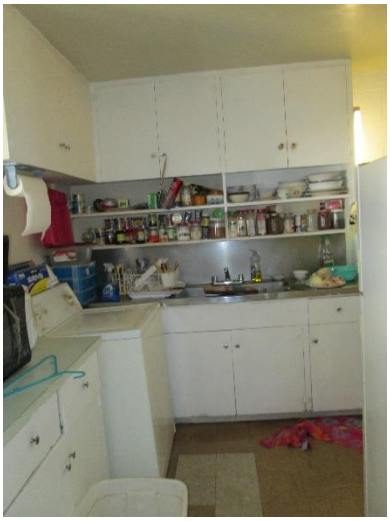
The two-story row-house buildings are rectangular in plan, with two protruding sections on the opposite side of the building from the units' entrances. Along the entry side of the buildings, there are concrete lanais, and at the back is an open, shared yard, typically with a free-standing concrete brick wall used to affix clotheslines from the back wall of the building. They have concrete slab foundations with concrete footings, walls that are a mix of cast concrete and concrete masonry units (CMU), and flat roofs that have wide, overhanging eaves. The four units at these buildings are divided by a vertical concrete wall at the open front lanais. Windows are mostly jalousie, with aluminum double-hung windows near the first floor front entrances. The exterior doors are flush wood and some have historic screen doors.

Each building includes one of each of the following unit types: 4-A, 4-B, 4-C and 4-D from left to right, respectively, with the center dividing wall between units 4B and 4C. Each building half is a mirror image of the other half (units 4-A and 4-B together are a mirror image of 4-C and 4-D together). Additionally, the two units at each half mirror one another, so, units 4-A and 4-B are mirror images, and units 4-C and 4-D are also mirror images. In all units, the living room, kitchen, dining area and half-bath are on the first floor of the units, while bedrooms and the main bathroom are upstairs.

Much of the historic interior fabric remains at these units, including kitchen cabinets and counters, bathroom fixtures and fittings such as shower/tubs and sinks, as well as wood staircases with metal and wood balustrades.

See the following page for the one-page historic assessment and photographs.



Project	Kuhio Park Terrace Row-House Buildings
Date	1965
Significance	Kuhio Park Terrace is eligible for the NRHP under Criterion A as Hawaii's largest federally aided public housing complex, with 614 units, and illustrates the shift towards high-density high-rise projects, or "warehousing." KPT consisted of a mix of high-rise and low-rise housing with community amenities in a campus-like setting.
Character Defining Features	Low-rise buildings separated by open grassy areas. Flat roofs, wide eaves, concrete wing walls at building corners, and as exterior dividers between units. Most set at 45 degree angle to street, and perpendicular to each other with shared yards. Glass jalousie windows, metal countertops and wood cabinets, wood staircases with wood and metal balustrades
Alterations	Some screen doors removed, two buildings re-roofed.
Integrity	Buildings are largely unaltered. Housing retains integrity of location, setting, design, feeling, and association. There have been minor changes to materials and workmanship, primarily at the interior.
National Register Eligibility	**Eligible**

Duplex Buildings

The four single-story, two-unit duplex buildings look similar to the four-unit buildings in plan. Their elevations are also somewhat similar to the four-unit buildings, albeit at only one story. Some still have an open lanai at the rear, and originally all had an enclosed area off of the lanai that was used for drying laundry, with a free-standing concrete brick wall used to affix the clothesline. Windows and doors are the same as well. The two units in each building are mirror images of one another with the living/dining rooms at the shared wall, and bedrooms arranged along the outer walls.

The interiors at three of these buildings (D2-D4) remain relatively intact, with remaining kitchen and bathroom elements including wood kitchen cabinets with stainless steel counters and integrated sinks, and tile shower/tubs in the bathrooms. Two buildings (D3 and D4), containing a total of four units remain in use as residences, while two other buildings (D1 and D2) have been converted for office and storage use. One unit in building D2 has become the management office for the low-rise buildings of Kuhio Park Terrace and Kuhio Homes, with minimal interior alterations, while the other unit in the same building has been converted for storage with minor alterations including removal of kitchen counters and cabinet doors. The two units in building D1 have been converted for use as storage, and have been more significantly altered, with removal of several interior walls at one of the units. Two of the duplex buildings, D2 and D3, have had the rear lanais enclosed as part of the interior space.

See the following pages for site plan and one-page historic assessment and photographs.

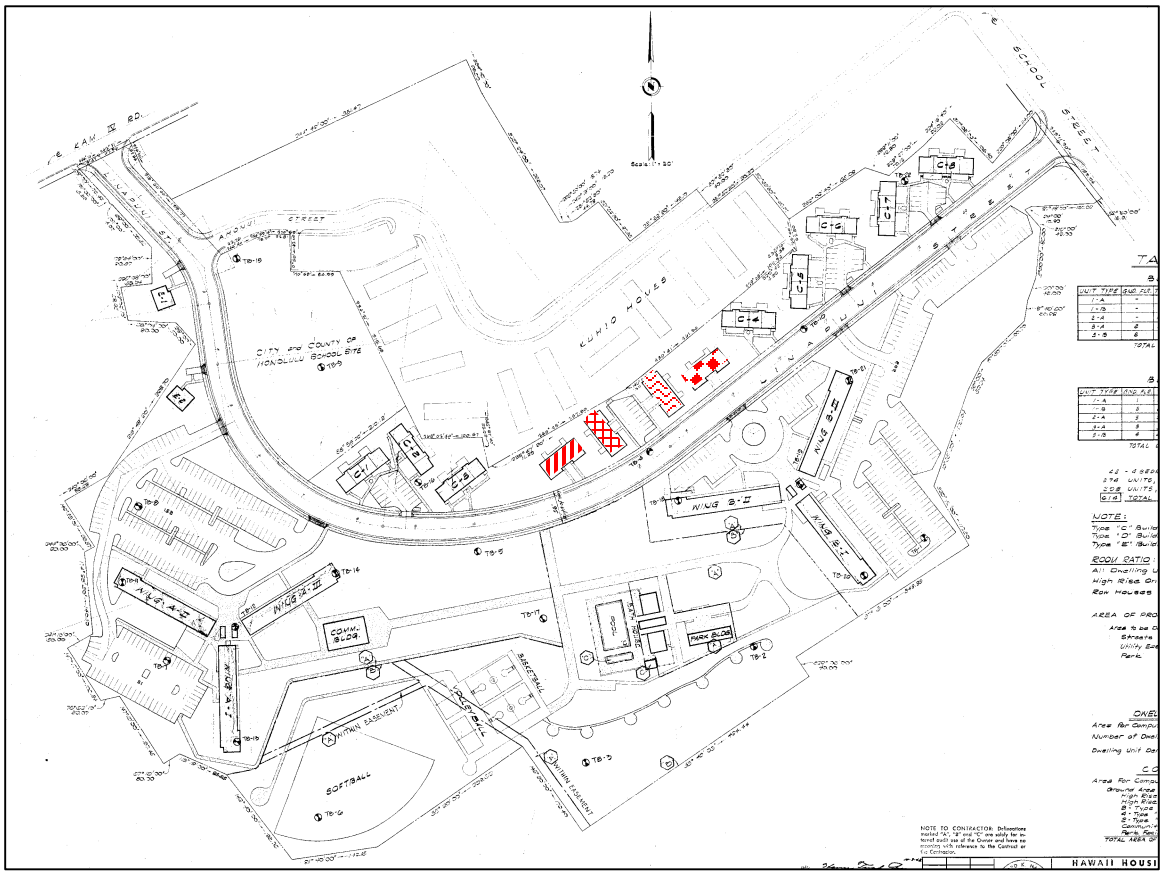


Figure 1: Original 1962 Site Plan showing location of Duplexes. D1 (diagonal lines) is converted for storage and has had interior walls removed, D2 (grid pattern) has been converted to office and storage, and along with residential D3 (zig-zag lines) has had rear lanais enclosed, D4 (checkerboard pattern) remains residential and retains open lanais.

Project	Kuhio Park Terrace Duplex Buildings
Date	1965
Significance	Kuhio Park Terrace is eligible for the NRHP under Criterion A as Hawaii's largest federally aided public housing complex, with 614 units, and illustrates the shift towards high-density high-rise projects, or "warehousing." KPT consisted of a mix of high-rise and low-rise housing with community amenities in a campus-like setting.
Character Defining Features	One-story buildings with flat roofs. Wide overhanging eaves and wing-walls, glass jalousie windows, metal countertops and wood cabinets.
Alterations	Some rear lanais have been incorporated into the units as interior space (D2 and D3), rear yard enclosures removed. Two buildings (D1 and D2) converted for office and storage use. One (D2) has minimal alterations, one unit in D1 has many interior walls removed.
Integrity	Most buildings have relatively minor alterations, retains integrity of location, setting, feeling, and association. Integrity of design, materials and workmanship have been compromised, most significantly at D1.
National Register Eligibility	**Buildings that retain interior walls D2 – D4 –Eligible** **All others D1 – Not Eligible**

Single-Family Building

The single remaining one-story, single unit building, E2 is a smaller version of the other two types of low-rise buildings. It is constructed of concrete, with a concrete slab foundation, a flat roof that has deep eaves, and wing walls at the corners of the buildings, and shielding the windows. Windows are glass jalousie. Doors are flush wood. The interior was not accessed, but is assumed to be similar to the duplex building units, as shown in the original building drawings.

See the following pages for site plan and one-page historic assessment and photographs.

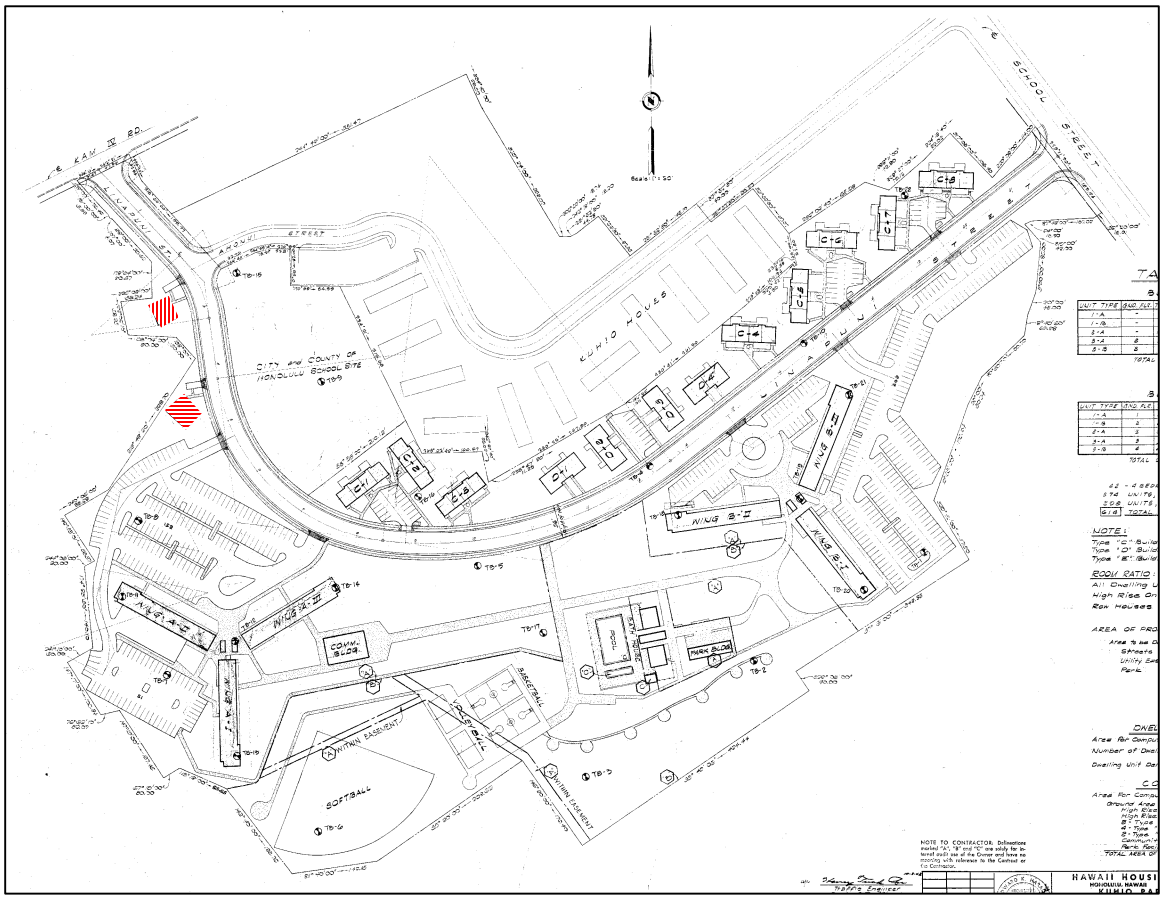
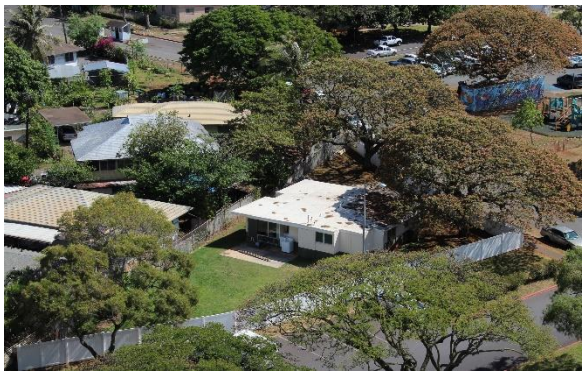


Figure 2: Original 1962 Site Plan showing location of remaining single-family, four bedroom building, E2 (horizontal stripes); and demolished single-family building E1 (vertical stripes).



Project	Kuhio Park Terrace Single-Family House
Date	1965
Significance	Kuhio Park Terrace is eligible for the NRHP under Criterion A as Hawaii's largest federally aided public housing complex, with 614 units, and illustrates the shift towards high-density high-rise projects, or "warehousing." KPT consisted of a mix of high-rise and low-rise housing with community amenities in a campus-like setting.
Character Defining Features	One-story buildings with flat roofs. Wide overhanging eaves and wing-walls, glass jalousie windows.
Alterations	None visible
Integrity	Building retains integrity of location, setting, materials design, workmanship, feeling, and association.
National Register Eligibility	**Eligible**

Community Buildings

There are four community buildings that are part of the Kuhio Park Terrace property. Only one of these was constructed at the same time as the residential buildings, while the other three were constructed in 1976, an unknown date, and 2003. The four are located between and to the southeast of the high rise buildings, approximately in a line. The three with later construction dates were evaluated only cursorily, as none are more than 50 years in age.

The 1965 community building (now Community Hall) was designed as part of the original Kuhio Park Terrace complex. It is a one story structure just to the southeast of high-rise building A, and overlooks the softball field that is just to its south, downhill from the buildings. It is constructed of concrete, with a slab foundation, and a flat roof with overhanging eaves on three sides. The eaves are widest on the side of the building facing the softball field, creating an open lanai. The roof is supported by large tapered, plus- or x-shaped concrete columns, as well as large horizontal concrete beams, whose ends are visible above the columns. There is an addition at the opposite side of the building that faces the street. The interior is comprised of one large room for community gatherings, with a smaller space at the building's rear that corresponds to the later addition, and acts as a prep and/or storage area. The street-facing addition was built in 1980, along with a concrete screen block wall that enclosed the open lanai on the opposite side. The screen block wall has since been removed.

The 1976 Family Education building is a two-tiered, one -story building constructed of concrete. It has a slab foundation, and a flat roof with a mansard surround. The walls are scored CMU, with sections of decorative concrete screen. Windows at the second tier are jalousie, and all windows and screens are further screened with metal mesh.

The PACT Head Start modular building is of an undetermined date, and is constructed of wood on a post and pier foundation with a gable roof. A section of the roof is extended on one side to provide an open lanai, and shelter the ramp up to the entrance. There are also wood awnings over the windows on the opposite side of the building. It has two adjacent play yards furnished with non-permanent playground equipment.

The 2003 Resource Center is centered between the two high-rise buildings with a large parking area between it and the street. It is a large concrete building with a complex hip roof that has a central extension toward the parking lot that forms an entrance. This large building appears as one-story from the street, but is sited on a hill, and has multiple stories as the hill allows.

1965 Community Hall

1976 Family Education Building

Unknown date PACT Head Start

2003 Resource Center

Project	Four Kuhio Park Terrace Community Buildings
Date	1965, 1976, unknown, 2003
Significance	1965 building only: Kuhio Park Terrace is eligible for the NRHP under Criterion A as Hawaii's largest federally aided public housing complex, with 614 units, and illustrates the shift towards high-density high-rise projects, or "warehousing." KPT consisted of a mix of high-rise and low-rise housing with community amenities in a campus-like setting.
Character Defining Features	One-story building with T-shaped concrete supports and large beams at 1965 building. Two levels and scored CMU at 1976 building. Wood construction and covered lanai and awnings at unknown date building. One-story concrete building with complex hip roof at 2003 building.
Alterations	Rear addition and windows changed at 1965 building, no exterior alterations to 1976 building, unknown date building, or 2003 building.
Integrity	The 1965 community center building retains integrity of location, setting, feeling, and association. There have been minor changes to design, materials and workmanship.
National Register Eligibility	**1965 Community Hall – Eligible** **All others – Not Eligible**

Integrity Summary

Integrity of design at the high-rise buildings has been somewhat compromised by the enclosure of all of the buildings' lanais, as well as the removal of the concrete grilles at the elevator core and stairwells, and replacement with metal railings. Nonetheless, the buildings retain integrity of location, setting, materials, workmanship, feeling and association.

The three other types of residential buildings that make up Kuhio Park Terrace retain integrity of location, setting, materials, workmanship, feeling and association. All of the original buildings remain in their original locations, with relationships to one another and the open spaces between them. The row houses and single-family house remain virtually unchanged since construction, also retaining integrity of design. The enclosure of the rear lanais at some of the duplex buildings, and loss of enclosed yards impacts their integrity of design somewhat. The materials have changed little, if at all, and in the majority of cases, their use has not changed, and where it has, the use has remained within the public housing mission.

Only one of the community buildings was constructed at the same time as the residential buildings at Kuhio Park Terrace. It is the building closest to high-rise building A. It retains its integrity of location, setting, feeling, and association. The alteration at the street side of the building has somewhat compromised the building's integrity of design, materials and workmanship. The other three buildings were built between 1976 and 2003, and retain all aspects of integrity. However, they are less than 50 years of age, and do not possess extraordinary significance under Criterion Consideration G, and so, are not eligible for the NRHP. They should be reevaluated when they reach 50 years of age.

The campus, as a cohesive group of buildings with associated landscaping, retains its integrity of location, setting, materials, feeling and association. The campus has lost some integrity of design due to the removal of a few of the community facilities, including the pool with adjacent bath house, and the park building, and the addition of three new community buildings. Despite the addition of these buildings, including a large central community building, the campus retains an open feeling. Much of the significant landscape features are retained as well, including large monkeypod trees shading the sidewalks and parking, eucalyptus trees around the high-rise buildings, as well as open grassy areas and the softball field at the rear of the complex.

Eligibility Summary

Many of the buildings at Kuhio Park Terrace have national register significance under Criterion A for their place in Hawaii's development of public housing. As Hawaii's largest federally aided public housing complex, with 614 units, the complex illustrates the shift towards high-density high-rise projects, or "warehousing." It was the state's first and last attempt to provide low-income family housing in publicly owned high-rise buildings. High-rise public housing had been a trend across the United States, and was regarded as an efficient and convenient way to provide low-income housing for a large number of families in a small footprint. Kuhio Park Terrace consisted of a mix of high-rise and low-rise housing with community amenities in a campus-like setting. It was able

to provide both a large number of units, and open space with recreational facilities for residents within a relatively small area.

Buildings that have significance and sufficient integrity to be considered eligible include both high-rise buildings, A and B; all row house buildings, C-1 through C-8, most duplex buildings including D-2 through D-4; the remaining single-family unit, E-2; and the 1965 Community Hall building located next to high-rise building A. Additionally, the campus overall has significance and appears to retain sufficient integrity to to be considered a historic district.

Building D1 has been significantly altered with the loss of a number of interior walls, and no longer has sufficient integrity to be considered eligible

HAWAII PUBLIC HOUSING AUTHORITY

ENVIRONMENTAL REVIEW

MĀ`ILI I

Wai`anae, O`ahu

AMP 44
HPHA No. 1033

Prepared for:

State of Hawaii
Hawaii Public Housing Authority

Prepared by:

HHF PLANNERS
places for people

U.S. Department of Housing and Urban Development
451 Seventh Street, SW
Washington, DC 20410
www.hud.gov

espanol.hud.gov

Environmental Review for Activity/Project that is Categorically Excluded Subject to Section 58.5

Pursuant to 24 CFR 58.35(a)

Project Information

Project Name: Māʻili I (AMP 44)

Responsible Entity: Hawaii Public Housing Authority
1002 North School Street
Honolulu, HI 96817

Grant Recipient (if different than Responsible Entity)**:**
Same as Responsible Entity

State/Local Identifier: State of Hawaiʻi

Preparer: Mr. Scott Ezer, Vice President
HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaiʻi 96813

Certifying Officer Name and Title: Mr. David Y. Ige
Governor, State of Hawaiʻi

Grant Recipient (if different than Responsible Entity)**:**
Same as Responsible Entity

Consultant (if applicable)**:** HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaiʻi 96813

Direct Comments to: Mr. Hakim Ouansafi, Executive Director
Hawaii Public Housing Authority
1002 North School Street
Honolulu, Hawaiʻi 96817

Project Location: Off Maliona Street
Waiʻanae, Hawaiʻi 96792

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]**:**

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a "major construction activity" and would involve one or a combination of several HUD designated categories of actions.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent;
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons;
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland;
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation;
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls);
7. Interior and exterior renovations and rehabilitation;
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site;
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Level of Environmental Review Determination:

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.5. Compliance with and completion of conformance determinations for other statute, executive order, or regulation has been completed and support the Categorical Exclusion.

Funding Information

Grant Number	HUD Program	Funding Amount
To be determined	Capital Fund	To be determined
To be determined	Economic Development Initiative Special Project Grant	To be determined
To be determined	Other Grants	To be determined

Estimated Total HUD Funded Amount:

To be determined by HUD using a formula and based upon federal budget.

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]**:**

Depends upon funds available.

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	*The project is not within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.*
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☒	*The State of Hawai'i does not have any designated coastal barrier resource units. (http://www.fws.gov/CBRA/Maps/Mapper.html)*
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes ☐ No ☒	*As indicated in Flood Insurance Rate Map Panel 15003C0192J, the project site is located in Zone X (area of minimal flooding) and is outside the 500-year flood zone. A field inspection and information obtained from the AMP Manager confirmed no major flooding issues within the site. Based on its description, the Mā'ili I housing project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance is not mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.*

STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5		
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes ☐ No ☒	*The State of Hawai'i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. EPA's Green Book for currently designated "nonattainment areas" as of June 2015. Planned repair and rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.*
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes ☐ No ☒	*Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai'i's Coastal Zone Management (CZM) program.*
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☐ No ☒	*There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.*
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes ☒ No ☐	*The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices, while project-specific mitigation measures are identified in the following section.*
Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes ☐ No ☒	*A field inspection identified an existing above-ground liquid propane gas tank of approximately 1,000 gallons which is not in use and is surrounded by a six-foot high chain link fence. The tank is about 30 feet away from the south side of Building 20, and was installed by and is owned by the gas company. Repair and rehabilitation improvements for this project should not impact*

		this fuel storage tank. Should rehabilitation improvements increase the density of the project (e.g. increase the number of units and associated persons exposed to the hazard within the acceptable separation distance), mitigative measures would need to be implemented for the fuel tank in compliance with HUD requirements.
Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes ☐ No ☒	*The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.*
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes ☐ No ☒	*The project site is located in Zone X, an area of minimal flooding, and is located outside the 500-year flood zone. A field inspection and information obtained from the AMP Manager confirmed no major flooding issues within the site. The project is in compliance with Executive Order 11988.*
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes ☒ No ☐	*Māili I is 46 years old and was constructed in 1969 and underwent a major renovation in 1992. In May 2015, Fung Associates conducted an Architectural Inventory Survey (AIS) for Māili I. The 2015 AIS notes that Māili I is the first "turnkey" project by the Hawai`i Housing Authority (HHA), a predecessor to the HPHA. As a result of a complete renovation in 2002, Māili I no longer retains its integrity of materials or design and does not appear to meet the criteria for listing in the National Register of Historic Places (NRHP). In a letter dated November 16, 2015, the State Historic Preservation Officer determined that repair and rehabilitation improvements for this project would have "no adverse effect" on historic properties pursuant to NHPA Section 106 subject to certain conditions.*
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes ☐ No ☒	*The project site is not situated along a highway or arterial roadway with a high volume of vehicular traffic that may generate significant noise. Farrington Highway (Route 93) is State arterial roadway in West O'ahu that serves the communities along the leeward coast including Mā'ili. Route 93 accommodates vehicle traffic*

		entering and leaving Mā‘ili and forms a cross intersection with Maliona Street which provides access to the housing project and other residences in the neighborhood. The HUD noise level calculator estimated noise levels at the project site to be 51.7 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes ☐ No ☒	*The housing project is located within the O‘ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation.*
Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☐ No ☒	*There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.* *(http://www.fws.gov/wetlands/data/mapper.HTML)*
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes ☐ No ☒	*There are no Wild and Scenic Rivers in Hawai‘i, which excludes this project from mitigation or formal consultation requirements (http://www.rivers.gov/map.php)*
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes ☐ No ☒	*Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, these improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects on minority populations and low-income populations. Improvements should benefit low-income and minority populations living within this housing project.*

Field Inspection (Date and completed by)**:** June 15, 2015
Glenn Tadaki, Planner
HHF Planners

Summary of Findings and Conclusions:

Repair and rehabilitation improvements implemented for this existing housing project by HPHA should not result in significant environmental impacts based upon research data collected, a field inspection, consultation with the site manager and maintenance staff, consultation with pertinent resource agencies, and prior HPHA experience implementing repair and rehabilitation improvements. Therefore, repair and rehabilitation improvements would comply and be consistent with the statutes, executive orders, and regulations addressed. Furthermore, HPHA would evaluate improvements planned to ensure the work is consistent with the designated categories of actions described under the project description section. Compliance with these factors evaluated are further addressed in the attached Source Documentation Statutory Worksheet along with relevant technical reports/assessments.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Law, Authority, or Factor	Mitigation Measure
Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	*Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.* *Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.* *Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.* *Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.*

	<u>Hawaiian Waterbirds</u>: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo‘i, impoundments or other vegetated water bodies. *1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols.* *2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.* *3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.* *In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.* *<u>Additional Measures</u>: The following additional measures would be implemented:* *1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.*
National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	*1. If ground disturbing activity is anticipated, HPHA must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation.* *a. Submit detailed plans, specifications and a detailed scope of work once the plans have been developed.* *b. Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation.* *c. Submit a TMK map showing the full extent of the project area within the affected parcel/s.*

	d. Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area. *e. Summary of land use history, such as previous intensive cultivation, grubbing or grading.* *f. Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.* *In addition to these mitigation measures, the HPHA would enter into a Programmatic Agreement with the SHPO to address the implementation of future repair and rehabilitation improvements to State housing projects after the current Section 106 review process is completed and prior to the next environmental review process in approximately five years. Furthermore, should subsurface human remains or other traces of human activity greater than 50 years old be encountered during construction, all work in the vicinity of the find would immediately stop and the SHPD would be promptly notified. The treatment of any human remains that are encountered would be conducted in accordance with applicable requirements of Chapter 6E, Hawai'i Revised Statutes (Historic Preservation) and Chapter 13-300, Hawai'i Administrative Rules (Rules of Practice and Procedure Relating to Burial Sites and Human Remains).*

Determination:

☐ This categorically excluded activity/project converts to **EXEMPT** per Section 58.34(a)(12), because it does not require any mitigation for compliance with any listed statutes or authorities, nor requires any formal permit or license; **Funds may be committed and drawn down after certification of this part** for this (now) EXEMPT project; OR

☒ This categorically excluded activity/project cannot convert to Exempt status because one or more statutes or authorities listed at Section 58.5 requires formal consultation or mitigation. Complete consultation/mitigation protocol requirements, **publish NOI/RROF and obtain "Authority to Use Grant Funds"** (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR

☐ This project is not categorically excluded OR, if originally categorically excluded, is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

Preparer Signature: Scott Ezer Date: 12-7-15

Name/Title/Organization: Mr. Scott Ezer, Vice President
HHF Planners

Responsible Entity Agency Official Signature:
David Y Ige Date: APR 28 2016

Name/Title: Mr. David Y. Ige, Governor

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

MĀʻILI I (HA # 1033)

TMK: (1) 8-7-002: 011 and 014

Hawaiʻi Public Housing Authority (HPHA) Environmental Review

SOURCE DOCUMENTATION (SD) STATUTORY WORKSHEET

Site Visit Date: June 15, 2015
Prepared By: Glenn Tadaki

PROJECT DESCRIPTION

The Māʻili I housing project is located in the Māʻili community of the Waiʻanae Coast on the island of Oʻahu. Māʻili is situated between the communities of Waiʻanae to the north and Nānākuli to the south. The project site consists of two tax parcels that are straddled by Maliona Street. Access to the project site is provided by Maliona Street, Maipela Street, and Hila Street. A concrete drainage channel along the eastern boundary of the site separates the Ma'ili I and Ma'ili II housing projects. Māʻili Community Park, about 230 feet to the east of the site, and Māʻili Elementary School, approximately 400 feet east of the park, lie in the vicinity of the project site. This housing project is within HPHA's Asset Management Project (AMP) 44 which includes four other housing projects.

Māʻili I was first occupied in 1969 and underwent a major renovation in 2002. The housing project is located along Maliona Street and is comprised of two parcels identified by Tax Map Keys (1) 8- 7-002: 011 and 014. Māʻili I consists of 20 single-family homes with a mix of two- and three-bedrooms per unit. The property is designated for "Urban" use by the State Land Use Commission and is zoned for "R-5 Residential" use by the City and County of Honolulu (City).

The project site is not located within a tsunami evacuation zone, and the entire site is located in Flood Zone X, an unstudied area where flood hazards are undetermined, but flooding is possible (Community Panel Number 15003C0192J, Revised November 5, 2014).

The following figures in Exhibit A provide supporting information on this housing project:

Figure 1: Location Map
Figure 2: TMK Map
Figure 3: Site Map
Figure 4: Flood Map

COMPLIANCE FACTORS

I. AIRPORT CLEAR ZONES AND ACCIDENT POTENTIAL ZONES (24 CFR PART 51D)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The housing project does not lie within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: 24 CFR 51 (D).

Honolulu International Airport Master Plan - 2010 (August 1994), State Department of Transportation, Airports Division; and

*Hawai`i Airports and Flying Safety Guide (2012-13, Fifth Edition, Revision 1)* Hawai`i Department of Transportation, Airports Division.

HDOT website at: http://hidot.hawaii.gov/airports/files/2013/01/Airport-Safety-Guide-2012-2013-5rev1.pdf

II. COASTAL BARRIER RESOURCES (COASTAL BARRIER IMPROVEMENT ACT OF 1990 [16 USC 3501])

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai'i does not have any designated coastal barrier resource units.

SUPPORTING DOCUMENTATION:

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/cbra/maps/mapper.html (Date accessed: 6/30/15).

III. FLOOD INSURANCE (FLOOD DISASTER PROTECTION ACT OF 1973 AND NATIONAL FLOOD INSURANCE REFORM ACT OF 1994 [42 USC 4001-4128 AND 42 USC 5154a])

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program

As indicated in the Flood Insurance Rate Map Panel 15003C0192J, the project site is located in Zone X (area of minimal flood hazard) and is outside the 500-year flood zone. A field inspection and information obtained from the AMP Manager confirmed no major flooding issues within the site. The Mā'ili I housing project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance is not mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the Mā'ili I housing project did not visually reveal any signs of previous flooding problems. An interview with the AMP Manager determined that no major ponding or flooding issues have occurred on the project site.

Printed: Flood Insurance Rate Map, City and County of Honolulu, Community Panel Number 15003C0192J, Revised November 5, 2014.

Hawai`i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 6/30/15)

IV. CLEAN AIR ACT (40 CFR PARTS 6, 51, 93)

SUPPORTING DOCUMENTS	
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable

The State of Hawai'i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. Environmental Protection Agency's Green Book for currently designated "nonattainment areas" as of June 2015. Planned rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.

SUPPORTING DOCUMENTATION:

Printed: *State of Hawai'i Annual Summary 2013 Air Quality Data*. State of Hawai'i, Department of Health, July 2014.

U.S. Environmental Protection Agency website at: http://epa.gov/airquality/greenbk/ (Date accessed: 6/30/2015).

V. COASTAL ZONE MANAGEMENT ACT (16 USC 1451, SECTIONS 307 (C), (D)

CONTACT:
Mr. John Nakagawa
Office of Planning
Department of Business, Economic Development & Tourism
State of Hawai'i
P.O. Box 2359
Honolulu, Hawai'i, 96804-2359

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: Not Applicable

Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai'i's Coastal Zone Management (CZM) program.

SUPPORTING DOCUMENTATION:

Contact: In an e-mail to the Office of Planning (OP) dated July 27, 2015, the HPHA determined that the use of HUD funds for the implementation of repair and rehabilitation improvements does not require review for consistency with Hawai'i's CZM program. The OP confirmed this determination in an e-mail dated July 28, 2015 and included in the Appendices.

Experience: As part of past environmental reviews in December 2010, a letter from the OP dated July 20, 2005 determined that their review for consistency with Hawai'i's CZM program was not required. A copy of this letter is included in the Appendices.

VI. CONTAMINATION AND TOXIC SUBSTANCES (24 CFR PART 50.3 & 58.5(I)(2))

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Project Not Affected

There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.

SUPPORTING DOCUMENTATION:

Field: A site inspection and interview with the AMP Manager revealed no presence of any toxic or radioactive materials on the project site that warrant any concern.

Study: Environmental Data Resources, Inc. (EDR), conducted a search of available environmental records and prepared a Radius Map Report (Inquiry Number 4237094.182s, March 17, 2015). EDR reviewed more than 25 federal and statewide regulatory databases for information regarding the treatment, storage, disposal and release of toxic chemicals at the project site and within specific radii (generally 1 mile) of the site. A Detail Map within the EDR report documents those sites identified within a 0.25 mile radius of the project site. Some of the sites contain underground storage tanks (UST) that are currently in use or are permanently out of use The EDR report in Exhibit B includes the results of their research findings.

In the vicinity of the project site, the EDR report notes that two 6,000 gallon gasoline USTs for the former Leeward Petroleum at 87-166 Farrington Highway are permanently out of use.

The project site was not identified as a Formerly Used Defense Site (FUDS) by the U.S. Army Corps of Engineers and is not subject to any cleanup actions for Department of Defense-generated contamination.

VII. ENDANGERED SPECIES (50 CFR PART 402)

CONTACT:
Mr. Loyal Mehrhoff, Field Supervisor
Pacific Islands Administrator
Fish and Wildlife Services
U.S. Department of the Interior
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawai'i 96813
Tel. #: 792-9400

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Adverse Effect Subject to Mitigation

The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received by the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices.

SUPPORTING DOCUMENTATION:

Contact: A letter from the HPHA dated July 24, 2015 was submitted to the Pacific Island Administrator for the FWS determining that repair and rehabilitation improvements that may be implemented using HUD funds for this housing project would have no likelihood of effect on any listed species or proposed species, or existing or proposed designated critical habitat subject to certain measures. Concurrence with this determination along with proposed minimization and avoidance measures was received from the FWS in a letter dated September 28, 2015 which is included in the Appendices. This housing project is subject to the following minimization and avoidance measures.

Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.

Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.

Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.

Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and

maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.

Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo‘i, impoundments or other vegetated water bodies.

1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols.
2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.
3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.

In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.

Additional Measures: The following additional measures would be implemented:

1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.

Experience: The FWS was previously consulted as part of environmental reviews that were completed in 2005 (39 housing projects) and 2010 (70 housing projects) which supported the determination that repair and rehabilitation improvements would either: 1) have no likelihood of effect for certain housing projects; or 2) not likely adversely affect federally listed species or critical habitat for certain housing projects subject to mitigative measures. A summary of these consultation efforts follows.

2005 Consultation: In a letter dated July 15, 2005, the Housing and Community Development Corporation of Hawai‘i (predecessor to the HPHA), determined that the implementation of minor repair and rehabilitation improvements for 39 housing projects would not have an adverse effect on federally-listed species or critical habitat. In a letter dated August 11, 2005, the FWS concurred with the HCDCH determination.

2010 Consultation: In a letter dated May 17, 2010, the HPHA informed the FWS that HUD funds would be used to immediately implement repair and rehabilitation improvements for six housing projects on O‘ahu and the island of Hawai`i. In a subsequent letter dated May 21, 2010, the FWS was informed that HPHA would be using HUD funds to implement minor repair and rehabilitation improvements for 64 projects throughout the State. In both letters, the HPHA determined that the repair and rehabilitation improvements were not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat. Based on further consultation and a

meeting with FWS staff on June 24, 2010, the HPHA determined that repair and rehabilitation improvements for most of their housing projects would not likely adversely affect any listed or proposed species, or existing or proposed designated habitat, subject to various mitigative measures for certain housing projects.

VIII. EXPLOSIVE AND FLAMMABLE OPERATIONS (24 CFR PART 51C)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

Status Category: No Impact Subject to Conditions and Mitigation, if Applicable.

A field inspection identified an existing above-ground explosive or flammable material storage container in excess of 100 gallons. The liquid propane gas (LPG) tank is surrounded by a six-foot high chain link fence, approximately 30 feet away from the south side of Building 20, and was installed by and is owned by the gas company. Repair and rehabilitation improvements for this project should not impact this fuel storage tank. Should rehabilitation improvements increase the density of the project (e.g. increase the number of units and associated persons exposed to the hazard within the acceptable separation distance), mitigative measures would need to be implemented for the fuel tank in compliance with HUD requirements.

Under CFR Title 24, Part 51, Subpart C, increasing the residential density and number of people under a rehabilitation project using HUD funding would be considered a "HUD-assisted project." Consequently, the existing fuel storage tank would be subject to standards under this regulation for establishing acceptable separation distances, or the application of the standards can be eliminated or modified if other conditions apply or mitigative measures are provided as identified below. HPHA would need to evaluate site conditions, comply with regulatory requirements, and determine the appropriate measure to implement.

1. The nature of the topography shields the proposed project form the hazard.
2. An existing permanent fire resistant structure of adequate size and strength will shield the proposed project from the hazard.
3. A barrier is constructed surrounding the hazard, at the site of the project, or in between the potential hazard and the proposed project.
4. The structure and outdoor areas used by people are designed to withstand blast overpressure and thermal radiation anticipated from the potential hazard (e.g., the project is of masonry and steel or reinforced concrete and steel construction).

SUPPORTING DOCUMENTATION:

Field: There is a 1,000 gallon above-ground fuel storage tank located approximately 30 feet away from the south side of Building 20. The LPG tank was installed by and is owned by the gas company. As noted by the AMP Manager, there are plans to remove the above-ground storage tank since Mā'ili I no longer uses LPG.

Printed: 24 CFR, Part 51, Subpart C.

Per CFR Title 24 Part 51.201 (Definitions), rehabilitation and modernization improvements that do not increase the density and number of people being exposed to hazardous operations do not meet the definition of a "HUD-assisted project," and are not subject to acceptable separation distance requirements under this regulation. Increasing the density (e.g. increase the number of units and associated persons exposed to the hazard within the acceptable separation distance) under a rehabilitation project using HUD funding would be considered a "HUD-assisted project." Consequently, the existing fuel storage tank would be subject to standards under this regulation for establishing acceptable separation distances, or the application of the standards can be eliminated or modified if other conditions apply or mitigative measures are provided as identified below. HPHA would need to evaluate site conditions, comply with regulatory requirements, and determine the appropriate measure to implement.

1. The nature of the topography shields the proposed project form the hazard.
2. An existing permanent fire resistant structure of adequate size and strength will shield the proposed project from the hazard.
3. A barrier is constructed surrounding the hazard, at the site of the project, or in between the potential hazard and the proposed project.
4. The structure and outdoor areas used by people are designed to withstand blast overpressure and thermal radiation anticipated from the potential hazard (e.g., the project is of masonry and steel or reinforced concrete and steel construction).

IX. FARMLANDS PROTECTION (7 CFR PART 658)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. Since the property consists of an existing housing development within an urbanized area, no farmlands would be impacted by the implementation of repair and rehabilitation improvements.

Printed: The property is designated for "Urban" use by the State Land Use Commission and is zoned for "R-5 Residential" use by the City and County of Honolulu.

Hawai`i Office of Planning website at: http://planning.hawaii.gov/gis/
(Date accessed: 6/30/2015).

X. FLOODPLAIN MANAGEMENT (EXECUTIVE ORDER 11988, 24 CFR PART 55)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program

The project site is located in Zone X, an area of minimal flooding, and is located outside the 500-year flood zone. A field inspection and information obtained from the AMP Manager confirmed no major flooding issues within the site. The project is in compliance with Executive Order 11988.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the Mā‘ili I housing project did not visually reveal any signs of previous flooding problems. An interview with the AMP Manager determined that no major ponding or flooding issues have occurred on the project site.

Printed: Flood Insurance Rate Map, City and County of Honolulu, Hawai‘i Community Panel Number Community Panel Number 15003C0192J, Revised November 5, 2014).

Hawai`i Department of Land and Natural Resources website at:
http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 6/30/15)

XI. HISTORIC PRESERVATION (NATIONAL HISTORIC PRESERVATION ACT OF 1966; SECTIONS 106 AND 110; 36 CFR, PART 800)

CONTACT:
Ms. Suzanne Case, Chairperson
Department of Land and Natural Resources (DLNR)
State of Hawai‘i
1151 Punchbowl Street
Honolulu, Hawai‘i 96813
Tel. #: 587-0400

SUPPORTING DOCUMENTS	
X	Field
X	Contact
X	Printed
X	Experience
X	Study

DETERMINATION:

Status Category: No Adverse Effect on Historic Properties with Mitigation

Mā‘ili I is 46 years old and was initially occupied in 1969, and underwent a major renovation in 1992. In May 2015, Fung Associates conducted an Architectural Inventory Survey (AIS) for Mā‘ili I. The 2015 AIS notes that Mā‘ili I was the first “turnkey” project by the Hawai`i Housing Authority (HHA), a predecessor

to the HPHA. As a result of a complete renovation in 2002, Mā‘ili I no longer retains its integrity of materials or design and does not appear to meet the criteria for listing in the National Register of Historic Places (NRHP). In a letter dated November 16, 2015, the State Historic Preservation Officer (SHPO) provided a determination and set forth conditions for ground-disturbing activities. In responding to this letter, the HPHA concurred with the conditions set forth by the SHPO.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the Mā‘ili I housing project did not locate any existing or potential archaeological sites (e.g., heiau) or cultural features on the property. The project site has undergone extensive ground-altering activities since it was initially developed and improved with buildings, driveways, parking lots, sidewalks, and other related improvements. An interview with the AMP Manager indicates that no known sites or features are present on the property.

Contact: Based on the findings and recommendations of the 2015 AIS, the HPHA submitted a letter to the SHPO dated August 20, 2015 regarding 28 housing projects, which is included in the Appendix. Of this total, 15 housing projects (including Mā‘ili I) did not meet National Register eligibility criteria, therefore, a “no historic properties affected” determination was proposed for these repair and rehabilitation improvements. Repair and rehabilitation improvements for the other 13 housing projects were determined to meet National Register eligibility criteria and were proposed to have “no adverse effect” on historic properties subject to certain mitigative measures.

In a letter dated November 16, 2015, the SHPO determined that repair and rehabilitation improvements for this housing project would have “no adverse effect” on historic properties instead of “no historic properties affected” pursuant to NHPA Section 106 and subject to the following mitigative measures. In responding to this letter, the HPHA concurred with the conditions set forth by the SHPO. A copy of these letters is included in Exhibit C.

1. If ground disturbing activity is anticipated, HPHA must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation.

    a. Submit detailed plans, specifications and a detailed scope of work once the plans have been developed.

    b. Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation.

    c. Submit a TMK map showing the full extent of the project area within the affected parcel/s.

    d. Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area.

    e. Summary of land use history, such as previous intensive cultivation, grubbing or grading.

f. Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

In addition to these mitigation measures, the HPHA would enter into a Programmatic Agreement with the SHPO to address the implementation of future repair and rehabilitation improvements to State housing projects after the current Section 106 review process is completed and prior to the next environmental review process in approximately five years. Furthermore, should subsurface human remains or other traces of human activity greater than 50 years old be encountered during construction, all work in the vicinity of the find would immediately stop and the SHPD would be promptly notified. The treatment of any human remains that are encountered would be conducted in accordance with applicable requirements of Chapter 6E, Hawai‘i Revised Statutes (Historic Preservation) and Chapter 13-300, Hawai‘i Administrative Rules (Rules of Practice and Procedure Relating to Burial Sites and Human Remains).

Printed: A review of the U.S. National Parks Service website for the National Register of Historic Places did not identify any historic properties within the limits of this housing project. A similar review of the State DLNR website for the State Register of Historic Places revealed that there are no historic properties within the project site.

National Register: U.S. National Park Service website at: http://www.nps.gov/nr/research/ (Date accessed: 7/2/15).

State Register: Hawai`i Department of Land and Natural Resources website at: http://dlnr.hawaii.gov/shpd/state-register/ (Date accessed: 7/2/15).

Experience: In a letter to the SHPD dated July 15, 2005, the Housing and Community Development Corporation of Hawai`i (HCDCH), a predecessor to the HPHA, proposed minor repair and rehabilitation improvement at 39 public housing projects throughout Hawai`i (including Mā‘ili I) and believed the work would have “no effect” on significant historic sites. The HCDCH also asked the SHPD to: (1) define the area of potential effect for the housing projects; (2) identify and evaluate historic properties within the housing projects; and (3) assess and resolve any adverse effects of the housing projects per Section 106 of the National Historic Preservation Act of 1966.

In a letter to the HCDCH dated September 27, 2005, the SHPO responded by requesting that a programmatic agreement (PA) with the HCDCH be developed that would also address the recordation of housing projects that have not yet reached the 50-year milestone but may face possible adverse effects from the proposed work.

Based on follow up discussions with the SHPD, Mason Architects prepared a historic property evaluation (HPE) on behalf of the HCDCH in April 2006 for six public housing projects on Hawai‘i Island and O‘ahu. This HPE did not include the Mā‘ili I housing project. The six projects covered by the HPE met, or would soon meet, the 50-year age criteria to become eligible for listing in the NRHP. At the time, only two of the projects were over 50 years old and only two met NRHP eligibility criteria. The HPE was submitted to the SHPD for review and comment on June 6, 2006. No comments or objections were received from the SHPO on the 2006 HPE or the “no effect” determination that was set forth in the HCDCH letter dated July 15, 2005.

In letter to the SHPO dated April 19, 2011, the HPHA determined that minor repair and rehabilitation improvement at 57 public housing projects throughout Hawai‘i (including

Mā‘ili I) would have “no effect” on historic properties. The SHPO had no comments or objections on the “no effect” determination.

Study: Mā‘ili I is 46 years old and was first occupied in 1969 and underwent a major renovation in 1992. The 2015 AIS evaluated 17 HPHA housing projects, including Mā‘ili I. The purpose of the AIS was to evaluate certain previously-evaluated housing projects along with other housing projects in order to determine if they would meet NRHP eligibility criteria. The section of the AIS that covers this housing project is included in Exhibit C, while the entire document is included in the Appendices.

Mā‘ili I is the first “turnkey” program project by the Hawai‘i Housing Authority (HHA), a predecessor to the HPHA. With this program, a developer would approach HHA with a proposed site and building designs that met HHA standards. Thus, dwellings were built by private developers just as any other subdivision, but with the guarantee that the HHA will purchase the entire subdivision upon its completion. Although Mā‘ili I is an early example of a turnkey project, it no longer retains its integrity of materials or design, having undergone a complete renovation in 2002. As a result of the remodeling, the exterior walls have been clad in T-111 siding, new windows and doors have replaced the originals, and the historic pitch and gravel roofs have been replaced by standing seam metal roofs. In addition, the entry has been modified by the addition of a roof over the front doorway.

XII. NOISE ABATEMENT CONTROL (24 CFR PART 51B)

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Within HUD Noise Standards

The project site is not situated along a highway or arterial roadway with a high volume of vehicular traffic that may generate significant noise. Farrington Highway (Route 93) is State arterial roadway in West O‘ahu that serves the communities along the leeward coast including Mā‘ili. Route 93 accommodates vehicle traffic entering and leaving Mā‘ili, and forms a cross intersection with Maliona Street which provides access to the housing project and other residences in the neighborhood. The HUD noise level calculator estimated noise levels at the project site to be 51.7 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA

SUPPORTING DOCUMENTATION:

Field: Maliona Street provides access to Farrington Highway for the residents of Mā‘ili I. The distance from the intersection of the highway with Maliona Street to the project site is approximately 760 feet. As a result, noise generated by traffic along Farrington Highway is very minimal due to this distance. Intervening buildings between the highway and the housing project also help dampen any ambient traffic noise to insignificant levels. No

significant noise generating sources were identified at the project site during the site inspection and an interview with the AMP Manager did not identify any loud noise producing sources in the area. Noise sources are predominantly associated with vehicular traffic along adjacent roadways and voices from surrounding activities

Study: Land use in the vicinity of the project site mostly consists of single-family dwellings. The HUD day/night noise level calculator was used to estimate approximate traffic noise levels at the project site. Farrington Highway is a State arterial roadway that is generally aligned in a northerly to southerly direction. It accommodates vehicle traffic entering and leaving the Mā‘ili area and handles about 32,435 vehicles a day based upon State Department of Transportation 2013 traffic data. Given the distance between the project site and the center line of this roadway, the estimated noise levels at the project site using the HUD calculator was 51.7 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

XIII. SOLE SOURCE AQUIFER (40 CFR PART 149)

SUPPORTING DOCUMENTS	
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact on Sole Source Aquifer.

The housing project is located within the O‘ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation. However, if exceptional circumstances require compliance steps with any of these authorities, such compliance must be established and documented prior to approving the site-specific loan or grant.

SUPPORTING DOCUMENTATION:

Printed: This determination was based upon review of the Sole Source Aquifer Memorandum of 4/30/90 (Sections II.B.1 and II.B.2) and consideration of the type of rehabilitation related improvements that would be conducted for this project.

XIV. WETLANDS PROTECTION (EXECUTIVE ORDER 11990)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the property did not identify the presence of any wetlands.

Printed: U.S Fish and Wildlife Service website at: http://www.fws.gov/wetlands/data/mapper.html (Date accessed 6/30/2015).

XV. WILD AND SCENIC RIVERS ACT (16 USC 1271, SECTION 7 (B), (C))

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no Wild and Scenic Rivers in Hawai‘i, which excludes this project from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: National Wild and Scenic Rivers System website at: http://www.rivers.gov/index.php (Date accessed: 6/30/2015).

XVI. ENVIRONMENTAL JUSTICE (EXECUTIVE ORDER NO. 12898)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact on Requirements

Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, repair and rehabilitation improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations. Repair and rehabilitation improvements should benefit low-income and minority populations living within this housing project.

SUPPORTING DOCUMENTATION:

Printed: Executive Order 12898.

U.S. Department of Housing and Urban Development website at:
https://www.hudexchange.info/environmental-review/environmental-justice/

EXHIBIT A

Location Map, TMK Map, Site Map, Flood Map, and Site Photos

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

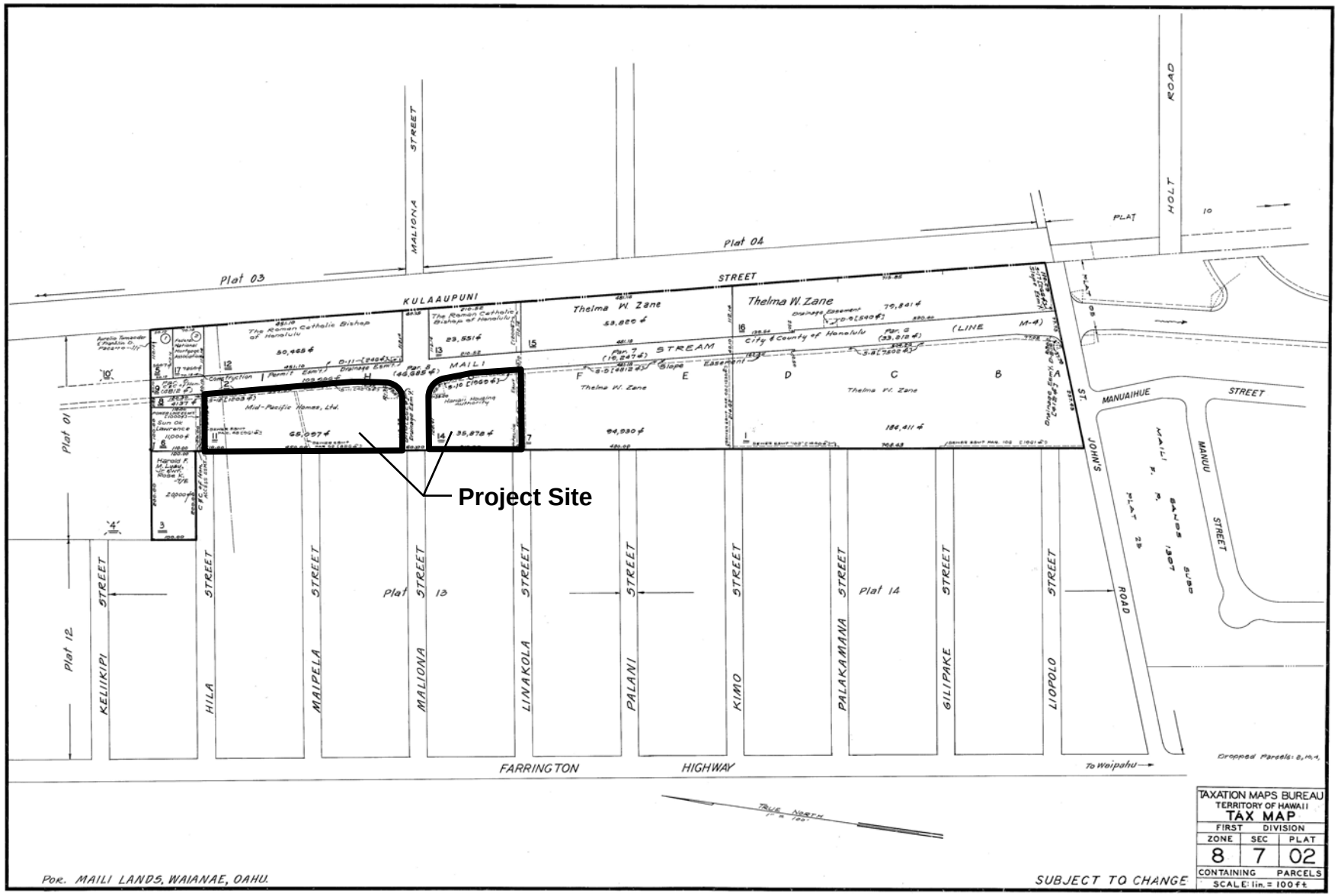
HPHA No. 1033 - Mā'ili I (AMP 44)

Figure 1 - Project Location Map

Wai'anae, O'ahu

1,000 FT

HHF PLANNERS
places for people

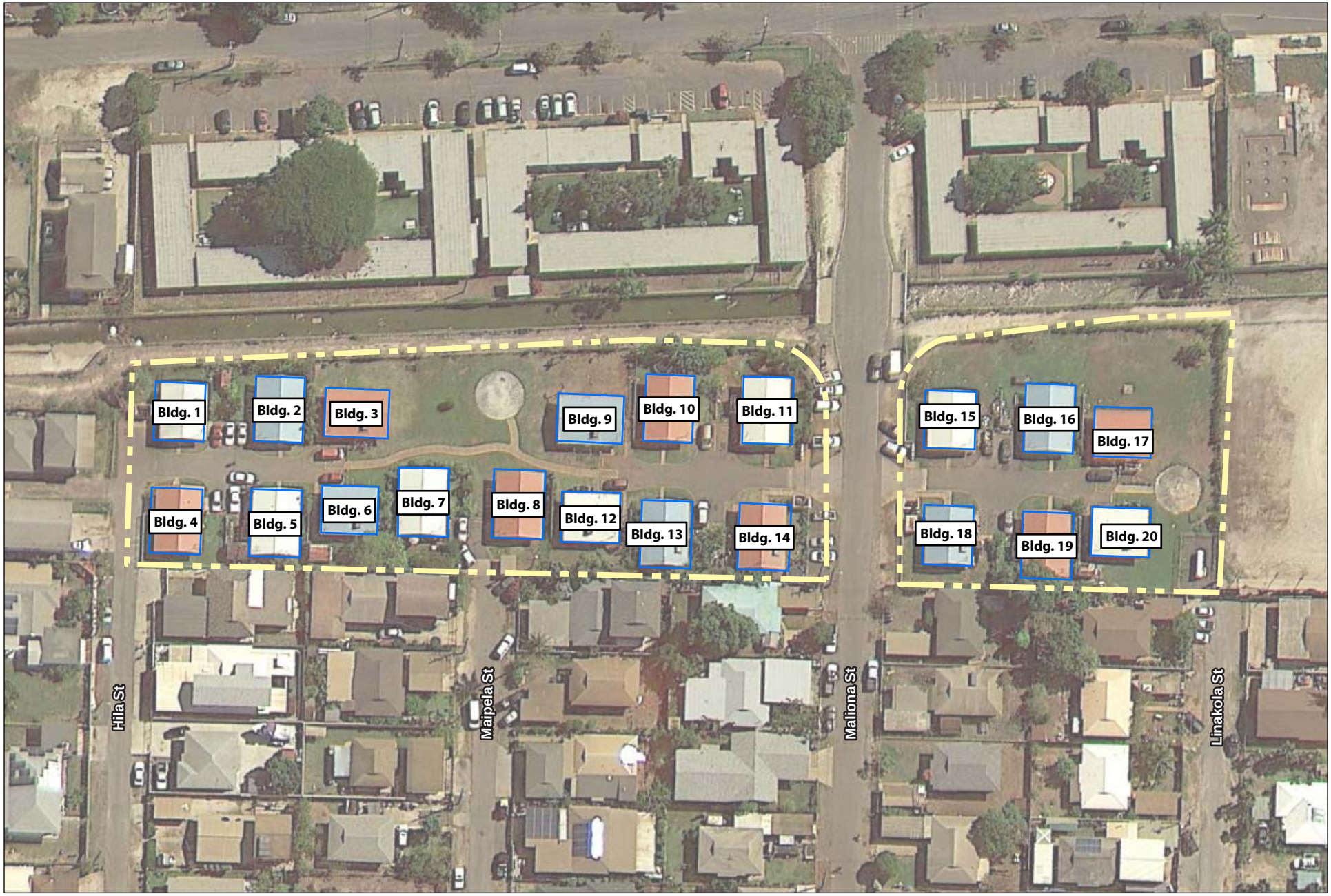


HPHA No. 1033 - Mā'ili I (AMP 44)

Figure 2 - TMK Map

Wai'anae, O'ahu

HHF PLANNERS
places for people



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1033 - Mā'ili I (AMP 44)

Figure 3 - Site Map

Wai'anae, O'ahu

60 FEET

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

LEGEND

Zone X - Outside the 0.2% Annual Chance of Flood

HPHA No. 1033 - Mā'ili I (AMP 44)

Figure 4 - Flood Map

Wai'anae, O'ahu

60 FEET

HHF PLANNERS
places for people

MĀʻILI I

SITE PHOTOS

View of Maliona Street, facing west. Traffic calming speed bumps are installed. Project site is to the left and right (not shown).

View of project site (between Building 20 and 17) towards Maliona Street.

View of project site from Maliona Street driveway, facing south

View from project's south-east corner, facing Buidling 17 & 16.

View from project's south-west corner, facing Buiding 20 & 19.

Gas tank near Building 20

Maliona Street bisects this housing project site. This photo and all subsequent photos are north of Maliona Street.

View of northern portion of housing site, between Buidling 11 & 14, looking north.

View of Maipela Street, facing west. Project site is behind (not shown)

View of Hila Street, facing west. Project site is to the left (not shown).

Building 4, facing south

Fenceline along Maili Stream near Building 1, looking south

Drain inlet to Maili Stream

EXHIBIT B

EDR Radius Map Report

Maili I
87-172 Maliona St.
Waianae, HI 96792

Inquiry Number: 4237094.182s
March 17, 2015

EDR Summary Radius Map Report

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

FORM-NULL-PVC

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

87-172 MALIONA ST.
HONOLULU County, HI 96792

COORDINATES

Latitude (North):	21.4209000 - 21˚ 25' 15.24''
Longitude (West):	158.1753000 - 158˚ 10' 31.08''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	585471.1
UTM Y (Meters):	2368816.2
Elevation:	10 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	USGS 7.5 min quad index

MAPPED SITES SUMMARY

Target Property Address:
87-172 MALIONA ST.
, HI 96792

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
Reg	LUALUALEI NAVAL RADI		DOD	Same	2885, NE
Reg	NAVAL COMPUTER AND T	500 CENTER STREET	NPL, CERCLIS, US ENG CONTROLS, US INST CONTROL,...	Same	2839, NE
1		87154 LILIANA ST	EDR US Hist Auto Stat	Higher	893, NNW
2	UNOCAL SERVICE STATI	84-1114 FARRINGTON H	SHWS	Higher	3588, NNW
3	HECO SUBSTATION: MIK	87-575 PAAKEA RD	SHWS, SPILLS	Higher	4336, East
4	C&CH WAIANAE CORP YA	86-220 FARRINGTON HW	SHWS, LUST, UST, Financial Assurance	Higher	4473, NW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: A review of the NPL list, as provided by EDR, and dated 12/16/2014 has revealed that there is 1 NPL site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NAVAL COMPUTER AND T	***500 CENTER STREET***	***NE 1/2 - 1 (0.538 mi.)***	***0***	***7***

State- and tribal - equivalent CERCLIS

SHWS: A review of the SHWS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 3 SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
UNOCAL SERVICE STATI	84-1114 FARRINGTON H	NNW 1/2 - 1 (0.680 mi.)	2	7
HECO SUBSTATION: MIK	***87-575 PAAKEA RD***	***E 1/2 - 1 (0.821 mi.)***	***3***	***7***
C&CH WAIANAE CORP YA	***86-220 FARRINGTON HW***	***NW 1/2 - 1 (0.847 mi.)***	***4***	***8***

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

DOD: A review of the DOD list, as provided by EDR, and dated 12/31/2005 has revealed that there is 1

DOD site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LUALUALEI NAVAL RADI		NE 1/2 - 1 (0.546 mi.)	0	7

ROD: A review of the ROD list, as provided by EDR, and dated 11/25/2013 has revealed that there is 1 ROD site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NAVAL COMPUTER AND T	***500 CENTER STREET***	***NE 1/2 - 1 (0.538 mi.)***	***0***	***7***

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Auto Stat: A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there is 1 EDR US Hist Auto Stat site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	87154 LILIANA ST	NNW 1/8 - 1/4 (0.169 mi.)	1	7

ORPHAN SUMMARY

Count: 2 records.

City	EDR ID	Site Name	Site Address	Zip	Database(s)
WAIANAE	1015730971	USARMY MAKUA MILITARY RESERVATION	FARRINGTON HWY	96792	RCRA-TSDF, CERCLIS, CORRACTS, RCRA-CESQG
WAIANAE	1006819047	P & S SANITARY HAULING INC	87-746 FARRINGTON HWY	96792	SHWS

OVERVIEW MAP - 4237094.182S

- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Maili I ADDRESS: 87-172 Maliona St. Waianae HI 96792 LAT/LONG: 21.4209 / 158.1753	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.182s DATE: March 17, 2015 5:51 pm

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DETAIL MAP - 4237094.182S

★ Target Property
▲ Sites at elevations higher than or equal to the target property
◆ Sites at elevations lower than the target property
Manufactured Gas Plants
Sensitive Receptors
National Priority List Sites
Dept. Defense Sites

0 1/16 1/8 1/4 Miles

Indian Reservations BIA
County Boundary
Oil & Gas pipelines from USGS
100-year flood zone
500-year flood zone
National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Maili I ADDRESS: 87-172 Maliona St. Walanae HI 96792 LAT/LONG: 21.4209 / 158.1753	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.182s DATE: March 17, 2015 5:52 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	1	NR	1
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
SHWS	1.000		0	0	0	3	NR	3
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		0	0	0	NR	NR	0
INST CONTROL	0.500		0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	1	NR	1
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	1	NR	1
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		0	1	NR	NR	NR	1
EDR US Hist Cleaners	0.250		0	0	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
RGA HWS	TP		NR	NR	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

DOD | **LUALUALEI NAVAL RADIO STATION** | **DOD** | **CUSA147739**
Region | | | **N/A**
NE | **LUALUALEI NAVAL RADIO STA (County), HI**
1/2-1
2885 ft.

Click here for full text details

NPL | **NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EA** | **NPL** | **1000167735**
Region | **500 CENTER STREET** | **CERCLIS** | **HI0170090054**
NE | **WAHIAWA, HI 96786** | **US ENG CONTROLS**
1/2-1 | | **US INST CONTROL**
2839 ft. | | **ROD**
| | **ICIS**

Click here for full text details

NPL
EPA Id: HI0170090054

CERCLIS
EPA Id: HI0170090054

---

1 | | **EDR US Hist Auto Stat** | **1015660393**
NNW | **87154 LILIANA ST** | | **N/A**
1/8-1/4 | **WAIANAE, HI 96792**
0.169 mi.
893 ft.

Relative:
Higher

Click here for full text details

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2 | **UNOCAL SERVICE STATION, FORMER #5245** | **SHWS** | **S104657527**
NNW | **84-1114 FARRINGTON HWY** | | **N/A**
1/2-1 | **MAKAHA, HI 96792**
0.680 mi.
3588 ft.

Relative:
Higher

Click here for full text details

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3 | **HECO SUBSTATION: MIKILUA SUBSTATION** | **SHWS** | **S107024362**
East | **87-575 PAAKEA RD** | **SPILLS** | **N/A**
1/2-1 | **WAIANAE, HI 96792**
0.821 mi.
4336 ft.

Relative:
Higher

Click here for full text details

4 | **C&CH WAIANAE CORP YARD** | **SHWS** | **U003221952**
NW | **86-220 FARRINGTON HWY** | **LUST** | **N/A**
1/2-1 | **WAIANAE, HI 96792** | **UST**
0.847 mi. | | **Financial Assurance**
4473 ft.

Relative:
Higher

Click here for full text details

LUST
Facility Id: 9-200133
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-200133
Tank Status: Permanently Out of Use
Tank Status: Permanently out of Use

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
HI	AIRS	List of Permitted Facilities	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	BROWNFIELDS	Brownfields Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	CDL	Clandestine Drug Lab Listing	Department of Health	08/04/2010	09/10/2010	10/22/2010
HI	DRYCLEANERS	Permitted Drycleaner Facility Listing	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	ENG CONTROLS	Engineering Control Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	Financial Assurance	Financial Assurance Information Listing	Department of Health	12/01/2014	12/19/2014	01/28/2015
HI	INST CONTROL	Sites with Institutional Controls	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	LUST	Leaking Underground Storage Tank Database	Department of Health	12/16/2014	12/19/2014	01/28/2015
HI	RGA HWS	Recovered Government Archive State Hazardous Waste Facilitie	Department of Health		07/01/2013	01/08/2014
HI	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Health		07/01/2013	01/17/2014
HI	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	Department of Health		07/01/2013	01/03/2014
HI	SHWS	Sites List	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	SPILLS	Release Notifications	Department of Health	12/02/2014	12/22/2014	01/28/2015
HI	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	03/10/2012	01/03/2013	02/11/2013
HI	SWF/LF	Permitted Landfills in the State of Hawaii	Department of Health	09/17/2012	04/03/2013	05/10/2013
HI	UIC	Underground Injection Wells Listing	Department of Health	02/07/2013	02/12/2013	04/09/2013
HI	UST	Underground Storage Tank Database	Department of Health	12/18/2014	12/19/2014	01/28/2015
HI	VCP	Voluntary Response Program Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	04/22/2013	03/03/2015	03/09/2015
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2011	02/26/2013	04/19/2013
US	CERCLIS	Comprehensive Environmental Response, Compensation, and Liab	EPA	10/25/2013	11/11/2013	02/13/2014
US	CERCLIS-NFRAP	CERCLIS No Further Remedial Action Planned	EPA	10/25/2013	11/11/2013	02/13/2014
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	07/01/2014	09/10/2014	10/20/2014
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	01/23/2015	02/13/2015	03/09/2015
US	CORRACTS	Corrective Action Report	EPA	12/09/2014	12/29/2014	01/29/2015
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DELISTED NPL	National Priority List Deletions	EPA	12/16/2014	01/08/2015	02/09/2015
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	07/31/2012	08/07/2012	09/18/2012
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EDR US Hist Auto Stat	EDR Exclusive Historic Gas Stations	EDR, Inc.			
US	EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	09/29/2014	09/30/2014	11/06/2014
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	07/21/2014	10/07/2014	10/20/2014
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
US	FEMA UST	Underground Storage Tank Listing	FEMA	01/01/2010	02/16/2010	04/12/2010
US	FINDS	Facility Index System/Facility Registry System	EPA	08/16/2014	09/10/2014	10/20/2014
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	06/06/2014	09/10/2014	09/18/2014
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	12/29/2014	12/30/2014	03/09/2015
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	01/23/2015	02/06/2015	03/09/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	02/01/2013	05/01/2013	11/01/2013

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	01/30/2015	02/05/2015	03/09/2015
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/10/2015	03/13/2015
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	01/28/2015	01/30/2015	03/13/2015
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	01/08/2015	01/08/2015	02/09/2015
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2005	12/08/2006	01/11/2007
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	02/01/2013	05/01/2013	01/27/2014
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	01/30/2015	02/05/2015	03/13/2015
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/13/2015	03/13/2015
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	01/29/2015	01/30/2015	03/13/2015
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	12/14/2014	02/13/2015	03/13/2015
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	09/29/2014	10/01/2014	11/06/2014
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	11/25/2014	11/26/2014	01/29/2015
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	02/18/2014	03/18/2014	04/24/2014
US	LUCIS	Land Use Control Information System	Department of the Navy	12/03/2014	12/12/2014	01/29/2015
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	12/29/2014	01/08/2015	01/29/2015
US	NPL	National Priority List	EPA	12/16/2014	01/08/2015	02/09/2015
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	07/01/2014	10/15/2014	11/17/2014
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	02/01/2011	10/19/2011	01/10/2012
US	PRP	Potentially Responsible Parties	EPA	10/25/2013	10/17/2014	10/20/2014
US	Proposed NPL	Proposed National Priority List Sites	EPA	12/16/2014	01/08/2015	02/09/2015
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	10/07/2014	10/08/2014	10/20/2014
US	RCRA NonGen / NLR	RCRA - Non Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RMP	Risk Management Plans	Environmental Protection Agency	08/01/2014	08/12/2014	11/06/2014
US	ROD	Records Of Decision	EPA	11/25/2013	12/12/2013	02/24/2014
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	03/07/2011	03/09/2011	05/02/2011
US	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2011	07/31/2013	09/13/2013
US	TSCA	Toxic Substances Control Act	EPA	12/31/2012	01/15/2015	01/29/2015
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	09/14/2010	10/07/2011	03/01/2012
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/16/2014	10/31/2014	11/17/2014
US	US AIRS MINOR	Air Facility System Data	EPA	10/16/2014	10/31/2014	11/17/2014

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	12/22/2014	12/22/2014	01/29/2015
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	11/19/2014	11/21/2014	01/29/2015
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	12/30/2014	12/31/2014	01/29/2015
US	Oil/Gas Pipelines	GeoData Digital Line Graphs from 1:100,000-Scale Maps	USGS			
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
US	USGS 7.5' Topographic Map	Scanned Digital USGS 7.5' Topographic Map (DRG)	USGS			

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

MAILI I
87-172 MALIONA ST.
WAIANAE, HI 96792

TARGET PROPERTY COORDINATES

Latitude (North):	21.4209 - 21˚ 25' 15.24''
Longitude (West):	158.1753 - 158˚ 10' 31.08''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	585471.1
UTM Y (Meters):	2368816.2
Elevation:	10 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	21158-D2 WAIANAE, HI
Most Recent Revision:	Not reported

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

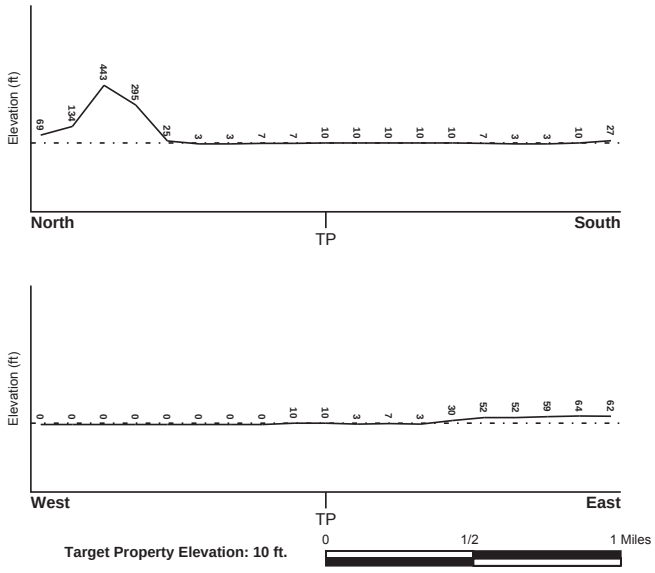
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General NW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
HONOLULU, HI	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 15003C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
WAIANAE	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

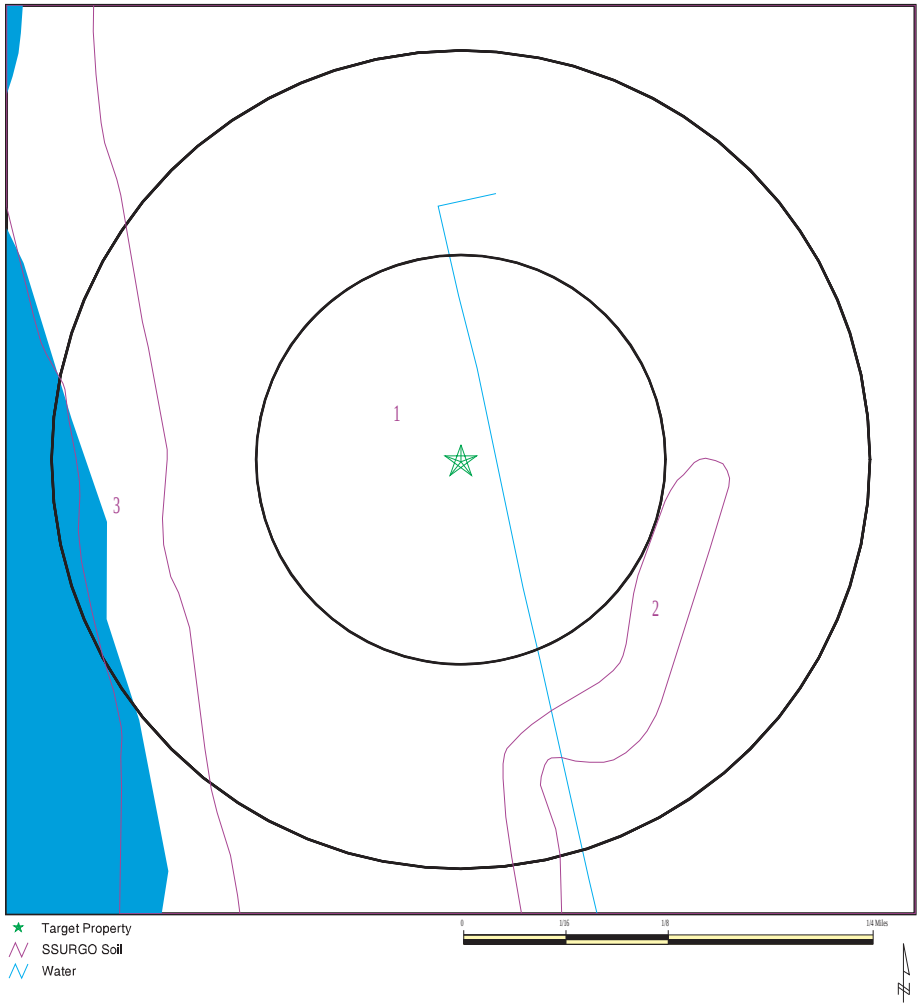
Era: -
System: -
Series: -
Code: N/A *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: -

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4237094.182s



SITE NAME: Maili I ADDRESS: 87-172 Maliona St. Walanae HI 96792 LAT/LONG: 21.4209 / 158.1753	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.182s DATE: March 17, 2015 5:52 pm

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DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Mokuleia

Soil Surface Texture: clay

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	16 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14.11 Min: 4.23	Max: 7.3 Min: 6.6
2	16 inches	50 inches	sand	Granular materials (35 pct. or less passing No. 200), Fine Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42.34	Max: 8.4 Min: 7.9

Soil Map ID: 2

Soil Component Name: Keaau

Soil Surface Texture: stony clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 70 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	14 inches	stony clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14.11 Min: 1.41	Max: 7.8 Min: 7.4
2	14 inches	33 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4.23 Min: 0.42	Max: 7.8 Min: 7.4
3	33 inches	38 inches	cemented material	Not reported	Not reported	Max: 705 Min: 42.34	Max: Min:
4	38 inches	57 inches	sand	Granular materials (35 pct. or less passing No. 200), Fine Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 705 Min: 141.14	Max: 8.4 Min: 7.9

Soil Map ID: 3

Soil Component Name: Beaches

Soil Surface Texture: coarse sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 92 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	coarse sand	Granular materials (35 pct. or less passing No. 200), Fine Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42.34	Max: 7.8 Min: 6.1
2	5 inches	59 inches	coarse sand	Granular materials (35 pct. or less passing No. 200), Fine Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42.34	Max: 7.8 Min: 6.1

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	USGS40000270722	1/8 - 1/4 Mile West
A2	USGS40000270725	1/4 - 1/2 Mile NNE
B4	USGS40000270723	1/4 - 1/2 Mile WNW
C7	USGS40000270714	1/4 - 1/2 Mile ESE
D8	USGS40000270724	1/4 - 1/2 Mile ENE
E10	USGS40000270730	1/2 - 1 Mile NNE
F12	USGS40000270733	1/2 - 1 Mile NW
G15	USGS40000270684	1/2 - 1 Mile SE
17	USGS40000270737	1/2 - 1 Mile NNE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A3	HI8000000003343	1/4 - 1/2 Mile NNE
B5	HI8000000003341	1/4 - 1/2 Mile WNW
C6	HI8000000003332	1/4 - 1/2 Mile ESE
D9	HI8000000003342	1/4 - 1/2 Mile ENE
E11	HI8000000003352	1/2 - 1 Mile NNE
F13	HI8000000003355	1/2 - 1 Mile NW
G14	HI8000000003294	1/2 - 1 Mile SE
16	HI8000000003320	1/2 - 1 Mile ESE

PHYSICAL SETTING SOURCE MAP - 4237094.182s

County Boundary
Major Roads
Contour Lines
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons

0 1/4 1/2 1 Miles

Groundwater Flow Direction
Indeterminate Groundwater Flow at Location
Groundwater Flow Varies at Location

SITE NAME: Maili I ADDRESS: 87-172 Maliona St. Walanae HI 96792 LAT/LONG: 21.4209 / 158.1753	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.182s DATE: March 17, 2015 5:52 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
1 West 1/8 - 1/4 Mile Higher	Click here for full text details	FED USGS	USGS40000270722
A2 NNE 1/4 - 1/2 Mile Lower	Click here for full text details	FED USGS	USGS40000270725
A3 NNE 1/4 - 1/2 Mile Lower	Click here for full text details	HI WELLS	HI8000000003343
B4 WNW 1/4 - 1/2 Mile Lower	Click here for full text details	FED USGS	USGS40000270723
B5 WNW 1/4 - 1/2 Mile Higher	Click here for full text details	HI WELLS	HI8000000003341
C6 ESE 1/4 - 1/2 Mile Higher	Click here for full text details	HI WELLS	HI8000000003332
C7 ESE 1/4 - 1/2 Mile Higher	Click here for full text details	FED USGS	USGS40000270714
D8 ENE 1/4 - 1/2 Mile Higher	Click here for full text details	FED USGS	USGS40000270724
D9 ENE 1/4 - 1/2 Mile Higher	Click here for full text details	HI WELLS	HI8000000003342

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
E10 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270730**
E11 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003352**
F12 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270733**
F13 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003355**
G14 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003294**
G15 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270684**
16 **ESE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003320**
17 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270737**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for HONOLULU County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 96792

Number of sites tested: 5

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.300 pCi/L	100%	0%	0%
Living Area - 2nd Floor	0.200 pCi/L	100%	0%	0%
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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EXHIBIT C

Section 106 Consultation &

Architectural Inventory Survey Information

DAVID Y. IGE
GOVERNOR OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555
KAPOLEI, HAWAII 96707

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

KEKOA KALUHIWA
FIRST DEPUTY

JEFFREY T. PEARSON
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

November 16, 2015

IN REPLY REFER TO:
LOG: 2015. 02939, 2015.03570
DOC: 1509JLP41
Architecture, Archaeology,
History and Culture

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
P.O. Box 17907
Honolulu, HI 96817

Dear Mr. Ouansafi,

SUBJECT: **Chapter 6E-8 and National Historic Preservation Act (NHPA) Section 106 Consultation – Department of Housing and Urban Development (HUD)**
Department of Human Services, Hawaii Public Housing Authority
Maili I Rehabilitation Project – 87-172 Maliona Street
Waianae Ahupua‘a, Waianae District, Island of O‘ahu
TMK: (1) 8-7-002:011

Thank you for your submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services (DHS), Hawaii Public Housing Authority (HPHA) consultation with SHPD in accordance with 36 CFR 800.3, and pursuant to Hawaii Revised Statutes (HRS), Chapter 6E. SHPD received another submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience.

Your submittal indicates that DHS/HPHA is requesting the State Historic Preservation Officer’s (SHPO) concurrence with a determination of “no effect” for the proposed HUD repair and rehabilitation improvement projects. HUD funding will be expended under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants and other grants. The repair and rehabilitation project will involve 43 existing public housing projects located throughout the State of Hawaii over the next five (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 on their behalf. This letter addresses the rehabilitation of Maili I Public Housing located at 87-172 Maliona Street, Waianae.

DHS/HPHA has identified Maili I as one of the 43 project site and it’s area of potential effect as the 2.29 acre parcel owned by the State of Hawaii, Hawaii Housing Authority identified as TMK: (1) 8-7-002:011 In addition DHS/HPHA has indicated at this stage of the planning process, they are unclear whether this project area identified as TMK: (1) 4-5-023:008, will require any ground disturbances.

Our records indicate numerous archaeological studies have been conducted within the Waianae Ahupuaa and a large number of surface and subsurface traditional and historic properties have been identified. The traditional sites include several Heiau(s), enclosures, rock walls, and large agricultural complexes consisting of wet land and dry land farming, and human burials. A human burial (SIHP 50-80-07-4244) is documented at approximately 1/4 mile from the proposed project site. Other historic properties include remnant ranching and sugar plantation remnants. In addition, SHPD has previously commented on a revised scope of work for the Maili I Homes Project on June 3, 1999 (Log No: 23539; Doc No 9905SC24). SHPD’s determination was indicative to no ground disturbances or demolitions of existing structures.

Pursuant to NHPA, Section 106 and HRS §6E-8 we have reviewed the undertaking at 87-172 Maliona Street, Waianae. The SHPO has determined, for the purpose of NHPA Section 106 that the proposed undertaking will have **no adverse effect** and that, for the purposes of HRS §6E-8, **no historic properties affected**, within the area of potential effects (APE) for the above cited undertaking **provided the following conditions are met:**

- There will be no ground disturbing activities within your final scope of work. If ground disturbing activity is anticipated, DHS must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation;
- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;
- Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;
- Submit a TMK map showing the full extent of the project area within the affected parcel(s);
- Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Summary of land use history, such as previous intensive cultivation, grubbing or grading;
- Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions regarding archaeological resources or concerns please contact Susan Lebo at (808) 692-8019 or at Susan.A.Lebo@hawaii.gov. For any history and cultural concerns please contact Ka‘āhiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov. Please contact Jessica Puff at Jessica.L.Puff@hawaii.gov or at (808) 692-8023 for any questions regarding architectural concerns or this letter.

Sincerely,

Alan A. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

MAILI I

Project	Maili I
Architect	Richard Matsunaga
Built	1969
National Register Eligibility	Not Eligible

Description

Maili I is comprised of 20 units built on a level, 2.3181 parcel in a quiet residential neighborhood one block mauka of Farrington Highway in Maile. The development is primarily clustered around three cul-de-sacs, two of which are accessed from Maliona Street, and the third from Hila Street. In addition, two three-bedroom houses are located at the head of Maipela Street. The project includes seven two-bedroom and 13 three-bedroom houses, with a mixture of the different sized houses on each cul-de-sac.

View from the Miliona Street

Typical Houses

Original Tongue and Groove Walls with Bedroom Closet Door

The single-story houses sit on poured-in-place, reinforced concrete slab foundations. They have front facing gable roofs, which originally were built up with pitch and gravel, but now are sheathed in standing seam metal. The walls, originally of redwood tongue-and-groove, now are covered with T-111 without any girt. The windows have also been replaced and now are anodized bronze aluminum sliding and jalousie windows. A non-original shed roof now shelters the centered main entry from the elements.

The interiors are more intact, with their original redwood tongue and groove walls. The bathroom and kitchen have been remodeled, but the bedroom closets still retain their doors, in some of the units.

No historic landscaping remains intact.

MAILI I

History and Significance

HUD started a turnkey program in 1967, and Maili I was the first use of this program in Hawaii. With this program a developer would approach HHA with a proposed site and a building designs which met HHA standards. Prior to the start of construction, HHA would provide the developer a letter of intent to purchase the development once it was constructed, and the federal government would provide the developer interim financing until the developer could obtain a private source of funding. Thus, dwellings were built by private developers just as any other subdivision, but with the guarantee that the HHA will purchase the entire subdivision upon its completion. This new vehicle for the construction of low cost housing was designed to aid in distributing low-income families throughout the community. Through this approach, lower income families would live in the same environment with families of higher income levels.

Maili I was developed by Francis Y. Wong and opened in January 1969. Upon obtaining the completed houses, the HHA selected families from the Waianae area to reside in the new houses. Rent was set between $55 and $65 a month, which included an allowance of $12 to $15 for utilities, with the tenants paying any overage. Tenants were responsible for all yard work and repairs. For the three-bedroom houses, the maximum income was $5,300, plus $100 for every child. HAA applied to federal authorities for a rent-to-own program for these residences, but this “equity accumulation” program never materialized. If it had, families would have paid 20% of their income into an equity plan. Once $365 had accumulated in their account, the tenants could use these moneys as a down payment to purchase their unit.

At the time Maili opened, other turnkey projects being processed by the HHA included two in Wahiawa, one in Nanakuli, and second in Maili. In addition, the Authority was considering turnkey projects at Waimea, Kauai (14 units), and for the elderly at Pahala on the island of Hawaii.

Although Maili I is an early example of low cost housing obtained by HHA via the turnkey program, it no longer retains its integrity of materials or design, having been completely renovated on the exterior in the past several years. The exterior walls have been clad in T-111, new windows and doors have replaced the originals, and the historic pitch and gravel roofs have been replaced by standing seam metal roofs. Also, the entry has been modified by the addition of a roof over the front doorway.

Maili I does not appear to meet the criteria for listing in the National Register of Historic Places.

HAWAII PUBLIC HOUSING AUTHORITY

ENVIRONMENTAL REVIEW

NĀNĀKULI HOMES

Wai`anae, O`ahu

AMP 44

HPHA No. 1035

Prepared for:

State of Hawaii
Hawaii Public Housing Authority

Prepared by:

HHF PLANNERS
places for people

U.S. Department of Housing and Urban Development
451 Seventh Street, SW
Washington, DC 20410
www.hud.gov

espanol.hud.gov

Environmental Review for Activity/Project that is Categorically Excluded Subject to Section 58.5

Pursuant to 24 CFR 58.35(a)

Project Information

Project Name: Nānākuli Homes (AMP 44)

Responsible Entity: Hawaii Public Housing Authority
1002 North School Street
Honolulu, HI 96817

Grant Recipient (if different than Responsible Entity)**:**
Same as Responsible Entity

State/Local Identifier: State of Hawai‘i

Preparer: Mr. Scott Ezer, Vice President
HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawai‘i 96813

Certifying Officer Name and Title: Mr. David Y. Ige
Governor, State of Hawai‘i

Grant Recipient (if different than Responsible Entity)**:**
Same as Responsible Entity

Consultant (if applicable)**:** HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawai‘i 96813

Direct Comments to: Mr. Hakim Ouansafi, Executive Director
Hawaii Public Housing Authority
1002 North School Street
Honolulu, Hawai‘i 96817

Project Location: 87-1606 Farrington Highway
Wai‘anae, Hawai‘i 96792

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]**:**

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a "major construction activity" and would involve one or a combination of several HUD designated categories of actions.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent;
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons;
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland;
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation;
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls);
7. Interior and exterior renovations and rehabilitation;
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site;
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Level of Environmental Review Determination:

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.5. Compliance with and completion of conformance determinations for other statute, executive order, or regulation has been completed and support the Categorical Exclusion.

Funding Information

Grant Number	HUD Program	Funding Amount
To be determined	Capital Fund	To be determined
To be determined	Economic Development Initiative Special Project Grant	To be determined
To be determined	Other Grants	To be determined

Estimated Total HUD Funded Amount:

To be determined by HUD using a formula and based upon federal budget.

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]**:**

Depends upon funds available.

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	*The project is not within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.*
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☒	*The State of Hawai'i does not have any designated coastal barrier resource units. (http://www.fws.gov/CBRA/Maps/Mapper.html)*
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes ☐ No ☒	*As indicated in Flood Insurance Rate Map Panel 15003C0194H, almost the entire project site is located in Zone D (area of undetermined flood hazard). A small section (about 15 feet) of the project's driveway entrance connection with Farrington Highway is situated within Zone AE (subject to 1% annual chance flood, base flood elevation determined). This flood area appears to be associated with flooding that occurs along the Farrington Highway corridor. This area only includes a portion of the project driveway leading into the site, and does not have any building structures within or close to the flood area. A field inspection and information obtained from the AMP Manager confirmed no major flooding issues within the site.* *No significant impacts to existing housing units or floodplain conditions are expected as a result of repair and rehabilitation improvements. The*

		portion of the driveway entrance located within flood Zone AE would need "no-rise" certifications for any proposed fill or grading to ensure flood heights for nearby areas are not adversely affected. Design plans would be submitted to pertinent State and County agencies for review and approval as part of the design review process. Any required site modifications would comply with applicable flood regulations and design standards. Because the housing project is on State-owned property, it would typically be exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). Therefore, the project will comply with applicable flood insurance standards as warranted.

STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5		
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes ☐ No ☒	*The State of Hawai'i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. EPA's Green Book for currently designated "nonattainment areas" as of June 2015. Planned repair and rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.*
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes ☐ No ☒	*Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai'i's Coastal Zone Management (CZM) program.*
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☐ No ☒	*There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.*
Endangered Species	Yes ☒ No ☐	*The HPHA determined that repair and rehabilitation improvements that may be*

Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402		*conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services in their letter dated September 28, 2015 which is included in the Appendices, while project-specific mitigation measures are identified in the following section.*
Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes ☐ No ☒	*There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.*
Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes ☐ No ☒	*The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.*
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes ☐ No ☒	*Almost the entire project site is located in Zone D (area of undetermined flood hazard). A small section (about 15 feet) of the project's driveway entrance connection with Farrington Highway is situated within Zone AE (subject to 1% annual chance flood, base flood elevation determined). This flood area appears to be associated with flooding that occurs along the Farrington Highway corridor based upon the Flood Insurance Rate Map (FIRM). This area only includes a portion of the project driveway leading into the site, and does not have any building structures within or close to the flood area. A field inspection and information obtained from the AMP Manager confirmed no major flooding issues within the site.* *No significant impacts to existing housing units or floodplain conditions are expected as a result of repair and rehabilitation improvements. Given the location of this area along the highway, no buildings should be constructed. The portion of the driveway entrance located within flood Zone*

		AE would need "no-rise" certifications for any proposed fill or grading to ensure flood heights for nearby areas are not adversely affected. Design plans would be submitted to pertinent State and County agencies for review and approval as part of the design review process. Any required site modifications would comply with applicable flood regulations and design standards. The implementation of the design review process and compliance with pertinent flood regulations should minimize any impacts on public health, safety, and welfare. The project is in compliance with Executive Order 11988
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes ☒ No ☐	*Nānākuli Homes is 46 years old and was constructed in 1969 and renovated in 1998. The Architectural Inventory Survey (AIS) that was conducted for Nānākuli Homes in May 2015 notes that it was one of the early "turnkey" program projects by the Hawai`i Housing Authority and is significant at the State level for its association with the history of public housing in Hawai'i. In addition to the use of cul-de-sacs that was typical of its time, the Nānākuli Homes housing project utilized single-wall construction, post and pier foundations, and corrugated metal roofs. This helped the project blend into the surrounding neighborhood which was a primary objective of the program to blend low cost housing projects into surrounding neighborhoods. Although it has undergone certain modifications, Nānākuli Homes remains very much intact. Nānākuli Homes also appears to meet the criteria for listing in the National Register of Historic Places. In a letter dated December 11, 2015, the State Historic Preservation Officer concurred with the HPHA's determination that repair and rehabilitation improvements for this housing project would have "no adverse effect" on historic properties pursuant to NHPA Section 106 and subject to certain mitigative measures.*
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes ☐ No ☒	*The project site is not situated along a highway or arterial roadway with a high volume of vehicular traffic that may generate significant noise. Farrington Highway (Route 93) is State arterial roadway in West O'ahu that serves the communities along the leeward coast including Nānākuli. Route 93 accommodates vehicle traffic entering and leaving Nānākuli and forms a cross intersection with Road A, the private access road for the housing project. Since residents of*

		Nānākuli Homes are the only ones using Road A, vehicle traffic along this roadway is very light and traffic noise is very minimal. The HUD noise level calculator estimated noise levels at the project site to be 52.1 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes ☐ No ☒	*The housing project is located within the O'ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation.*
Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☐ No ☒	*There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.* *(http://www.fws.gov/wetlands/data/mapper.HTML)*
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes ☐ No ☒	*There are no Wild and Scenic Rivers in Hawai'i, which excludes this project from mitigation or formal consultation requirements (http://www.rivers.gov/map.php)*
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes ☐ No ☒	*Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, these improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects on minority populations and low-income populations. Improvements should benefit low-income and minority populations living within this housing project.*

Field Inspection (Date and completed by)**:** June 15, 2015
Glenn Tadaki, Planner
HHF Planners

Summary of Findings and Conclusions:

Repair and rehabilitation improvements implemented for this existing housing project by HPHA should not result in significant environmental impacts based upon research data collected, a field inspection, consultation with the site manager and maintenance staff, consultation with pertinent resource agencies, and prior HPHA experience implementing repair and rehabilitation improvements. Therefore, repair and rehabilitation improvements would comply and be consistent with the statutes, executive orders, and regulations addressed. Furthermore, HPHA would evaluate improvements planned to ensure the work is consistent with the designated categories of actions described under the project description section. Compliance with these factors evaluated are further addressed in the attached Source Documentation Statutory Worksheet along with relevant technical reports/assessments.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Law, Authority, or Factor	Mitigation Measure
Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	*Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th).* *Newell's shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.* *Hawaiian goose (Nene): If Nene are known to be present within the project site, a qualified biologist will conduct a Nene survey at the project site prior to construction initiation. Nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.* *Additional Measures: The following additional measures would be implemented:*

	1. In the event that any earth-disturbing activities are proposed (e.g. foundation repair), Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity. *2. Where tree or brush removal outside the footprint of the existing development and landscaped areas is proposed, a qualified botanist will inspect the proposed disturbance area prior to project implementation to document any listed plant species. Should listed plants be discovered, they will either be avoided or consultation with the FWS be initiated.*
National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	*1.When considering rehabilitation improvements or building modifications: 1) the buildings' character-defining features shall be retained to the extent practicable; and 2) the renovations shall adhere to the Secretary of the Interior's (SOI) Standards for Rehabilitation.* *2. If rehabilitation improvements or building modifications cannot retain the character-defining features or adhere to the SOI's Standards, a Historic American Buildings Survey (HABS) will be conducted subject to the following conditions:* *a. Level II HABS documentation will be conducted in accordance with the National Park Service standards; and* *b. A representative sample of multiple building types would be selected for HABS documentation due to the multiple types of buildings constructed for housing projects.* *3. If ground disturbing activity is anticipated, HPHA must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation.* *a. Submit detailed plans, specifications and a detailed scope of work once the plans have been developed.* *b. Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation.* *c. Submit a TMK map showing the full extent of the project area within the affected parcel/s.* *d. Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area.* *e. Summary of land use history, such as previous intensive cultivation, grubbing or grading.*

	f. Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property. *In addition to these mitigation measures, the HPHA would enter into a Programmatic Agreement with the SHPO to address the implementation of future repair and rehabilitation improvements to State housing projects after the current Section 106 review process is completed and prior to the next environmental review process in approximately five years. Furthermore, should subsurface human remains or other traces of human activity greater than 50 years old be encountered during construction, all work in the vicinity of the find would immediately stop and the SHPD would be promptly notified. The treatment of any human remains that are encountered would be conducted in accordance with applicable requirements of Chapter 6E, Hawai'i Revised Statutes (Historic Preservation) and Chapter 13-300, Hawai'i Administrative Rules (Rules of Practice and Procedure Relating to Burial Sites and Human Remains).*

Determination:

☐ This categorically excluded activity/project converts to **EXEMPT** per Section 58.34(a)(12), because it does not require any mitigation for compliance with any listed statutes or authorities, nor requires any formal permit or license; **Funds may be committed and drawn down after certification of this part** for this (now) EXEMPT project; OR

☒ This categorically excluded activity/project cannot convert to Exempt status because one or more statutes or authorities listed at Section 58.5 requires formal consultation or mitigation. Complete consultation/mitigation protocol requirements, **publish NOI/RROF and obtain "Authority to Use Grant Funds"** (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR

☐ This project is not categorically excluded OR, if originally categorically excluded, is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

Preparer Signature: Scott Ezer Date: 12-17-15

Name/Title/Organization: Mr. Scott Ezer, Vice President
HHF Planners

Responsible Entity Agency Official Signature:

David Y Ige Date: APR 28 2016

Name/Title: Mr. David Y. Ige, Governor

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

NĀNĀKULI HOMES (HA # 1035)

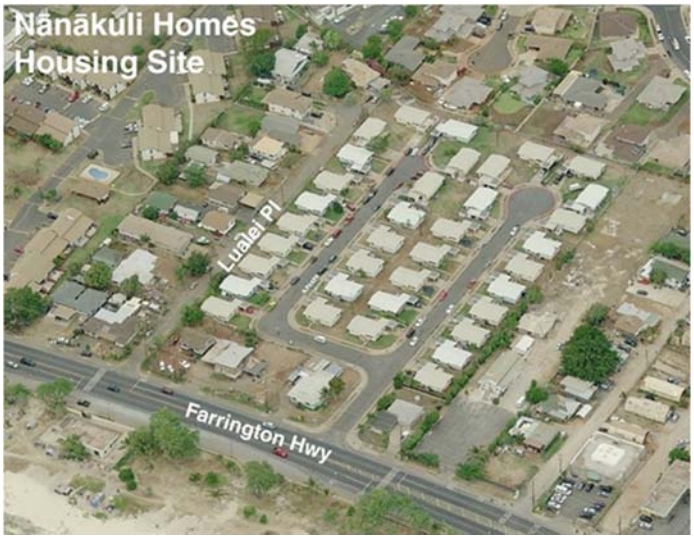
TMK: (1) 8-7-034: 004

Hawai‘i Public Housing Authority (HPHA) Environmental Review

SOURCE DOCUMENTATION (SD) STATUTORY WORKSHEET

Site Visit Date: June 15, 2015
Prepared By: Glenn Tadaki

PROJECT DESCRIPTION



The Nānākuli Homes housing project is located in the Nānākuli community on the island of O‘ahu. Nānākuli is situated at the southern end of the Wai‘anae Coast.

The project site is bordered by Farrington Highway to the west, and Lualei Place to the north. The site driveway is accessed off of Farrington Highway, and Ulehawa Beach Park is located across the highway. This housing project is within HPHA’s Asset Management Project (AMP) 44 which includes four other housing projects.

Nānākuli Homes was first occupied in 1969 and has a street address of 87-1606 Farrington Highway. The property consists of 4.24 acres, and it is identified as Tax Map Key (1) 8- 7-034:004. The housing project is comprised of a 36 single family homes with three bedrooms each. The property is designated for “Urban” use by the State Land Use Commission and is zoned for “R-5 Residential” use by the City and County of Honolulu.

The project site is not located within a tsunami evacuation zone, and almost the entire site is located in Flood Zone D, an unstudied area where flood hazards are undetermined, but flooding is possible (Community Panel Number 15003C0194H, Revised January 19, 2011). A small section (about 15 feet) of the project’s driveway connection with Farrington Highway is situated within Zone AE (subject to 1% annual chance flood) that is generally associated with that occurs along the highway corridor.

The following figures in Exhibit A provide supporting information on this housing project:

Figure 1: Location Map
Figure 2: TMK Map
Figure 3: Site Map
Figure 4: Flood Map

COMPLIANCE FACTORS

I. AIRPORT CLEAR ZONES AND ACCIDENT POTENTIAL ZONES (24 CFR PART 51D)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The housing project does not lie within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: 24 CFR 51 (D).

Honolulu International Airport Master Plan - 2010 (August 1994), State Department of Transportation, Airports Division; and

*Hawai`i Airports and Flying Safety Guide (2012-13, Fifth Edition, Revision 1)* Hawai`i Department of Transportation, Airports Division.

HDOT website at: http://hidot.hawaii.gov/airports/files/2013/01/Airport-Safety-Guide-2012-2013-5rev1.pdf

II. COASTAL BARRIER RESOURCES (COASTAL BARRIER IMPROVEMENT ACT OF 1990 [16 USC 3501])

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i does not have any designated coastal barrier resource units.

SUPPORTING DOCUMENTATION:

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/cbra/maps/mapper.html (Date accessed: 6/30/15).

III. FLOOD INSURANCE (FLOOD DISASTER PROTECTION ACT OF 1973 AND NATIONAL FLOOD INSURANCE REFORM ACT OF 1994 [42 USC 4001-4128 AND 42 USC 5154a])

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Adversely Affect Program

Almost the entire project site is located in Zone D (area of undetermined flood hazard). A small section (about 15 feet) of the project's driveway entrance connection with Farrington Highway is situated within Zone AE (subject to 1% annual chance flood, base flood elevation determined). This flood area appears to be associated with flooding that occurs along the Farrington Highway corridor based upon the Flood Insurance Rate Map (FIRM). This area only includes a portion of the project driveway leading into the site, and does not have any building structures within or close to the flood area. A field inspection and information obtained from the AMP Manager confirmed no major flooding issues within the site.

No significant impacts to existing housing units or floodplain conditions are expected as a result of repair and rehabilitation improvements. Given the location of this area along the highway, no buildings should be constructed. The portion of the driveway entrance located within flood Zone AE would need "no-rise" certifications for any proposed fill or grading to ensure flood heights for nearby areas are not adversely affected. Design plans would be submitted to pertinent State and County agencies for review and approval as part of the design review process. Any required site modifications would comply with applicable flood regulations and design standards. The implementation of the design review process and compliance with pertinent flood regulations should minimize any impacts on public health, safety, and welfare. Because the housing project is on State-owned property, it would typically be exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). Therefore, the project will comply with applicable flood insurance standards as warranted.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the Nānākuli Homes housing project did not visually reveal any signs of previous flooding problems. An interview with the AMP Manager determined that no major ponding or flooding issues have occurred on the project site.

Printed: Flood Insurance Rate Map, City and County of Honolulu, Hawai'i Community Panel Number 15003C0120F, Revised January 19, 2011.

Hawai`i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 6/30/15)

IV. CLEAN AIR ACT (40 CFR PARTS 6, 51, 93)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. Environmental Protection Agency's Green Book for currently designated "nonattainment areas" as of June 2015. Planned rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.

SUPPORTING DOCUMENTATION:

Printed: *State of Hawai‘i Annual Summary 2013 Air Quality Data*. State of Hawai'i, Department of Health, July 2014.

U.S. Environmental Protection Agency website at: http://epa.gov/airquality/greenbk/ (Date accessed: 6/30/2015).

V. COASTAL ZONE MANAGEMENT ACT (16 USC 1451, SECTIONS 307 (C), (D)

CONTACT:
Mr. John Nakagawa
Office of Planning
Department of Business, Economic Development & Tourism
State of Hawai‘i
P.O. Box 2359
Honolulu, Hawai'i, 96804-2359

SUPPORTING DOCUMENTS

	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai‘i's Coastal Zone Management (CZM) program.

SUPPORTING DOCUMENTATION:

Contact: In an e-mail to the Office of Planning (OP) dated July 27, 2015, the HPHA determined that the use of HUD funds for the implementation of repair and rehabilitation improvements does not require review for consistency with Hawai‘i's CZM program. The OP confirmed this determination in an e-mail dated July 28, 2015 and included in the Appendices.

Experience: As part of past environmental reviews in December 2010, a letter from the OP dated July 20, 2005 determined that their review for consistency with Hawai'i's CZM program was not required. A copy of this letter is included in the Appendices.

VI. CONTAMINATION AND TOXIC SUBSTANCES (24 CFR PART 50.3 & 58.5(I)(2))

	SUPPORTING DOCUMENTS
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Project Not Affected

There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.

SUPPORTING DOCUMENTATION:

Field: A site inspection and interview with the AMP Manager revealed no presence of any toxic or radioactive materials on the project site that warrant any concern.

Study: Environmental Data Resources, Inc. (EDR), conducted a search of available environmental records and prepared a Radius Map Report (Inquiry Number 4237094.190s, March 17, 2015). EDR reviewed more than 25 federal and statewide regulatory databases for information regarding the treatment, storage, disposal and release of toxic chemicals at the project site and within specific radii (generally 1 mile) of the site. A Detail Map within the EDR report documents those sites identified within a 0.25 mile radius of the project site. Some of the sites contain underground storage tanks (UST) that are currently in use or are permanently out of use The EDR report in Exhibit B includes the results of their research findings.

In the vicinity of the project site, the EDR report notes that one diesel UST (2,000 gallon) for the Lualualei Wastewater Pump Station at 87-1581 Farrington Highway is currently in use.

The project site was not identified as a Formerly Used Defense Site (FUDS) by the U.S. Army Corps of Engineers and is not subject to any cleanup actions for Department of Defense-generated contamination.

VII. ENDANGERED SPECIES (50 CFR PART 402)

CONTACT:
Mr. Loyal Mehrhoff, Field Supervisor
Pacific Islands Administrator
Fish and Wildlife Services
U.S. Department of the Interior
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawai'i 96813
Tel. #: 792-9400

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Adverse Effect Subject to Mitigation

The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received by the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices.

SUPPORTING DOCUMENTATION:

Contact: A letter from the HPHA dated July 24, 2015 was submitted to the Pacific Island Administrator for the FWS determining that repair and rehabilitation improvements that may be implemented using HUD funds for this housing project would have no likelihood of effect on any listed species or proposed species, or existing or proposed designated critical habitat subject to certain measures. Concurrence with this determination along with proposed minimization and avoidance measures was received from the FWS in a letter dated September 28, 2015 which is included in the Appendices. This housing project is subject to the following minimization and avoidance measures.

Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.

Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.

Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.

Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and

maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.

Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo‘i, impoundments or other vegetated water bodies.

1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols.
2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.
3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.

In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.

Additional Measures: The following additional measures would be implemented:

1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.

Experience: The FWS was previously consulted as part of environmental reviews that were completed in 2005 (39 housing projects) and 2010 (70 housing projects) which supported the determination that repair and rehabilitation improvements would either: 1) have no likelihood of effect for certain housing projects; or 2) not likely adversely affect federally listed species or critical habitat for certain housing projects subject to mitigative measures. A summary of these consultation efforts follows.

2005 Consultation: In a letter dated July 15, 2005, the Housing and Community Development Corporation of Hawai‘i (predecessor to the HPHA), determined that the implementation of minor repair and rehabilitation improvements for 39 housing projects would not have an adverse effect on federally-listed species or critical habitat. In a letter dated August 11, 2005, the FWS concurred with the HCDCH determination.

2010 Consultation: In a letter dated May 17, 2010, the HPHA informed the FWS that HUD funds would be used to immediately implement repair and rehabilitation improvements for six housing projects on O‘ahu and the island of Hawai`i. In a subsequent letter dated May 21, 2010, the FWS was informed that HPHA would be using HUD funds to implement minor repair and rehabilitation improvements for 64 projects throughout the State. In both letters, the HPHA determined that the repair and rehabilitation improvements were not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat. Based on further consultation and a

meeting with FWS staff on June 24, 2010, the HPHA determined that repair and rehabilitation improvements for most of their housing projects would not likely adversely affect any listed or proposed species, or existing or proposed designated habitat, subject to various mitigative measures for certain housing projects.

VIII. EXPLOSIVE AND FLAMMABLE OPERATIONS (24 CFR PART 51C)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

SUPPORTING DOCUMENTATION:

Field: Field inspection was limited to the exterior of residential buildings and associated structures for this housing project. No above-ground explosive or flammable material storage containers in excess of 100 gallons were observed at the site.

Printed: 24 CFR Part 51, Subpart C addresses acceptable separation distance from above-ground explosive or flammable fuels or chemical containers. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

IX. FARMLANDS PROTECTION (7 CFR PART 658)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. Since the property consists of an existing housing development within an urbanized area, no farmlands would be impacted by the implementation of repair and rehabilitation improvements.

Printed: The property is designated for "Urban" use by the State Land Use Commission and is zoned for "R-5 Residential" use by the City and County of Honolulu.

Hawai`i Office of Planning website at: http://planning.hawaii.gov/gis/
(Date accessed: 6/30/2015).

X. FLOODPLAIN MANAGEMENT (EXECUTIVE ORDER 11988, 24 CFR PART 55)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Adversely Affect Floodplain

Almost the entire project site is located in Zone D (area of undetermined flood hazard). A small section (about 15 feet) of the project's driveway entrance connection with Farrington Highway is situated within Zone AE (subject to 1% annual chance flood, base flood elevation determined). This flood area appears to be associated with flooding that occurs along the Farrington Highway corridor based upon the Flood Insurance Rate Map (FIRM). This area only includes a portion of the project driveway leading into the site, and does not have any building structures within or close to the flood area. A field inspection and information obtained from the AMP Manager confirmed no major flooding issues within the site.

No significant impacts to existing housing units or floodplain conditions are expected as a result of repair and rehabilitation improvements. Given the location of this area along the highway, no buildings should be constructed. The portion of the driveway entrance located within flood Zone AE would need "no-rise" certifications for any proposed fill or grading to ensure flood heights for nearby areas are not adversely affected. Design plans would be submitted to pertinent State and County agencies for review and approval as part of the design review process. Any required site modifications would comply with applicable flood regulations and design standards. The implementation of the design review process and compliance with pertinent flood regulations should minimize any impacts on public health, safety, and welfare. The project is in compliance with Executive Order 11988.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the Nānākuli Homes housing project did not visually reveal any signs of previous flooding problems. An interview with the AMP Manager determined that no major ponding or flooding issues have occurred on the project site.

Printed: Flood Insurance Rate Map, City and County of Honolulu, Hawai'i Community Panel Number Community Panel Number 15003C0194H, Revised January 19, 2011).

Hawai'i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 6/30/15)

XI. HISTORIC PRESERVATION (NATIONAL HISTORIC PRESERVATION ACT OF 1966; SECTIONS 106 AND 110; 36 CFR, PART 800)

CONTACT:	SUPPORTING DOCUMENTS	
Ms. Suzanne Case, Chairperson	X	Field
Department of Land and Natural Resources (DLNR)	X	Contact
State of Hawai'i	X	Printed
1151 Punchbowl Street	X	Experience
Honolulu, Hawai'i 96813	X	Study
Tel. #: 587-0400		

DETERMINATION:

Status Category: No Adverse Effect on Historic Properties with Mitigation

Nānākuli Homes is 46 years old and was initially occupied in 1969 and renovated in 1998. In May 2015, Fung Associates conducted an Architectural Inventory Survey (AIS) for Nānākuli Homes. The 2015 AIS notes that Nānākuli Homes was one of the early "turnkey" program projects by the Hawai`i Housing Authority (HHA), a predecessor to the HPHA. It is significant at the State level for its association with the history of public housing in Hawai'i. In addition to the use of cul-de-sacs that was typical of its time, the Nānākuli Homes housing project utilized single-wall construction, post and pier foundations, and corrugated metal roofs. This helped the project blend into the surrounding neighborhood which was a primary objective of the program to blend low cost housing projects into surrounding neighborhoods. Although it has undergone certain modifications, Nānākuli Homes remains very much intact. Other than kitchen and bath remodeling, most of the alterations have replaced original materials with in-kind materials. The only obvious new modification is the use of concrete masonry tiles to replace the carport's original wood posts.

Nānākuli Homes also appears to meet the criteria for listing in the National Register of Historic Places (NRHP). To be considered eligible, a property must meet the National Register criteria for evaluation which involves examining its integrity, significance, and age (generally at least 50 years old). In a letter to the State Historic Preservation Officer (SHPO) dated August 20, 2015, the HPHA determined that repair and rehabilitation improvements for this housing project would have "no adverse effect" on historic properties subject to certain mitigative measures. In a letter dated December 11, 2015, the SHPO concurred with the HPHA's determination and provided additional conditions for ground-disturbing activities. In responding to this letter, the HPHA concurred with the conditions set forth by the SHPO.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the Nānākuli Homes housing project did not locate any existing or potential archaeological sites (e.g., heiau) or cultural features on the property. The project site has undergone extensive ground-altering activities since it was initially developed and improved with buildings, driveways, parking lots, sidewalks, and other related improvements. An interview with the AMP Manager indicates that no known sites or features are present on the property.

Contact: Based on the findings and recommendations of the 2015 AIS, the HPHA submitted a letter to the State Historic Preservation Officer dated August 20, 2015 regarding 28 housing projects, which is included in the Appendix. Of this total, 15 housing projects did not meet National Register eligibility criteria, therefore, a "no historic properties affected" determination was proposed for these repair and rehabilitation improvements. Repair and rehabilitation improvements for the other 13 housing projects (including Nānākuli Homes) were determined to meet National Register eligibility criteria and were proposed to have "no adverse effect" on historic properties subject to certain mitigative measures.

In a letter dated December 11, 2015, the SHPO concurred with the HPHA's determination that repair and rehabilitation improvements for this housing project would have "no adverse effect" on historic properties pursuant to NHPA Section 106 and subject to the following mitigative measures. In response to this letter, the HPHA concurred with the conditions set forth by the SHPO. A copy of these letters are included in Exhibit C.

1. When considering rehabilitation improvements or building modifications: 1) the buildings' character-defining features shall be retained to the extent practicable; and 2) the renovations shall adhere to the Secretary of the Interior's (SOI) Standards for Rehabilitation.

2. If rehabilitation improvements or building modifications cannot retain the character-defining features or adhere to the SOI's Standards, a Historic American Buildings Survey (HABS) will be conducted subject to the following conditions:

    a. Level II HABS documentation will be conducted in accordance with the National Park Service standards; and

    b. A representative sample of multiple building types would be selected for HABS documentation due to the multiple types of buildings constructed for housing projects.

3. If ground disturbing activity is anticipated, HPHA must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation.

    a. Submit detailed plans, specifications and a detailed scope of work once the plans have been developed.

    b. Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation.

    c. Submit a TMK map showing the full extent of the project area within the affected parcel/s.

d. Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area.

e. Summary of land use history, such as previous intensive cultivation, grubbing or grading.

f. Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

In addition to these mitigation measures, the HPHA would enter into a Programmatic Agreement with the SHPO to address the implementation of future repair and rehabilitation improvements to State housing projects after the current Section 106 review process is completed and prior to the next environmental review process in approximately five years. Furthermore, should subsurface human remains or other traces of human activity greater than 50 years old be encountered during construction, all work in the vicinity of the find would immediately stop and the SHPD would be promptly notified. The treatment of any cultural artifacts and human remains that are encountered would be conducted in accordance with applicable requirements of Chapter 6E, Hawai‘i Revised Statutes (Historic Preservation) and Chapter 13-300, Hawai‘i Administrative Rules **(**Rules of Practice and Procedure Relating to Burial Sites and Human Remains).

Printed: A review of the U.S. National Parks Service website for the National Register of Historic Places did not identify any historic properties within the limits of this housing project. A similar review of the State DLNR website for the State Register of Historic Places revealed that there are no historic properties within the project site.

National Register: U.S. National Park Service website at:
http://www.nps.gov/nr/research/ (Date accessed: 7/2/15).

State Register: Hawai`i Department of Land and Natural Resources website at:
http://dlnr.hawaii.gov/shpd/state-register/ (Date accessed: 7/2/15).

Experience: In letter to the SHPO dated April 19, 2011, the HPHA determined that minor repair and rehabilitation improvement at 57 public housing projects throughout Hawai`i (including Nānākuli Homes) would have “no effect” on historic properties. The SHPO had no comments or objections on the “no effect” determination.

Study: The 2015 AIS evaluated 17 HPHA housing projects including Nānākuli Homes. The purpose of the AIS was to evaluate certain previously-evaluated housing projects along with other housing projects in order to determine if they would meet NRHP eligibility criteria. The section of the AIS that covers this housing project is included in Exhibit C, while the entire document is included in the Appendices.

Two of the 17 housing projects are over 50 years old, while the remaining 15 are over 45 years old and will be at least 50 years old when repair and rehabilitation improvements are implemented. In addition, eight of the 17 projects met the eligibility criteria for listing in the NRHP and were considered significant for their role in the social history of Hawai‘i, for representing the efforts of a territorial and statewide housing reform, and for their architecture, which reflected a type, style, method of construction, and materials used during the period in which they were constructed. The housing projects that were not considered NRHP eligible were evaluated as such because of their loss of integrity due to prior renovations.

Nānākuli Homes is 46 years old and was first occupied in 1969 and renovated in 1998. This housing project was one of the early "turnkey" program projects by the Hawai'i Housing Authority (HHA), a predecessor to the HPHA. With this program, a developer would approach HHA with a proposed site and building designs that met HHA standards. Thus, dwellings were built by private developers just as any other subdivision, but with the guarantee that the HHA will purchase the entire subdivision upon its completion. In addition to the use of cul-de-sacs that was typical of its time, the Nānākuli Homes housing project utilized single-wall construction, post and pier foundations, and corrugated metal roofs. This helped the project blend into the surrounding neighborhood which was a primary objective of the program to blend low cost housing projects into surrounding neighborhoods.

Although it has undergone certain modifications, Nānākuli Homes remains very much intact. Other than kitchen and bath remodeling, most of the alterations have replaced original materials with in-kind materials. The only obvious new modification is the use of concrete masonry tiles to replace the carport's original wood posts. At this time, Nānākuli Homes appears to be the most historically intact turn-key project, and is a good example of the HHA's implementation of this federal program. Nānākuli Homes also appears to meet the criteria for listing in the National Register of Historic Places (NRHP).

XII. NOISE ABATEMENT CONTROL (24 CFR PART 51B)

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Within HUD Noise Standards.

The project site is not situated along a highway or arterial roadway with a high volume of vehicular traffic that may generate significant noise. Farrington Highway (Route 93) is State arterial roadway in West O'ahu that serves the communities along the leeward coast including Nānākuli. Route 93 accommodates vehicle traffic entering and leaving Nānākuli and forms a cross intersection with Road A, the private access road for the housing project. Since residents of Nānākuli Homes are the only ones using Road A, vehicle traffic along this roadway is very light and traffic noise is very minimal. The HUD noise level calculator estimated noise levels at the project site to be 57 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

SUPPORTING DOCUMENTATION:

Field: Road A is a private road which provides access to Farrington Highway for the residents of Nānākuli Homes. The distance from the intersection of the highway and Road A to the project site is approximately 160 feet. As a result, noise generated by traffic along Farrington Highway is very minimal due to this distance. Intervening buildings between the highway and the housing project also help dampen any ambient traffic noise to

insignificant levels. No significant noise generating sources were identified at the project site during the site inspection and an interview with the AMP Manager did not identify any loud noise producing sources in the area. Noise sources are predominantly associated with vehicular traffic along adjacent roadways and voices from surrounding activities

Study: Land use in the vicinity of the project site mostly consists of single- and multi-family dwellings. The HUD day/night noise level calculator was used to estimate approximate traffic noise levels at the project site. Farrington Highway is a State arterial roadway that is generally aligned in a northerly to southerly direction. It accommodates vehicle traffic entering and leaving Nānākuli and handles about 37,692 vehicles a day based upon State Department of Transportation 2013 traffic data. Given the distance between the project site and the center line of this roadway, the estimated noise levels at the project site using the HUD calculator was 57 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

XIII. SOLE SOURCE AQUIFER (40 CFR PART 149)

	SUPPORTING DOCUMENTS
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: .No Impact on Sole Source Aquifer.

The housing project is located within the O‘ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation. However, if exceptional circumstances require compliance steps with any of these authorities, such compliance must be established and documented prior to approving the site-specific loan or grant.

SUPPORTING DOCUMENTATION:

Printed: This determination was based upon review of the Sole Source Aquifer Memorandum of 4/30/90 (Sections II.B.1 and II.B.2) and consideration of the type of rehabilitation related improvements that would be conducted for this project.

XIV. WETLANDS PROTECTION (EXECUTIVE ORDER 11990)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the property did not identify the presence of any wetlands.

Printed: U.S Fish and Wildlife Service website at: http://www.fws.gov/wetlands/data/mapper.html (Date accessed 6/30/2015).

XV. WILD AND SCENIC RIVERS ACT (16 USC 1271, SECTION 7 (B), (C))

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no Wild and Scenic Rivers in Hawai‘i, which excludes this project from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: National Wild and Scenic Rivers System website at: http://www.rivers.gov/index.php (Date accessed: 6/30/2015).

XVI. ENVIRONMENTAL JUSTICE (EXECUTIVE ORDER NO. 12898)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: .No Impact on Requirements.

Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, repair and rehabilitation improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations. Repair and rehabilitation improvements should benefit low-income and minority populations living within this housing project.

SUPPORTING DOCUMENTATION:

Printed: Executive Order 12898.

U.S. Department of Housing and Urban Development website at:
https://www.hudexchange.info/environmental-review/environmental-justice/

EXHIBIT A

Location Map, TMK Map, Site Map, Flood Map, and Site Photos

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

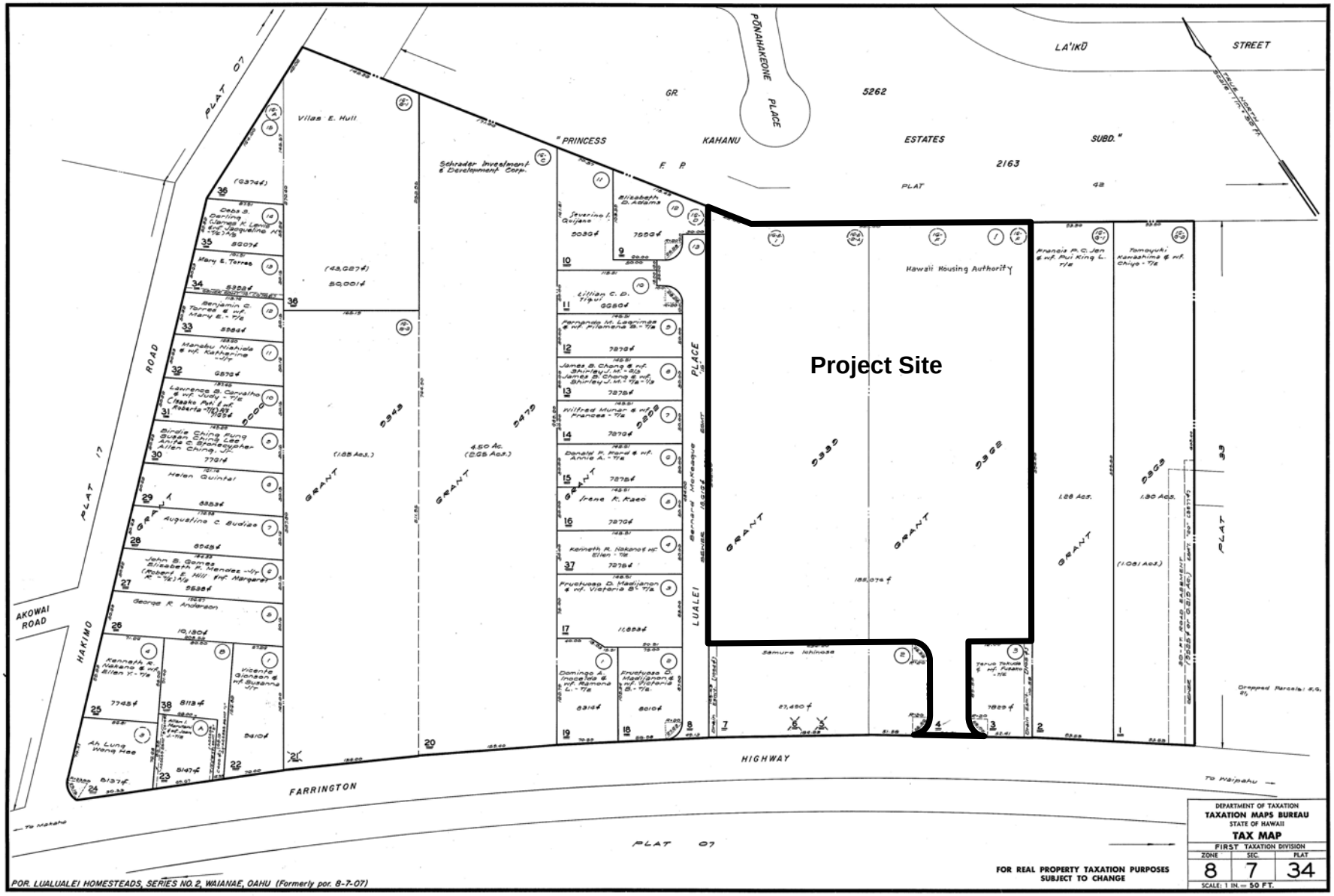
HPHA No. 1035 - Nānākuli Homes (AMP 44)

Figure 1 - Project Location Map

Wai'anae, O'ahu

1,000 FT

HHF PLANNERS
places for people



HPHA No. 1035 - Nānākuli Homes (AMP 44)

Figure 2 - TMK Map

Waiʻanae, Oʻahu

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

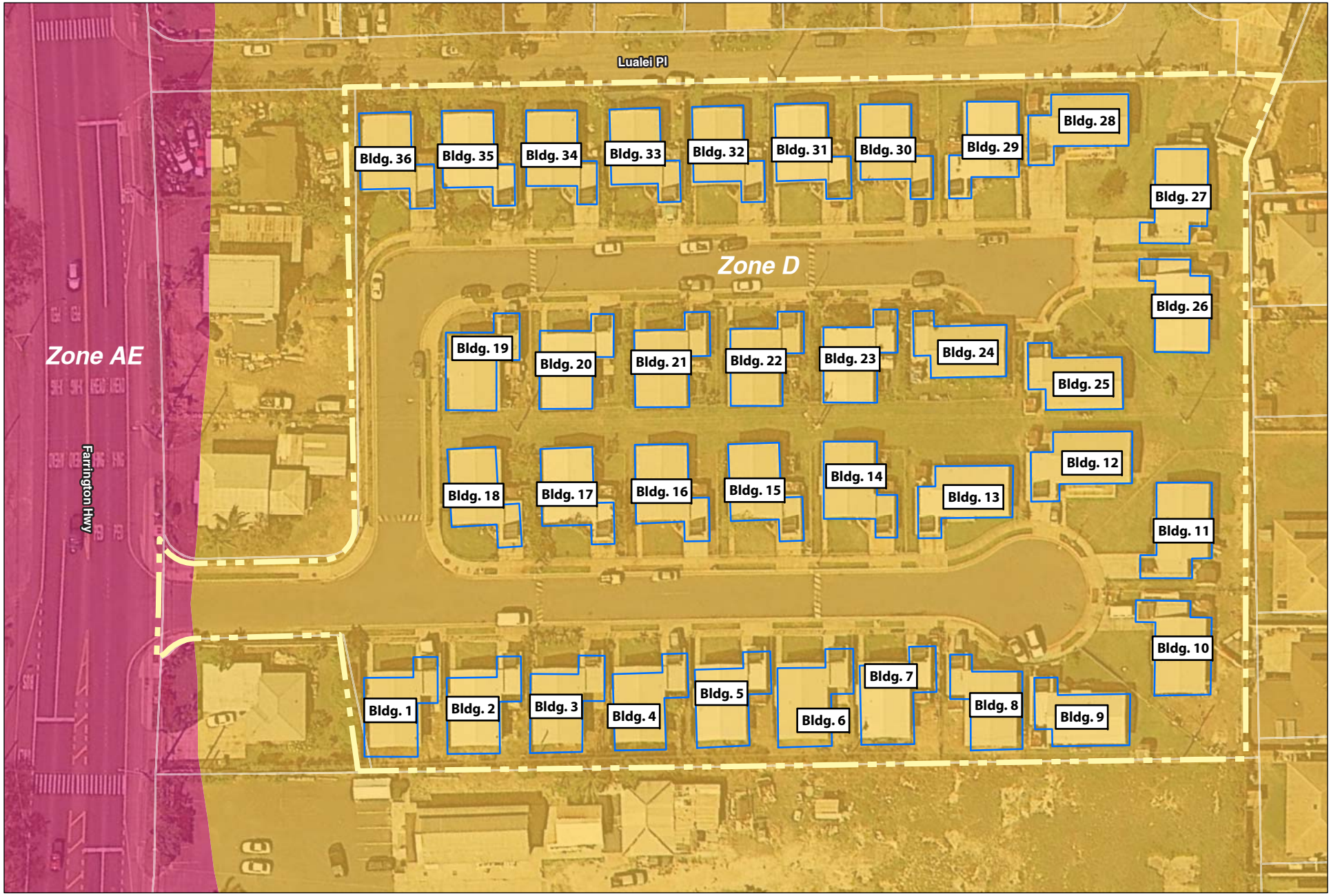
HPHA No. 1035 - Nānākuli Homes (AMP 44)

Figure 3 - Site Map

Wai'anae, O'ahu

50 FEET

HHF PLANNERS
places for people



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1035 - Nānākuli Homes (AMP 44)

Figure 4 - Flood Map

Wai'anae, O'ahu

50 FEET

HHF PLANNERS
places for people

LEGEND

- Zone AE - 1% Annual Chance of Flood
- Zone D - Unstudied Area

NĀNĀKULI HOMES
SITE PHOTOS

Farrington Highway, principal arterial roadway, adjacent to project site, facing east

Farrington Highway, principal arterial roadway, adjacent to project site, facing west.

Cul-de-sac (facing north) off of Farrington Highway, to access project site

View towards Farrington Highway (facing south/ocean) from project site. Traffic calming provided by speed bumps.

West cul-de-sac view, facing south

West cul-de-sac view, facing north

NĀNĀKULI HOMES
SITE PHOTOS

Roadway segment conneting the east and west cul-de-sacs

Standing between Building 12 and 25, looking south towards the ocean

Project's rear west corner, looking south

Project's rear west corner, looking east

Grading at adjacent property (approximately 2 feet cut) along northwest corner (facing east) has undermined the existing fencing and grade of the housing site

Stormdrain catch basin at project entrance, corner of Farrington Highway, facing east

EXHIBIT B

EDR Radius Map Report

Nanakuli
87-1606 Farrington Hwy.
Waianae, HI 96792

Inquiry Number: 4237094.190s
March 17, 2015

EDR Summary Radius Map Report

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

FORM-NULL-PVC

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

87-1606 FARRINGTON HWY.
HONOLULU County, HI 96792

COORDINATES

Latitude (North):	21.3962000 - 21' 23' 46.32''
Longitude (West):	158.1603000 - 158' 9' 37.08''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	587040.3
UTM Y (Meters):	2366090.8
Elevation:	13 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	USGS 7.5 min quad index

MAPPED SITES SUMMARY

Target Property Address:
87-1606 FARRINGTON HWY.
, HI 96792

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
1	LUALUALEI WASTEWATER	87-1581 FARRINGTON H	UST, Financial Assurance	Lower	471, SW
2	SILVA'S NANAKULI SHE	87-1796 FARRINGTON H	LUST, UST	Lower	2108, SE
3	GAS EXPRESS 61	87-1818 FARRINGTON H	LUST, UST	Lower	2422, SE
4	ALOHA NANAKULI	87-1942 FARRINGTON H	SHWS, LUST, UST, Financial Assurance	Lower	3556, SE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

State- and tribal - equivalent CERCLIS

SHWS: A review of the SHWS list, as provided by EDR, and dated 12/02/2014 has revealed that there is 1 SHWS site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ALOHA NANAKULI	***87-1942 FARRINGTON H***	***SE 1/2 - 1 (0.673 mi.)***	***4***	***7***

State and tribal leaking storage tank lists

LUST: A review of the LUST list, as provided by EDR, and dated 12/16/2014 has revealed that there are 2 LUST sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SILVA'S NANAKULI SHE	***87-1796 FARRINGTON H***	***SE 1/4 - 1/2 (0.399 mi.)***	***2***	***7***
Facility Status: Site Cleanup Completed (NFA)				
GAS EXPRESS 61	***87-1818 FARRINGTON H***	***SE 1/4 - 1/2 (0.459 mi.)***	***3***	***7***
Facility Status: Site Cleanup Completed (NFA)				

State and tribal registered storage tank lists

UST: A review of the UST list, as provided by EDR, and dated 12/18/2014 has revealed that there is 1 UST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
LUALUALEI WASTEWATER	***87-1581 FARRINGTON H***	***SW 0 - 1/8 (0.089 mi.)***	***1***	***7***

Count: 12 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
NANAKULI	1003880056	THE HAKIMO ROAD SITE	1107 & 1121 HAKIMO ROAD	96792	CERC-NFRAP
NANAKULI	1015894779	H.B. NANAKULI / PAPA PANTRY	87-1942 FARRINGTON HIGHWAY		FINDS
NANAKULI	S116402699	MAHALO EXPRESS NANAKULI #12811	87-1942 FARRINGTON HWY		RGA LUST
NANAKULI	S116401654	H.B. NANAKULI	87-1942 FARRINGTON HWY		RGA LUST
NANAKULI	1015874850	SILVA'S NANAKULI SHELL	87-1796 FARRINGTON HIGHWAY		FINDS
NANAKULI	S116403883	SILVA'S NANAKULI SHELL	87-1796 FARRINGTON HWY		RGA LUST
NANAKULI	S116401653	H.B. NANAKULI / PAPA PANTRY	87-1942 FARRINGTON HWY		RGA LUST
NANAKULI	S106817253	HAKIMO ROAD, MAILE	HAKIMO RD	96792	SHWS, SPILLS
WAIANAE	S116404752	NANAKULI LANDFILL	87-2020 FARRINGTON HWY		RGA LF
WAIANAE	1015730971	USARMY MAKUA MILITARY RESERVATION	FARRINGTON HWY	96792	RCRA-TSDF, CERCLIS, CORRACTS, RCRA-CESQG
WAIANAE	1006819047	P & S SANITARY HAULING INC	87-746 FARRINGTON HWY	96792	SHWS
WAIANAE	1006819275	MAILI KAI EMERGENCY ACCESS ROAD	HAKIMO RD	96792	SHWS, SPILLS

OVERVIEW MAP - 4237094.190S

0 1/4 1/2 1 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Nanakuli ADDRESS: 87-1606 Farrington Hwy. Walanae HI 96792 LAT/LONG: 21.3962 / 158.1603	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.190s DATE: March 17, 2015 5:41 pm

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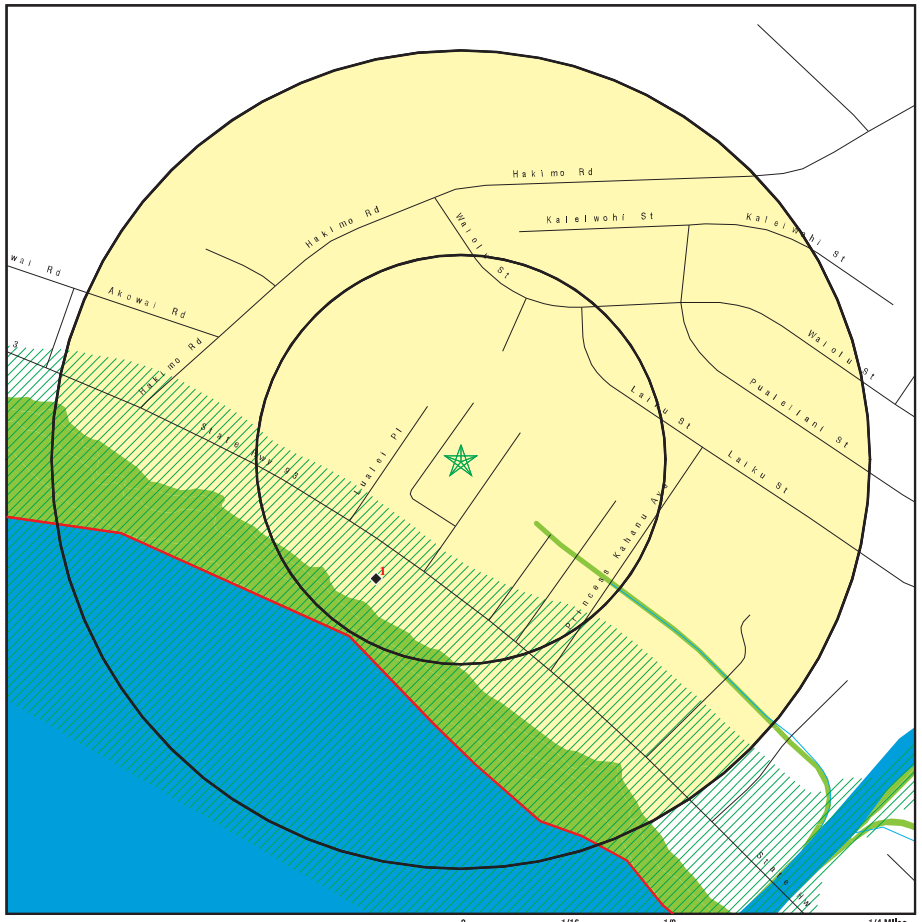
DETAIL MAP - 4237094.190S



0 1/16 1/8 1/4 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Oil & Gas pipelines from USGS
- 100-year flood zone
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- National Wetland Inventory

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
SHWS	1.000		0	0	0	1	NR	1
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	0	2	NR	NR	2
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250		1	0	NR	NR	NR	1

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		0	0	0	NR	NR	0
INST CONTROL	0.500		0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		0	0	NR	NR	NR	0
EDR US Hist Cleaners	0.250		0	0	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
RGA HWS	TP		NR	NR	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
1 SW < 1/8 0.089 mi. 471 ft. Relative: Lower	**LUALUALEI WASTEWATER PUMP STATION 87-1581 FARRINGTON HWY LUALUALEI, HI 96792**	**UST Financial Assurance**	**U003221955 N/A**
	Click here for full text details		
	UST Facility Id: 9-200142 Tank Status: Currently in Use		
2 SE 1/4-1/2 0.399 mi. 2108 ft. Relative: Lower	**SILVA'S NANAKULI SHELL 87-1796 FARRINGTON HWY NANAKULI, HI 96792**	**LUST UST**	**U001236325 N/A**
	Click here for full text details		
	LUST Facility Id: 9-201364 Facility Status: Site Cleanup Completed (NFA)		
	UST Facility Id: 9-201364 Tank Status: Permanently Out of Use		
3 SE 1/4-1/2 0.459 mi. 2422 ft. Relative: Lower	**GAS EXPRESS 61 87-1818 FARRINGTON HWY WAIANAE, HI 96792**	**LUST UST**	**U003222000 N/A**
	Click here for full text details		
	LUST Facility Id: 9-200924 Facility Status: Site Cleanup Completed (NFA)		
	UST Facility Id: 9-200924 Tank Status: Permanently Out of Use		
4 SE 1/2-1 0.673 mi. 3556 ft. Relative: Lower	**ALOHA NANAKULI 87-1942 FARRINGTON HWY NANAKULI, HI 96792**	**SHWS LUST UST Financial Assurance**	**U003222049 N/A**
	Click here for full text details		
	LUST Facility Id: 9-201864 Facility Status: Site Cleanup Completed (NFA)		
	UST Facility Id: 9-201864		

ALOHA NANAKULI (Continued) **U003222049**

Tank Status: Currently In Use

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
HI	AIRS	List of Permitted Facilities	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	BROWNFIELDS	Brownfields Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	CDL	Clandestine Drug Lab Listing	Department of Health	08/04/2010	09/10/2010	10/22/2009
HI	DRYCLEANERS	Permitted Drycleaner Facility Listing	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	ENG CONTROLS	Engineering Control Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	Financial Assurance	Financial Assurance Information Listing	Department of Health	12/01/2014	12/19/2014	01/28/2015
HI	INST CONTROL	Sites with Institutional Controls	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	LUST	Leaking Underground Storage Tank Database	Department of Health	12/16/2014	12/19/2014	01/28/2015
HI	RGA HWS	Recovered Government Archive State Hazardous Waste Facilitie	Department of Health		07/01/2013	01/08/2014
HI	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Health		07/01/2013	01/17/2014
HI	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	Department of Health		07/01/2013	01/03/2014
HI	SHWS	Sites List	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	SPILLS	Release Notifications	Department of Health	12/02/2014	12/22/2014	01/28/2015
HI	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	03/10/2012	01/03/2013	02/11/2013
HI	SWF/LF	Permitted Landfills in the State of Hawaii	Department of Health	09/17/2012	04/03/2013	05/10/2013
HI	UIC	Underground Injection Wells Listing	Department of Health	02/07/2013	02/12/2013	04/09/2013
HI	UST	Underground Storage Tank Database	Department of Health	12/18/2014	12/19/2014	01/28/2015
HI	VCP	Voluntary Response Program Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	04/22/2013	03/03/2015	03/09/2015
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2011	02/26/2013	04/19/2013
US	CERCLIS	Comprehensive Environmental Response, Compensation, and Liab	EPA	10/25/2013	11/11/2013	02/13/2014
US	CERCLIS-NFRAP	CERCLIS No Further Remedial Action Planned	EPA	10/25/2013	11/11/2013	02/13/2014
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	07/01/2014	09/10/2014	10/20/2014
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	01/23/2015	02/13/2015	03/09/2015
US	CORRACTS	Corrective Action Report	EPA	12/09/2014	12/29/2014	01/29/2015
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DELISTED NPL	National Priority List Deletions	EPA	12/16/2014	01/08/2015	02/09/2015
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	07/31/2012	08/07/2012	09/18/2012
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EDR US Hist Auto Stat	EDR Exclusive Historic Gas Stations	EDR, Inc.			
US	EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	09/29/2014	09/30/2014	11/06/2014
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	07/21/2014	10/07/2014	10/20/2014
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
US	FEMA UST	Underground Storage Tank Listing	FEMA	01/01/2010	02/16/2010	04/12/2010
US	FINDS	Facility Index System/Facility Registry System	EPA	08/16/2014	09/10/2014	10/20/2014
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	06/06/2014	09/10/2014	09/18/2014
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	12/29/2014	12/30/2014	03/09/2015
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	01/23/2015	02/06/2015	03/09/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	02/01/2013	05/01/2013	11/01/2013

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	01/30/2015	02/05/2015	03/09/2015
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/10/2015	03/13/2015
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	01/28/2015	01/30/2015	03/13/2015
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	01/08/2015	01/08/2015	02/09/2015
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2005	12/08/2006	01/11/2007
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	02/01/2013	05/01/2013	01/27/2014
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	01/30/2015	02/05/2015	03/13/2015
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/13/2015	03/13/2015
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	01/29/2015	01/30/2015	03/13/2015
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	12/14/2014	02/13/2015	03/13/2015
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	09/29/2014	10/01/2014	11/06/2014
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	11/25/2014	11/26/2014	01/29/2015
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	02/18/2014	03/18/2014	04/24/2014
US	LUCIS	Land Use Control Information System	Department of the Navy	12/03/2014	12/12/2014	01/29/2015
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	12/29/2014	01/08/2015	01/29/2015
US	NPL	National Priority List	EPA	12/16/2014	01/08/2015	02/09/2015
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	07/01/2014	10/15/2014	11/17/2014
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	02/01/2011	10/19/2011	01/10/2012
US	PRP	Potentially Responsible Parties	EPA	10/25/2013	10/17/2014	10/20/2014
US	Proposed NPL	Proposed National Priority List Sites	EPA	12/16/2014	01/08/2015	02/09/2015
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	10/07/2014	10/08/2014	10/20/2014
US	RCRA NonGen / NLR	RCRA - Non Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RMP	Risk Management Plans	Environmental Protection Agency	08/01/2014	08/12/2014	11/06/2014
US	ROD	Records Of Decision	EPA	11/25/2013	12/12/2013	02/24/2014
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	03/07/2011	03/09/2011	05/02/2011
US	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2011	07/31/2013	09/13/2013
US	TSCA	Toxic Substances Control Act	EPA	12/31/2012	01/15/2015	01/29/2015
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	09/14/2010	10/07/2011	03/01/2012
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/16/2014	10/31/2014	11/17/2014
US	US AIRS MINOR	Air Facility System Data	EPA	10/16/2014	10/31/2014	11/17/2014

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	12/22/2014	12/22/2014	01/29/2015
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	11/19/2014	11/21/2014	01/29/2015
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	12/30/2014	12/31/2014	01/29/2015
US	Oil/Gas Pipelines	GeoData Digital Line Graphs from 1:100,000-Scale Maps	USGS			
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
US	USGS 7.5' Topographic Map	Scanned Digital USGS 7.5' Topographic Map (DRG)	USGS			

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

NANAKULI
87-1606 FARRINGTON HWY.
WAIANAE, HI 96792

TARGET PROPERTY COORDINATES

Latitude (North):	21.3962 - 21˚ 23' 46.32''
Longitude (West):	158.1603 - 158˚ 9' 37.08''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	587040.3
UTM Y (Meters):	2366090.8
Elevation:	13 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	21158-D2 WAIANAE, HI
Most Recent Revision:	Not reported

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

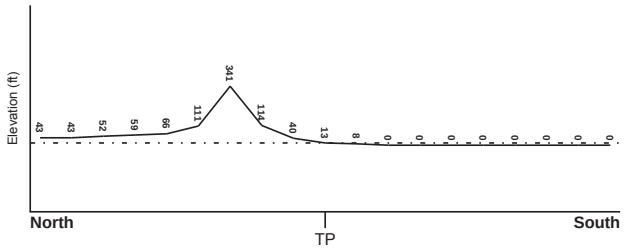
TOPOGRAPHIC INFORMATION

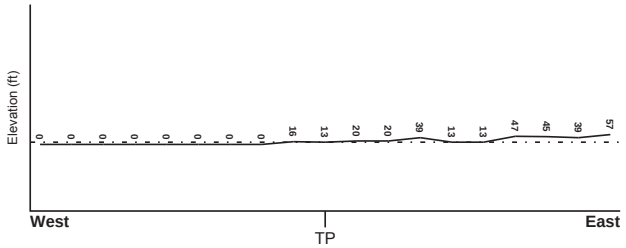
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General South

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 13 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
HONOLULU, HI	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 15003C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
WAIANAE	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

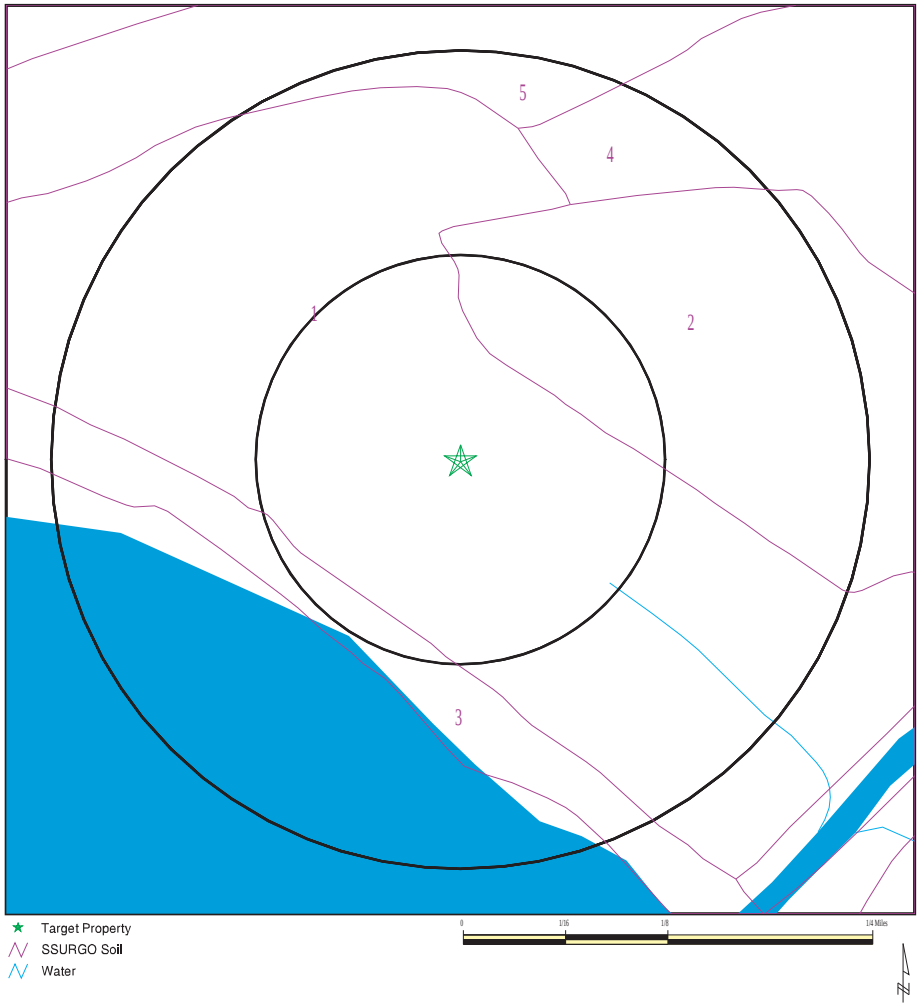
Era: -
System: -
Series: -
Code: N/A *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: -

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4237094.190s



SITE NAME: Nanakuli ADDRESS: 87-1606 Farrington Hwy. Walanae HI 96792 LAT/LONG: 21.3962 / 158.1603	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.190s DATE: March 17, 2015 5:42 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Mamala

Soil Surface Texture: stony silty clay loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 48 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches	stony silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	CL-K (proposed)	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6
2	7 inches	18 inches	stony silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	CL-K (proposed)	Max: 14 Min: 4.23	Max: 7.8 Min: 7.4
3	18 inches	29 inches	bedrock	Not reported	Not reported	Max: 0.42 Min: 0.02	Max: Min:

Soil Map ID: 2

Soil Component Name: Quarry

Soil Surface Texture: stony silty clay loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class:

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

Soil Map ID: 3

Soil Component Name: Beaches

Soil Surface Texture: coarse sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 92 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	coarse sand	Granular materials (35 pct. or less passing No. 200), Fine Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42.34	Max: 7.8 Min: 6.1
2	5 inches	59 inches	coarse sand	Granular materials (35 pct. or less passing No. 200), Fine Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42.34	Max: 7.8 Min: 6.1

Soil Map ID: 4

Soil Component Name: Lualualei

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4.23 Min: 0.42	Max: 7.3 Min: 6.6
2	9 inches	59 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 7.8 Min: 5.6

Soil Map ID: 5

Soil Component Name: Lualualei

Soil Surface Texture: extremely stony clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	extremely stony clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4.23 Min: 0.42	Max: 7.3 Min: 6.6
2	9 inches	59 inches	extremely stony clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 7.3 Min: 5.6

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	USGS40000270569	0 - 1/8 Mile NNE
A2	USGS40000270508	0 - 1/8 Mile SE
A3	USGS40000270509	0 - 1/8 Mile SE
A4	USGS40000270507	0 - 1/8 Mile SE

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A5	USGS40000270505	0 - 1/8 Mile SE
A6	USGS40000270506	0 - 1/8 Mile SE
A7	USGS40000270513	0 - 1/8 Mile SE
A8	USGS40000270514	0 - 1/8 Mile SE
A9	USGS40000270512	0 - 1/8 Mile SE
A10	USGS40000270510	0 - 1/8 Mile SE
A11	USGS40000270511	0 - 1/8 Mile SE
12	USGS40000270550	1/4 - 1/2 Mile East
B13	USGS40000270573	1/2 - 1 Mile East
B15	USGS40000270574	1/2 - 1 Mile ENE
C17	USGS40000270651	1/2 - 1 Mile North
D19	USGS40000270653	1/2 - 1 Mile North
C21	USGS40000270655	1/2 - 1 Mile North
E23	USGS40000270619	1/2 - 1 Mile NE
F25	USGS40000270654	1/2 - 1 Mile NNE
G26	USGS40000270657	1/2 - 1 Mile North
G27	USGS40000270658	1/2 - 1 Mile North
H31	USGS40000270652	1/2 - 1 Mile NNE
E33	USGS40000270626	1/2 - 1 Mile NE
I35	USGS40000270669	1/2 - 1 Mile North
G37	USGS40000270672	1/2 - 1 Mile North

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
B14	HI8000000003167	1/2 - 1 Mile East
B16	HI8000000003175	1/2 - 1 Mile ENE
C18	HI8000000003260	1/2 - 1 Mile North
D20	HI8000000003262	1/2 - 1 Mile North
C22	HI8000000003263	1/2 - 1 Mile North
E24	HI8000000003222	1/2 - 1 Mile NE
F28	HI8000000003264	1/2 - 1 Mile NNE
G29	HI8000000003267	1/2 - 1 Mile North
G30	HI8000000003268	1/2 - 1 Mile North
H32	HI8000000003261	1/2 - 1 Mile NNE
E34	HI8000000003229	1/2 - 1 Mile NE
I36	HI8000000003271	1/2 - 1 Mile North
G38	HI8000000003273	1/2 - 1 Mile North

PHYSICAL SETTING SOURCE MAP - 4237094.190s

County Boundary
Major Roads
Contour Lines
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons

0 1/4 1/2 1 Miles

Groundwater Flow Direction
GI Indeterminate Groundwater Flow at Location
GV Groundwater Flow Varies at Location

N

SITE NAME: Nanakuli ADDRESS: 87-1606 Farrington Hwy. Walanae HI 96792 LAT/LONG: 21.3962 / 158.1603	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.190s DATE: March 17, 2015 5:42 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
1 **NNE** **0 - 1/8 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270569**
A2 **SE** **0 - 1/8 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270508**
A3 **SE** **0 - 1/8 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270509**
A4 **SE** **0 - 1/8 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270507**
A5 **SE** **0 - 1/8 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270505**
A6 **SE** **0 - 1/8 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270506**
A7 **SE** **0 - 1/8 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270513**
A8 **SE** **0 - 1/8 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270514**
A9 **SE** **0 - 1/8 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270512**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
A10 **SE** **0 - 1/8 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270510**
A11 **SE** **0 - 1/8 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270511**
12 **East** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270550**
B13 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270573**
B14 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003167**
B15 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270574**
B16 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003175**
C17 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270651**
C18 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003260**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
D19 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270653**
D20 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003262**
C21 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270655**
C22 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003263**
E23 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270619**
E24 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003222**
F25 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270654**
G26 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270657**
G27 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270658**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
F28 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003264**
G29 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003267**
G30 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003268**
H31 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270652**
H32 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003261**
E33 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270626**
E34 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003229**
I35 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270669**
I36 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003271**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
G37 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270672**
G38 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003273**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for HONOLULU County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 96792

Number of sites tested: 5

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.300 pCi/L	100%	0%	0%
Living Area - 2nd Floor	0.200 pCi/L	100%	0%	0%
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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EXHIBIT C

Section 106 Consultation &

Architectural Inventory Survey Information

DAVID Y. IGE
GOVERNOR OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

KEKOA KALUHIWA
FIRST DEPUTY

JEFFREY T. PEARSON
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

December 11, 2015

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
P.O. Box 17907
Honolulu, HI 96817

LOG: 2015.02939, 2015.03571
DOC: 1511JLP35
Architecture, Archaeology
History and Culture

Dear Mr. Ouansafi:

SUBJECT: **Chapter 6E-8 and National Historic Preservation Act Section (NHPA) Section 106 Consultation – Department of Housing and Urban Development (HUD) Repair and Rehabilitation Project Department of Human Services, Hawai‘i Public Housing Authority (HPHA) Nanakuli Homes Rehabilitation Project – 87-1608 Farrington Highway Nānākuli Ahupua‘a, Waianae District, Island of O‘ahu TMK: (1) 8-7-034:004**

Thank you for your initial submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services (DHS), Hawaii Public Housing Authority (HPHA) consultation with SHPD in accordance with 36 CFR 800.3 and Hawaii Revised Statutes (HRS), Chapter 6E. We received your another submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience.

The submittal indicates that the HPHA is requesting the State Historic Preservation Officer’s (SHPO) concurrence with a determination of “no effect” for the proposed HUD repair and rehabilitation improvement projects involving 43 existing public housing developments located throughout the State over the next fivd5 (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 consultation on their behalf.

This letter addresses Nānākuli Homes Rehabilitation Project, 87-1608 Farrington Highway. The HPHA has identified the area of potential effects (APE) as the 4.24 acre area parcel owned by the State (HPHA) which is identified as TMK: (1) 8-7-034:004. DHS/HPHA have indicated at this stage of the planning process, they are unclear whether the subject 4.24-acre project area will require any ground disturbances.

Our records indicate that no archaeological inventory survey has been conducted within the subject parcel and that no historic properties have been identified. However, based on nearby studies potential exists to encounter subsurface traditional Hawaiian and/or historic properties within the subject parcel.

The SHPD has reviewed the undertaking at 87-1068 Farrington Highway, and the SHPO’s determination is **no adverse effect** pursuant to NHPA Section 106 and **no historic properties affected** pursuant to HRS §6E-8 within the APE **provided the following conditions are met:**

- If ground disturbing activity is anticipated, DHS must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation;
- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;

- Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;
- Submit a TMK map showing the full extent of the project area within the affected parcel/s;
- Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Summary of land use history, such as previous intensive cultivation, grubbing or grading;
- Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions regarding archaeological resources or concerns please contact Susan Lebo at (808) 692-8019 or at Susan.A.Lebo@hawaii.gov. For any history and cultural concerns please contact Kaʻāhiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov. Please contact Jessica Puff at Jessica.L.Puff@hawaii.gov or (808) 692-8023 for any questions regarding architectural concerns or this letter.

Sincerely,

Susan A. Lebo

Signed for

Alan A. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

NANAKULI HOMES

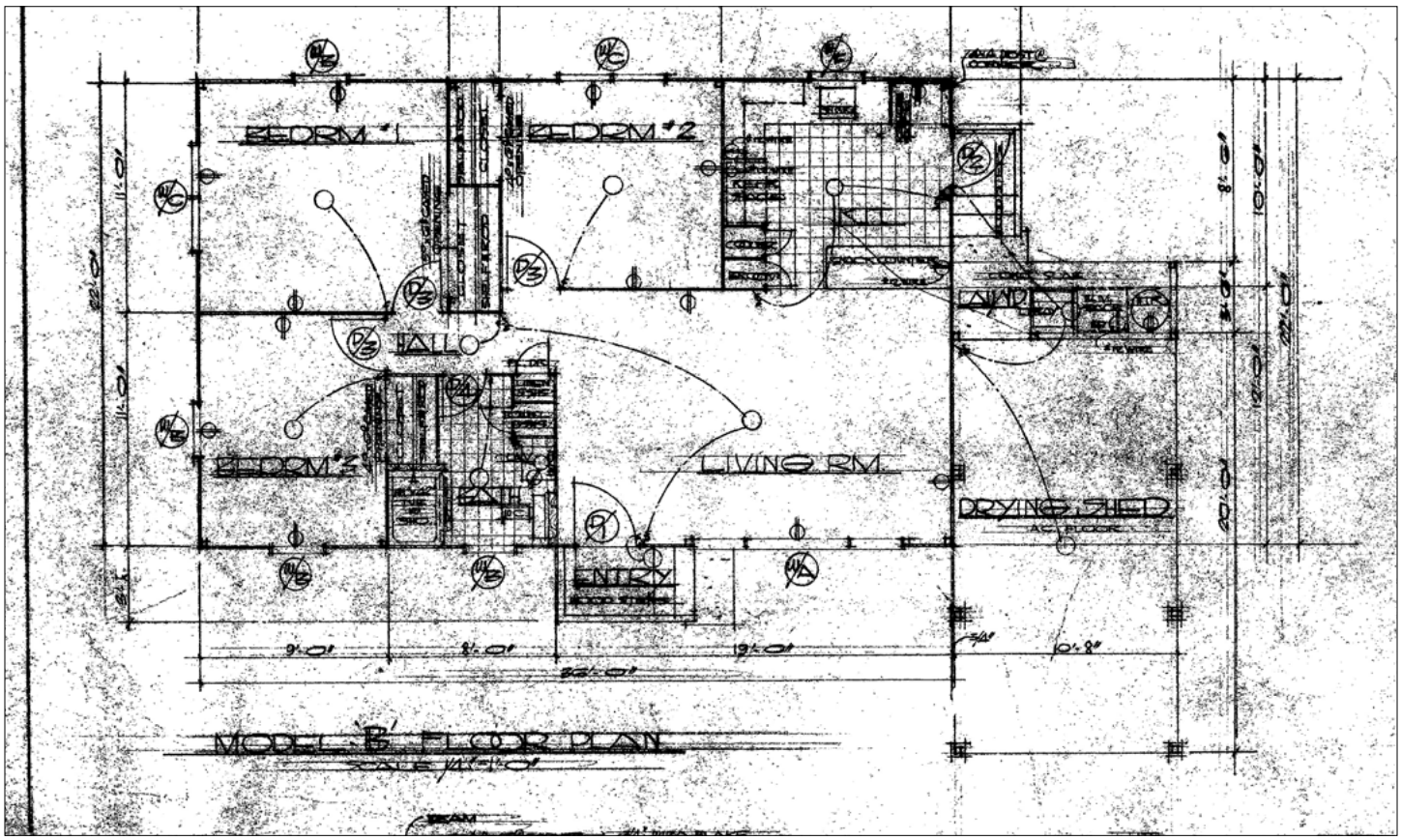
Project	Nanakuli Homes
Architect	Maitland C. Dease
Built	1969, Renovated in 1998
National Register Eligibility	Eligible
Criteria	A and C
Significance	Association with history of the public housing in Hawaii. Architecturally significant in typical design of the public housing in its period.
Character Defining Features	Lateral running gable roof/ front facing gable roof, tongue and groove exterior walls, picture window franked by jalousie windows, jalousie windows, and tongue and groove interior walls.

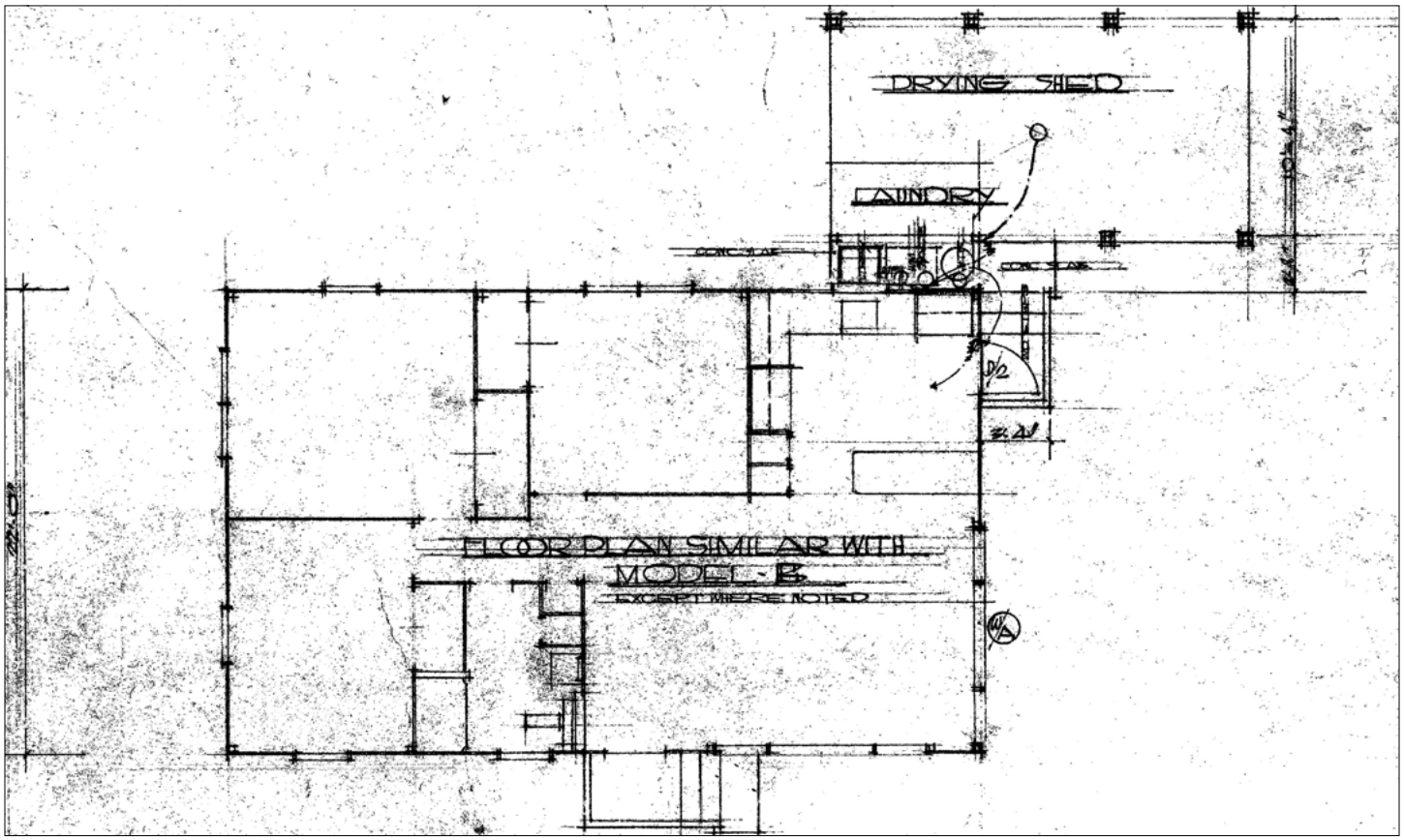
Description

Nanakuli Homes is comprised of 36 single family residences which are laid out around two cul-de-sacs on 4.25 acres. They are part of a larger residential neighborhood, and are off Farrington Highway in Nanakuli. All the houses are three-bedroom, and assume two forms, one with a lateral running gable roof and the other a front facing gable roof. The floor plans of the two types of houses are the same, but their orientation to the street and the location of their carport distinguishes the one from the other. The dwellings sit on post and pier foundations and have a slat apron. The walls are of tongue and groove, and the roof is of corrugated metal. The façade features a picture window flanked by jalousie windows, and the remainder of the windows throughout the house are jalousie, except for the model with the front facing gable, which has a second living room picture window on its side elevation.

Over view of the Homes

Typical Front Elevation of the House





Model A (above) and B (below) Floor Plans
Maitland C. Dease & Associates, Inc., *Floor Plans*, (*Nanakuli Turnkey Plan)*, Sheet A-2, 1968, Hawaii Housing Authority.

The interiors of the houses retain their tongue and groove walls, although the kitchens and baths were remodeled in 1998. The bedroom closets have no doors.

The houses were renovated in 1998. At this time new tile floors replaced the old, and the masonite ceilings were replaced with new masonite ceilings. Similarly, the roofs received a new corrugated metal sheathing and the wood steps leading to the front and side entries were replaced with new wood steps. A number of the jalousie windows were replaced at this time by newer jalousies. Also, the wood posts which supported the carport roofs were replaced with cmu columns.

Tongue and Groove Interior Wall

Renovated Kitchen

Left: Bedroom Closet

NANAKULI HOMES

History and Significance

Nanakuli Homes was one of HHA's early "turnkey" projects. This program originated with HUD where a developer would approach HHA with a proposed site and a building proposal which met HHA standards. Prior to the start of construction, HHA would provide the developer a letter of intent to purchase the development once it was constructed, and the federal government would provide the developer interim financing until the developer could obtain a private source of funding. Thus, dwellings were built by private developers just as any other subdivision, but with the guarantee that the HHA would purchase the entire subdivision upon its completion. This new vehicle for the construction of low-cost housing was designed to aid in distributing low-income families throughout the community. Through this approach lower income families would live in the same environment with families of higher income levels.

Nanakuli Homes was developed by H & T Company, Ltd., and was in the final approval process in January 1969.
Nanakuli Homes is significant at a local level under criterion A for its associations with the history of public housing in Hawaii. It is also architecturally significant at the local level under criterion C as its design was typical of Hawaii public housing during its period of construction.

Nanakuli Homes utilizing cul-de-sacs was typical of its time, as were the designs of the residences with their single wall construction, post and pier foundations and corrugated metal roofs. The HHA development integrates into the other housing developments happening around it, thus, fulfilling a primary objective of the turnkey program to blend low cost housing projects into their surrounding neighborhoods. Nanakuli Homes remains much more intact, although it has undergone certain modifications. However, other than the kitchen and bath remodeling, most of the alterations have replaced original materials with in-kind materials. New tile floors replaced the old tile, old masonite ceilings were replaced with new masonite ceilings, the original corrugated metal roofs were repaired with new corrugated metal, and a number of the original jalousies have been replaced by new jalousie windows. Similarly, the wooden steps leading to the entries have been replaced by new wooden steps. The only conspicuous new modification is the replacement of the carport's original wood posts with cmu posts. Several other turnkey projects were constructed for HHA, but these were not included in this survey and were not visited or evaluated. Thus, at this moment Nanakuli Homes appears to be the most historically intact turnkey project, and as such is a good example of the HHA's implementation of this federal program.

Nanakuli Homes appears to meet the criteria for listing in the National Register of Historic Places as a historic district.

HAWAII PUBLIC HOUSING AUTHORITY

ENVIRONMENTAL REVIEW

WAIMAHA SUNFLOWER

Wai`anae, O`ahu

AMP 44
HPHA No. 1057

Prepared for:

State of Hawaii
Hawaii Public Housing Authority

Prepared by:

HHF PLANNERS
places for people

U.S. Department of Housing and Urban Development
451 Seventh Street, SW
Washington, DC 20410
www.hud.gov

espanol.hud.gov

Environmental Review for Activity/Project that is Categorically Excluded Subject to Section 58.5

Pursuant to 24 CFR 58.35(a)

Project Information

Project Name: Waimaha Sunflower (AMP 44)

Responsible Entity: Hawaii Public Housing Authority
1002 North School Street
Honolulu, HI 96817

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

State/Local Identifier: State of Hawai‘i

Preparer: Mr. Scott Ezer, Vice President
HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813

Certifying Officer Name and Title: Mr. David Y. Ige
Governor, State of Hawai‘i

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

Consultant (if applicable): HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawai‘i 96813

Direct Comments to: Mr. Hakim Ouansafi, Executive Director
Hawaii Public Housing Authority
1002 North School Street
Honolulu, Hawai‘i 96817

Project Location: 85-186 McArthur Street
Wai‘anae, O‘ahu, Hawai‘i 96792

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]**:**

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a "major construction activity" and would involve one or a combination of several HUD designated categories of actions.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent;
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons;
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland;
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation;
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls);
7. Interior and exterior renovations and rehabilitation;
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site;
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Level of Environmental Review Determination:

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.5. Compliance with and completion of conformance determinations for other statute, executive order, or regulation has been completed and support the Categorical Exclusion.

Funding Information

Grant Number	HUD Program	Funding Amount
To be determined	Capital Fund	To be determined
To be determined	Economic Development Initiative Special Project Grant	To be determined
To be determined	Other Grants	To be determined

Estimated Total HUD Funded Amount:

To be determined by HUD using a formula and based upon federal budget.

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]**:**

Depends upon funds available.

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	*The project is not within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.*
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☒	*Hawai'i has no coastal barriers (http://www.fws.gov/CBRA/Maps/Mapper.html)*
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes ☐ No ☒	*As indicated in Flood Insurance Rate Map Panel 15003C0183H, the entire project site (both parcels) is located within Zone XS (0.2% annual chance of flood). Zone XS is a non-special flood hazard area that is a low to moderate risk flood area. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities. A field inspection and information obtained from the AMP Manager confirmed no major flooding issues within the site. The Waimaha Sunflower housing project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance is not mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance requirements.*

STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5		
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes ☐ No ☒	*The State of Hawai'i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. EPA's Green Book for currently designated "nonattainment areas" as of June 2015. Planned repair and rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.*
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes ☐ No ☒	*Documentation from the Office of Planning determined that projects receiving federal funds from HUD's Public Housing Capital Fund do not require review for consistency with Hawai'i's CZM program.*
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☐ No ☒	*Based on the results of the EDR report and site visit, there are no known hazardous materials, contamination, or toxic chemicals, gasses or radioactive substances in the immediate vicinity which could affect the health or safety of occupants or conflict with intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gasses, etc.*
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes ☒ No ☐	*The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (USFWS) in their letter dated September 28, 2015 which is included in the Appendices, while project-specific mitigation measures are identified in the following section*
Explosive and Flammable Hazards	Yes ☐ No ☒	*There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. Repair and*

24 CFR Part 51 Subpart C		*rehabilitation improvements would not increase the number of people exposed to hazardous operation, and thus do not meet the definition of a HUD-assisted project and are not subject to these regulations. The project site is also not within a Formerly Used Defense Site based upon the EDR report and review of data (COE Website).*
Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes ☐ No ☒	*The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. The project is located within the State Land Use Urban District. The existing development is located on urbanized property. No farmlands will be impacted by repair or rehabilitation improvements implemented.*
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes ☐ No ☒	*The entire project site (both parcels) is located within Zone XS (0.2% annual chance of flood). Zone XS is a non-special flood hazard area that is a low to moderate risk flood area. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities. A field inspection and information obtained from the AMP Manager confirmed no major flooding issues within the site. No significant impacts to existing housing units or Zone XS floodplain conditions are expected as a result of repair and rehabilitation improvements. However, should new housing units be constructed in the future, design plans would be submitted to pertinent State and County agencies for review and approval as part of the design review process. Any required site modifications would comply with applicable flood regulations and design standards. The implementation of the design review process and compliance with pertinent flood regulations should minimize any impacts on public health, safety, and welfare. The project is in compliance with Executive Order 11988.*
Historic Preservation	Yes ☐ No ☒	*Waimaha Sunflower is 35 years old and was first occupied in 1980. To be eligible for listing in the National Register of Historic Places (NRHP), a property must meet the National Register criteria*

National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800		*for evaluation which involves examining its integrity, significance, and age (generally at least 50 years old). Due to its age, this housing project does not meet the eligibility criteria to be evaluated for the NRHP. In a letter to the State Historic Preservation Officer dated July 23, 2015, the HPHA determined that no historic properties would be affected by repair and rehabilitation improvements for this housing project. No comments or objections about this no effect determination were received.*
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes ☐ No ☒	*The project site is not situated along a highway or arterial roadway that has a high volume of vehicular traffic that may generate significant noise. This housing project site is divided into two separate parcels (Waimaha and Sunflower parcels), therefore, the noise estimate included traffic data from two roadways. Farrington Highway, with the highest volume of vehicular traffic in the area, is approximately 250 feet away from the closest noise receptor at the Sunflower portion of the project site. The HUD noise level calculator estimated noise level at the project site to be 56.4 dBA. Plantation Road has far less vehicles, and is about 320 feet away from the Waimaha portion of the housing project. The estimated noise levels at the Waimaha portion of the project site using the HUD calculator was 44.5 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.*
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes ☐ No ☒	*The housing project is located within the O‘ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation.*

Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☐ No ☒	*There are no known wetlands within the housing project's property, and therefore, no wetlands will be adversely impacted by the project improvements (http://www.fws.gov/wetlands/data/mapper.HTML)*
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes ☐ No ☒	*There are no Wild and Scenic Rivers in Hawai'i, which excludes this project from mitigation or formal consultation requirements (http://www.rivers.gov/map.php) .*
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes ☐ No ☒	*Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, these improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects on minority populations and low-income populations. Improvements should benefit low-income and minority populations living within this housing project.*

Field Inspection (Date and completed by)**:** June 15, 2015
Glenn Tadaki, Planner
HHF Planners

Summary of Findings and Conclusions:

Repair and rehabilitation improvements implemented for this existing housing project by HPHA should not result in significant environmental impacts based upon research data collected, a field inspection, consultation with the site manager and maintenance staff, consultation with pertinent resource agencies, and prior HPHA experience implementing repair and rehabilitation improvements. Therefore, repair and rehabilitation improvements would comply and be consistent with the statutes, executive orders, and regulations addressed. Furthermore, HPHA would evaluate improvements planned to ensure the work is consistent with the designated categories of actions described under the project description section. Compliance with these factors evaluated are further addressed in the attached Source Documentation Statutory Worksheet along with relevant technical reports/assessments.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Law, Authority, or Factor	Mitigation Measure
Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	*Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.* *Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.* *Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.* *Newell's shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.* *Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.* *Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo'i, impoundments or other vegetated water bodies.*

	1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols. *2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.* *3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.* *In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.* *<u>Additional Measures</u>: The following additional measures would be implemented:* *1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.*

Determination:

☐ This categorically excluded activity/project converts to **EXEMPT** per Section 58.34(a)(12), because it does not require any mitigation for compliance with any listed statutes or authorities, nor requires any formal permit or license; **Funds may be committed and drawn down after certification of this part** for this (now) EXEMPT project; OR

☒ This categorically excluded activity/project cannot convert to Exempt status because one or more statutes or authorities listed at Section 58.5 requires formal consultation or mitigation. Complete consultation/mitigation protocol requirements, **publish NOI/RROF and obtain "Authority to Use Grant Funds"** (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR

☐ This project is not categorically excluded OR, if originally categorically excluded, is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

Preparer Signature: Scott Ezer Date: 11-10-15

Name/Title/Organization: Mr. Scott Ezer, Vice President
HHF Planners

Responsible Entity Agency Official Signature:

David Y. Ige Date: APR 28 2016

Name/Title: Mr. David Y. Ige, Governor

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

WAIMAHA SUNFLOWER (HA # 1057)

TMK: (1) 8-5-010: 029 and 063

Hawai‘i Public Housing Authority (HPHA) Environmental Review

SOURCE DOCUMENTATION (SD) STATUTORY WORKSHEET

Site Visit Date: June 15, 2015
Prepared By: Glenn Tadaki

PROJECT DESCRIPTION

The Waimaha Sunflower housing project is located in the Wai‘anae community on the island of O‘ahu. Wai‘anae is situated between the communities of Mākaha to the north and Mā‘ili to the south.

The project site is located at the intersection of Mill Street and McArthur Street and lies to the west of Wai‘anae Elementary School. This housing project lies within HPHA’s Asset Management Project (AMP) 44 which includes four other housing projects.

Waimaha Sunflower was first occupied in 1980 and has a street address of 85-186 McArthur Street. The property consists of a combined area of 3.77 acres and encompasses two parcels, Tax Map Key (1) 8-5-010: 029 (Waimaha) and Tax Map Key (1) 8-5-010: 063 (Sunflower). The housing project consists of nine three-story townhouses ranging from one, two, or three bedrooms per unit, as well as a single-story community center. The property is designated for “Urban” use by the State Land Use Commission and is zoned for “A-2 Medium Density Apartment” use by the City and County of Honolulu.

The project site is not located within a tsunami evacuation zone. Based upon an updated Flood Insurance Rate Map (Community Panel Number 15003C0183H, Revised November 5, 2014), the project site is designated being located within Zone XS (0.2% annual chance of flood).

The following figures in Exhibit A provide supporting information on this housing project:

Figure 1: Location Map
Figure 2: TMK Map
Figure 3: Site Map
Figure 4: Flood Map

COMPLIANCE FACTORS

I. AIRPORT CLEAR ZONES AND ACCIDENT POTENTIAL ZONES (24 CFR PART 51D)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The housing project does not lie within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: 24 CFR 51 (D).

Honolulu International Airport Master Plan - 2010 (August 1994), State Department of Transportation, Airports Division; and

*Hawai`i Airports and Flying Safety Guide (2012-13, Fifth Edition, Revision 1)* Hawai`i Department of Transportation, Airports Division.

HDOT website at: http://hidot.hawaii.gov/airports/files/2013/01/Airport-Safety-Guide-2012-2013-5rev1.pdf

II. COASTAL BARRIER RESOURCES (COASTAL BARRIER IMPROVEMENT ACT OF 1990 [16 USC 3501])

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i does not have any designated coastal barrier resource units.

SUPPORTING DOCUMENTATION:

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/cbra/maps/mapper.html (Date accessed: 6/30/15).

III. FLOOD INSURANCE (FLOOD DISASTER PROTECTION ACT OF 1973 AND NATIONAL FLOOD INSURANCE REFORM ACT OF 1994 [42 USC 4001-4128 AND 42 USC 5154a])

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
X	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program.

As indicated in Flood Insurance Rate Map Panel 15003C0183H, the entire project site (both parcels) is located within Zone XS (0.2% annual chance of flood). Zone XS is a non-special flood hazard area that is a low to moderate risk flood area. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities. A field inspection and information obtained from the AMP Manager confirmed no major flooding issues within the site. The Waimaha Sunflower housing project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance is not mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the Waimaha Sunflower housing project did not visually reveal any signs of previous flooding problems. An interview with the AMP Manager determined that no major ponding or flooding issues have occurred on the project site.

Printed: Flood Insurance Rate Map, City and County of Honolulu, Community Panel Number 15003C0183H, Revised November 5, 2014.

Hawai‘i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 6/30/15)

Experience: Flood Insurance Rate Map (FIRM), City and County of Honolulu, Hawai‘i Community Panel Number 15003C0183H, Revised September 30, 2004. In 2004, the entire project site was designated Zone X (outside the 0.2% annual chance of flood) based upon the FIRM. However, the recent November 2014 update of this FIRM has placed the entire project site and surrounding areas within Zone XS (0.2% annual chance of flood).

IV. CLEAN AIR ACT (40 CFR PARTS 6, 51, 93)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. Environmental Protection Agency's Green Book for currently designated "nonattainment areas" as of June 2015. Planned rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.

SUPPORTING DOCUMENTATION:

Printed: *State of Hawai‘i Annual Summary 2013 Air Quality Data*. State of Hawai'i, Department of Health, July 2014.

U.S. Environmental Protection Agency website at: http://epa.gov/airquality/greenbk/ (Date accessed: 6/30/2015).

V. COASTAL ZONE MANAGEMENT ACT (16 USC 1451, SECTIONS 307 (C), (D)

CONTACT:
Mr. John Nakagawa
Office of Planning
Department of Business, Economic Development & Tourism
State of Hawai‘i
P.O. Box 2359
Honolulu, Hawai'i, 96804-2359

SUPPORTING DOCUMENTS

	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai‘i's Coastal Zone Management (CZM) program.

SUPPORTING DOCUMENTATION:

Contact: In an e-mail to the Office of Planning (OP) dated July 27, 2015, the HPHA determined that the use of HUD funds for the implementation of repair and rehabilitation improvements does not require review for consistency with Hawai‘i's CZM program. The OP confirmed this determination in an e-mail dated July 28, 2015 and included in the Appendices.

Experience: As part of past environmental reviews in December 2010, a letter from the OP dated July 20, 2005 determined that their review for consistency with Hawai'i's CZM program was not required. A copy of this letter is included in the Appendices.

VI. CONTAMINATION AND TOXIC SUBSTANCES (24 CFR PART 50.3 & 58.5(I)(2))

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Does Not Affect Program.

There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.

SUPPORTING DOCUMENTATION:

Field: A site inspection and interview with the AMP Manager revealed no presence of any toxic or radioactive materials on the project site that warrant any concern. A secure storage room in the Waimaha Sunflower community center is used to store flammable and hazardous materials for the housing projects in AMP 44. The storage room is in acceptable condition and labeled with signage.

Study: Environmental Data Resources, Inc. (EDR), conducted a search of available environmental records and prepared a Radius Map Report (Inquiry Number 4237094.194s, March 17, 2015). EDR reviewed more than 25 federal and statewide regulatory databases for information regarding the treatment, storage, disposal and release of toxic chemicals at the project site and within specific radii (generally 1 mile) of the site. A Detail Map within the EDR report documents those sites identified within a 0.25 mile radius of the project site. Some of the sites contain underground storage tanks (UST) that are currently in use or are permanently out of use The EDR report in Exhibit B includes the results of their research findings.

In the vicinity of the project site, the EDR report notes that CNK Trucking Company at 85-138C Wai'anae Valley Road is currently classified as a non-generator because it does not generate hazardous waste. The report also notes that three gasoline USTs (total 16,000 gallons) at the Wai'anae Police Station on 85-939 Farrington Highway are permanently out of use, and that cleanup for a leaking UST at this facility was completed in 1998.

The project site was not identified as a Formerly Used Defense Site (FUDS) by the U.S. Army Corps of Engineers and is not subject to any cleanup actions for Department of Defense-generated contamination.

VII. ENDANGERED SPECIES (50 CFR PART 402)

CONTACT:
Mr. Loyal Mehrhoff, Field Supervisor
Pacific Islands Administrator
Fish and Wildlife Services
U.S. Department of the Interior
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawai'i 96813
Tel. #: 792-9400

SUPPORTING DOCUMENTS

	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Adverse Effect Subject to Mitigation

The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices.

SUPPORTING DOCUMENTATION:

Contact: A letter from the HPHA dated July 24, 2015 was submitted to the Pacific Island Administrator for the FWS determining that repair and rehabilitation improvements that may be implemented using HUD funds for this housing project would have no likelihood of effect on any listed species or proposed species, or existing or proposed designated critical habitat subject to certain measures. Concurrence with this determination along with proposed minimization and avoidance measures was received from the FWS in a letter dated September 28, 2015 which is included in the Appendices. This housing project is subject to the following minimization and avoidance measures.

Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.

Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.

Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.

Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No

potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.

Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo‘i, impoundments or other vegetated water bodies.

1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols.
2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.
3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.

In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.

Additional Measures: The following additional measures would be implemented:

1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.

Experience: The FWS was previously consulted as part of environmental reviews that were completed in 2005 (39 housing projects) and 2010 (70 housing projects) which supported the determination that repair and rehabilitation improvements would either: 1) have no likelihood of effect for certain housing projects; or 2) not likely adversely affect federally listed species or critical habitat for certain housing projects subject to mitigative measures. A summary of these consultation efforts follows.

2005 Consultation: In a letter dated July 15, 2005, the Housing and Community Development Corporation of Hawai‘i (predecessor to the HPHA), determined that the implementation of minor repair and rehabilitation improvements for 39 housing projects would not have an adverse effect on federally-listed species or critical habitat. In a letter dated August 11, 2005, the FWS concurred with the HCDCH determination.

2010 Consultation: In a letter dated May 17, 2010, the HPHA informed the FWS that HUD funds would be used to immediately implement repair and rehabilitation improvements for six housing projects on O‘ahu and the island of Hawai`i. In a subsequent letter dated May 21, 2010, the FWS was informed that HPHA would be using HUD funds to implement minor repair and rehabilitation improvements for 64 projects throughout the State. In both letters, the HPHA determined that the repair and rehabilitation improvements were not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat. Based on further consultation and a meeting with FWS staff on June 24, 2010, the HPHA determined that repair and

rehabilitation improvements for most of their housing projects would not likely adversely affect any listed or proposed species, or existing or proposed designated habitat, subject to various mitigative measures for certain housing projects.

VIII. EXPLOSIVE AND FLAMMABLE OPERATIONS (24 CFR PART 51C)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

SUPPORTING DOCUMENTATION:

Field: Field inspection was limited to the exterior of residential buildings and associated structures for this housing project. No above-ground explosive or flammable material storage containers in excess of 100 gallons were observed at the site.

Printed: 24 CFR Part 51, Subpart C addresses acceptable separation distance from above-ground explosive or flammable fuels or chemical containers. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

IX. FARMLANDS PROTECTION (7 CFR PART 658)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program.

The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. Since the property consists of an existing housing development within an urbanized area, no farmlands would be impacted by the implementation of repair and rehabilitation improvements.

Printed: The property is designated for "Urban" use by the State Land Use Commission and is zoned for "A-2 Medium Density Apartment" use by the City and County of Honolulu.

Hawai`i Office of Planning website at: http://planning.hawaii.gov/gis/
(Date accessed: 6/30/2015).

X. FLOODPLAIN MANAGEMENT (EXECUTIVE ORDER 11988, 24 CFR PART 55)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
X	Experience
	Study

DETERMINATION:

Status Category: Complies with Program; Subject to Review and Permits for New Housing Units, if Applicable

As indicated in Flood Insurance Rate Map, Panel 15003C0183H, the entire project site (both parcels) is located within Zone XS (0.2% annual chance of flood). Zone XS is a non-special flood hazard area that is a low to moderate risk flood area. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities. A field inspection and information obtained from the AMP Manager confirmed no major flooding issues within the site. No significant impacts to existing housing units or Zone XS floodplain conditions are expected as a result of repair and rehabilitation improvements. However, should new housing units be constructed in the future, design plans would be submitted to pertinent State and County agencies for review and approval as part of the design review process. Any required site modifications would comply with applicable flood regulations and design standards. The implementation of the design review process and compliance with pertinent flood regulations should minimize any impacts on public health, safety, and welfare.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the Waimaha Sunflower housing project did not visually reveal any signs of previous flooding problems. An interview with the AMP Manager determined that no major ponding or flooding issues have occurred on the project site.

Printed: Flood Insurance Rate Map, City and County of Honolulu, Hawai'i Community Panel Number Community Panel Number 15003C0183G, Revised January 19, 2011).

Hawai'i Department of Land and Natural Resources website at:
http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 6/30/15)

Experience: Flood Insurance Rate Map (FIRM), City and County of Honolulu, Hawai'i Community Panel Number 15003C0183H, Revised September 30, 2004. In 2004, the entire project site was designated Zone X (outside the 0.2% annual chance of flood) based upon the FIRM. However, the recent November 2014 update of this FIRM has placed the entire project site and surrounding areas within Zone XS (0.2% annual chance of flood).

XI. HISTORIC PRESERVATION (NATIONAL HISTORIC PRESERVATION ACT OF 1966; SECTIONS 106 AND 110; 36 CFR, PART 800)

CONTACT:	SUPPORTING DOCUMENTS	
Ms. Suzanne Case, Chairperson	X	Field
Department of Land and Natural Resources (DLNR)	X	Contact
State of Hawai'i	X	Printed
1151 Punchbowl Street	X	Experience
Honolulu, Hawai'i 96813		Study
Tel. #: 587-0400		

DETERMINATION:

Status Category: No Effect on Historic Properties

Waimaha Sunflower is 35 years old and was initially occupied in 1980. To be eligible for listing in the National Register of Historic Places (NRHP), a property must meet the National Register criteria for evaluation which involves examining its integrity, significance, and age (generally at least 50 years old). Due to its age, this housing project does not meet the eligibility criteria to be evaluated for the NRHP. In a letter to the State Historic Preservation Officer (SHPO) dated July 23, 2015, the HPHA determined that no historic properties would be affected (no effect) by repair and rehabilitation improvements for this housing project. No comments or objections about this no effect determination were received.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the Waimaha Sunflower housing project did not locate any existing or potential archaeological sites (e.g., heiau) or cultural features on the property. The project site has undergone extensive ground-altering activities since it was initially developed and improved with buildings, driveways, parking lots, sidewalks, and other related improvements. An interview with the AMP Manager indicates that no known sites or features are present on the property.

Contact: A letter from the HPHA dated July 23, 2015, which is included in the Appendix, was submitted to the State Historic Preservation Officer [SHPO] (Chair of State Board of Land and Natural Resources) as part of Section 106 consultation determining that no historic properties would be affected (no effect) by repair and rehabilitation improvements that may be implemented using HUD funds for this housing project. The SHPO did not submit any comments or objections on the "no effect" determination for this housing project, which included follow-up e-mails with the State Historic Preservation Division regarding a response. On September 28, 2015, notice of HPHA's determination was also distributed to several native Hawaiian organizations and the various County Planning Departments. No concerns or opposition to this determination was received.

Printed: A review of the U.S. National Parks Service website for the National Register of Historic Places did not identify any historic properties within the limits of this housing project. A similar review of the State DLNR website for the State Register of Historic Places revealed that there are no historic properties within the project site.

National Register: U.S. National Park Service website at: http://www.nps.gov/nr/research/ (Date accessed: 7/2/15).

State Register: Hawai`i Department of Land and Natural Resources website at: http://dlnr.hawaii.gov/shpd/state-register/ (Date accessed: 7/2/15).

Experience: In letter to the SHPO dated April 19, 2011, the HPHA determined that minor repair and rehabilitation improvement at 57 public housing projects throughout Hawai‘i (including Waimaha Sunflower) would have “no effect” on historic properties. The SHPO had no comments or objections on the “no effect” determination.

XII. NOISE ABATEMENT CONTROL (24 CFR PART 51B)

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

Status Category: Within HUD Noise Standards

The project site is not situated along a highway or arterial roadway that has a high volume of vehicular traffic that may generate significant noise. This housing project site is divided into two separate parcels (Waimaha and Sunflower parcels), therefore, the noise estimate included traffic data from two roadways. Access to both project site parcels is provided by Mill Street. This is a side street that runs parallel to Farrington Highway, connecting Wai‘anae Valley Road and Plantation Road. Farrington Highway, with the highest volume of vehicular traffic in the area, is approximately 250 feet away from the closest noise receptor at the Sunflower portion of the project site. The HUD noise level calculator estimated noise level at the project site to be 56.4 dBA. Plantation Road has far less vehicles, and is about 320 feet away from the Waimaha portion of the housing project. The estimated noise levels at the Waimaha portion of the project site using the HUD calculator was 44.5 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

SUPPORTING DOCUMENTATION:

Field: No significant noise generating sources were identified within the project site during the site inspection. Furthermore, an interview with the AMP manager and Maintenance Supervisor did not identify any loud noise producing sources in the area. Noise sources are predominantly associated with vehicular traffic along adjacent roadways and voices from surrounding activities.

Study: The HUD day/night noise level (DNL) calculator was used to estimate approximate traffic noise levels at the project site. Roadways within the project area are City roadways used predominantly for circulation within the local area, and have speed limits of 25 mph. This

housing project site is divided into two separate parcels (Waimaha and Sunflower parcels), therefore, the noise estimate included traffic data from two roadways.

For the larger Waimaha property (TMK Parcel 29), Plantation Road is located approximately 315 feet north of this portion of the project site, and connects to Lihue Street and Mill Street. Mill Street serves as the main access road into this portion of the project site. Plantation Road has about 5,600 vehicles a day based upon State Department of Transportation 2013 traffic data. Given the distance of the center lines of this roadway from the project site (approximately 320 feet), the estimated noise levels at the Waimaha portion of the project site using the HUD calculator was 44.5 dBA.

Farrington Highway is the main highway serving this community, and is located approximately 250 feet away from the closest noise receptor at the Sunflower portion (TMK Parcel 63) of this housing project site. There is a vacant plot of land (approximately one acre) between the southeast edge. Farrington Highway is expected to generate the most traffic noise in the area. The estimated noise levels at this Sunflower portion of the project site from Farrington Highway was 56.1 dBA. Therefore, traffic noise levels at this entire housing project site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvement are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

XIII. SOLE SOURCE AQUIFER (40 CFR PART 149)

	SUPPORTING DOCUMENTS
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact on Sole Source Aquifer.

The housing project is located within the O‘ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation. However, if exceptional circumstances require compliance steps with any of these authorities, such compliance must be established and documented prior to approving the site-specific loan or grant.

SUPPORTING DOCUMENTATION:

Printed: This determination was based upon review of the Sole Source Aquifer Memorandum of 4/30/90 (Sections II.B.1 and II.B.2) and consideration of the type of rehabilitation related improvements that would be conducted for this project.

XIV. WETLANDS PROTECTION (EXECUTIVE ORDER 11990)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the property did not identify the presence of any wetlands.

Printed: U.S Fish and Wildlife Service website at: http://www.fws.gov/wetlands/data/mapper.html (Date accessed 6/30/2015).

XV. WILD AND SCENIC RIVERS ACT (16 USC 1271, SECTION 7 (B), (C))

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no Wild and Scenic Rivers in Hawai‘i, which excludes this project from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: National Wild and Scenic Rivers System website at: http://www.rivers.gov/index.php (Date accessed: 6/30/2015).

XVI. ENVIRONMENTAL JUSTICE (EXECUTIVE ORDER NO. 12898)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact on Requirements.

Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, repair and rehabilitation improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations. Repair and rehabilitation improvements should benefit low-income and minority populations living within this housing project.

SUPPORTING DOCUMENTATION:

Printed: Executive Order 12898.

U.S. Department of Housing and Urban Development website at:
https://www.hudexchange.info/environmental-review/environmental-justice/

EXHIBIT A

Location Map, TMK Map, Site Map, Flood Map, and Site Photos

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

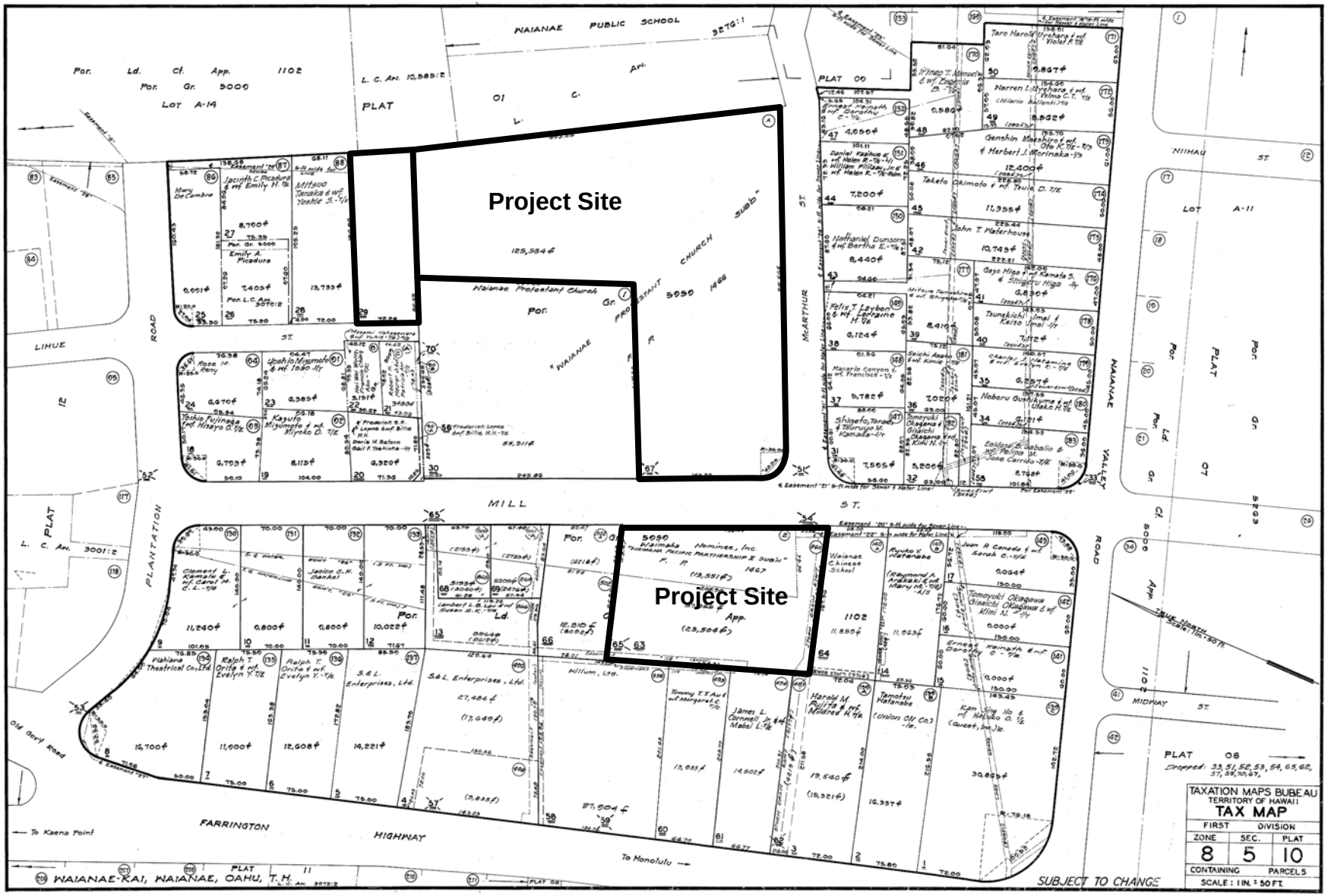
HPHA No. 1057 - Waimaha Sunflower (AMP 44)

Figure 1 - Project Location Map

Wai'anae, O'ahu

1,000 FT

HHF PLANNERS
places for people

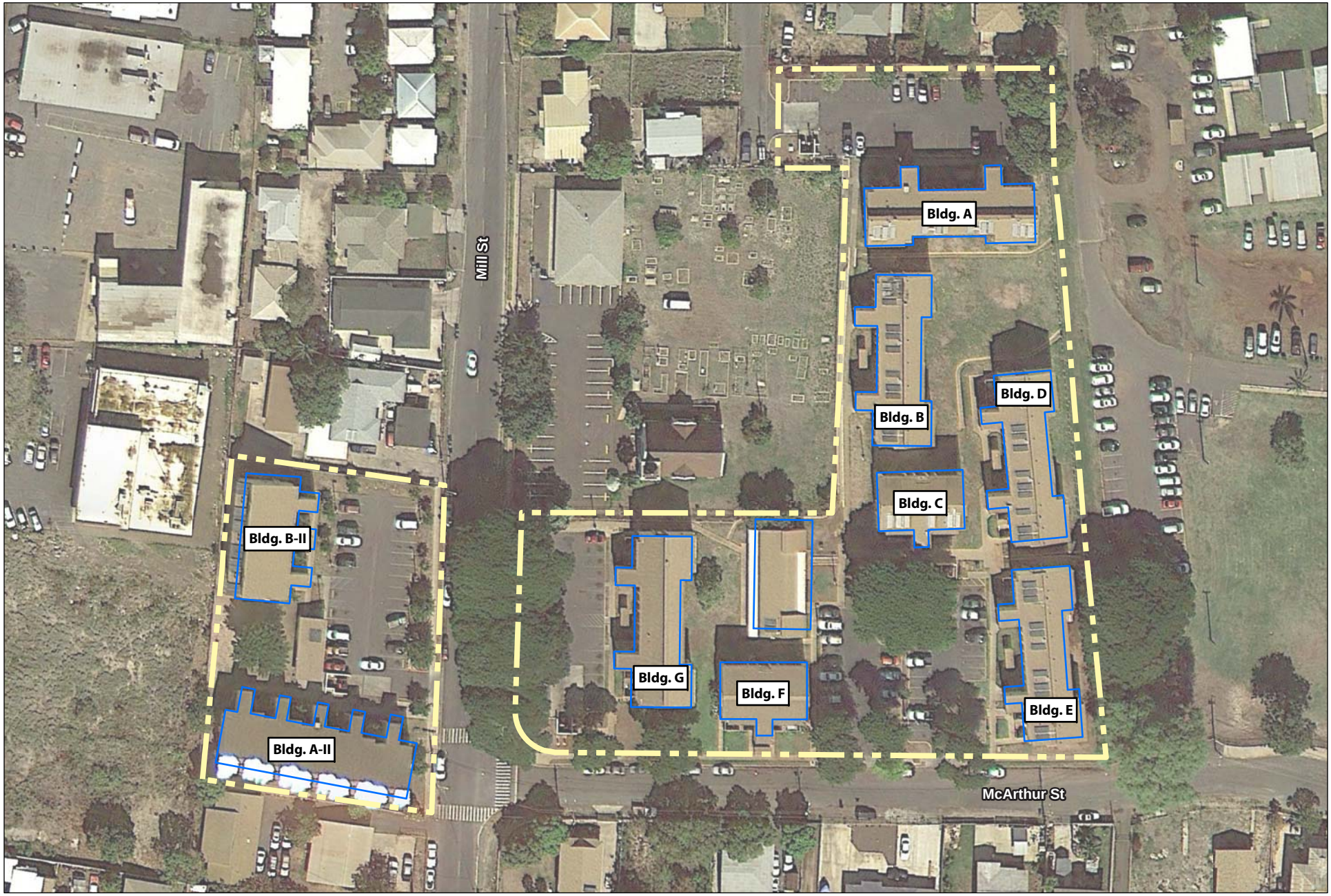


HPHA No. 1057 - Waimaha Sunflower (AMP 44)

Figure 2 - TMK Map

Waiʻanae, Oʻahu

HHF PLANNERS
places for people



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1057 - Waimaha Sunflower (AMP 44)

Figure 3 - Site Map

Wai'anae, O'ahu

67 FEET

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

LEGEND

- Zone X - Outside the 0.2% Annual Chance of Flood
- Zone XS - 0.2% Annual Chance of Flood

HPHA No. 1057 - Waimaha Sunflower (AMP 44)

Figure 4 - Flood Map

Wai'anae, O'ahu

67 FEET

HHF PLANNERS
places for people

WAIMAHA SUNFLOWER
SITE PHOTOS

McArthur Street (facing west) adjacent to housing site (at right)

McArthur Street (facing east) adjacent to housing site (at left)

Lihue Street (facing north) adjacent to housing site (at right)

Mill Street (facing south) adjacent to housing site (at right)

Parking lot off of McArthur Street; Community Center (left) and Building C (right)

Parking lot off of McArthur Street; Building E

WAIMAHA SUNFLOWER
SITE PHOTOS

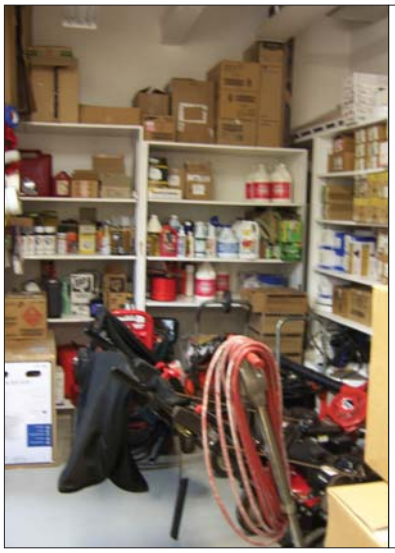
Parking lot off of Lihue Street; Building A

Parking lot off of Mill Street; Building B-II

Side yard along Building D (right) and Building E (beyond)

Rear yard along Building A-II, facing south

Side yard along Building A-II, facing east



Storage Area

EXHIBIT B

EDR Radius Map Report

Waimaha-Sunflower
85-186 Mcarthur St.
Waianae, HI 96792

Inquiry Number: 4237094.194s
March 17, 2015

EDR Summary Radius Map Report

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

FORM-NULL-PVC

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

85-186 MCARTHUR ST.
HONOLULU County, HI 96792

COORDINATES

Latitude (North):	21.4447000 - 21' 26' 40.92''
Longitude (West):	158.1858000 - 158' 11' 8.88''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	584369.1
UTM Y (Meters):	2371444.8
Elevation:	19 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	USGS 7.5 min quad index

MAPPED SITES SUMMARY

Target Property Address:
85-186 MCARTHUR ST.
, HI 96792

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
1	CNK TRUCKING CO. LLC	85-138 C WAIANAE VAL	RCRA NonGen / NLR	Lower	504, South
A2		85942 FARRINGTON HW	EDR US Hist Auto Stat	Lower	596, SW
B3		85850 FARRINGTON HW	EDR US Hist Auto Stat	Lower	716, WNW
4		85915 FARRINGTON HW	EDR US Hist Auto Stat	Lower	716, WSW
A5	C&CH WAIANAE POLICE	85-939 FARRINGTON HW	LUST, UST, Financial Assurance	Lower	747, SW
6	TOSCO WAIANAE BULK P	87 523 FARRINGTON HW	RCRA NonGen / NLR, EPA WATCH LIST	Lower	810, West
B7	CONSUMER TIRE WAREHO	85 850 FARRINGTON HW	RCRA NonGen / NLR, FINDS	Lower	862, WNW
C8	MAHALO 7-ELEVEN WAIA	85-830 FARRINGTON HW	LUST, UST, Financial Assurance	Lower	953, NW
C9		85830 FARRINGTON HW	EDR US Hist Auto Stat	Lower	1010, NW
C10	AIM WAIANAE	85-803 FARRINGTON HW	LUST, UST, Financial Assurance	Lower	1076, NW
11	7-11 WAIANAE	85-997 FARRINGTON HW	LUST, UST, Financial Assurance	Lower	1156, SSW
12		85143 LUALUALEI HOM	EDR US Hist Auto Stat	Higher	1180, South
13	WAIANAE SHELL	86-003 FARRINGTON HW	LUST, UST, Financial Assurance	Lower	1186, SSW
D14	WAIANAE CLEANERS INC	85 784 FARRINGTON HW	RCRA-SQG, FINDS	Lower	1228, NW
15		85351 IMIPONO PL	EDR US Hist Auto Stat	Lower	1248, NE
D16		85803 FARRINGTON HW	EDR US Hist Auto Stat	Lower	1258, NW
17	LARRY'S CHEVRON	86-038 FARRINGTON HW	LUST, Financial Assurance	Lower	1767, South
E18	LEEWARD PETROLEUM IN	85-723 FARRINGTON HW	SHWS, SPILLS	Lower	1843, NW
E19	LEEWARD PETROLEUM CO	85-723 FARRINGTON HW	LUST, UST	Lower	1928, NW
20	WAIANAE CENTRAL OFFI	85-677 FARRINGTON HW	LUST, UST, Financial Assurance	Lower	2342, NW
21	JAYMER INC	86-363 HALE ELUA ST	CERC-NFRAP, RCRA NonGen / NLR, FINDS, SHWS	Higher	3724, ESE
22	85-443 WAIANAE VALLE	85-443 WAIANAE VALLE	FINDS, SHWS, SPILLS	Higher	3728, ENE
23	C&CH WAIANAE CORP YA	86-220 FARRINGTON HW	SHWS, LUST, UST, Financial Assurance	Lower	5076, SSE

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA generators list

RCRA-SQG: A review of the RCRA-SQG list, as provided by EDR, and dated 12/09/2014 has revealed that there is 1 RCRA-SQG site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
WAIANAE CLEANERS INC	*85 784 FARRINGTON HW*	*NW 1/8 - 1/4 (0.233 mi.)*	*D14*	*10*

State- and tribal - equivalent CERCLIS

SHWS: A review of the SHWS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 4 SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
JAYMER INC	*86-363 HALE ELUA ST*	*ESE 1/2 - 1 (0.705 mi.)*	*21*	*11*
85-443 WAIANAE VALLE	*85-443 WAIANAE VALLE*	*ENE 1/2 - 1 (0.706 mi.)*	*22*	*11*

Lower Elevation	Address	Direction / Distance	Map ID	Page
LEEWARD PETROLEUM IN	*85-723 FARRINGTON HW*	*NW 1/4 - 1/2 (0.349 mi.)*	*E18*	*10*
C&CH WAIANAE CORP YA	*86-220 FARRINGTON HW*	*SSE 1/2 - 1 (0.961 mi.)*	*23*	*12*

State and tribal leaking storage tank lists

LUST: A review of the LUST list, as provided by EDR, and dated 12/16/2014 has revealed that there are 8 LUST sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
C&CH WAIANAE POLICE	*85-939 FARRINGTON HW*	*SW 1/8 - 1/4 (0.141 mi.)*	*A5*	*7*
Facility Status: Site Cleanup Completed (NFA)				
MAHALO 7-ELEVEN WAIA	*85-830 FARRINGTON HW*	*NW 1/8 - 1/4 (0.180 mi.)*	*C8*	*8*
Facility Status: Site Cleanup Completed (NFA)				
AIM WAIANAE	*85-803 FARRINGTON HW*	*NW 1/8 - 1/4 (0.204 mi.)*	*C10*	*8*
Facility Status: Site Cleanup Completed (NFA)				
7-11 WAIANAE	*85-997 FARRINGTON HW*	*SSW 1/8 - 1/4 (0.219 mi.)*	*11*	*9*
Facility Status: Site Cleanup Completed with EHMP				
WAIANAE SHELL	*86-003 FARRINGTON HW*	*SSW 1/8 - 1/4 (0.225 mi.)*	*13*	*9*
Facility Status: Soil Vapor Sampling				
LARRY'S CHEVRON	*86-038 FARRINGTON HW*	*S 1/4 - 1/2 (0.335 mi.)*	*17*	*10*
Facility Status: Site Cleanup Completed (NFA)				
LEEWARD PETROLEUM CO	*85-723 FARRINGTON HW*	*NW 1/4 - 1/2 (0.365 mi.)*	*E19*	*11*
Facility Status: Active Remediation				
WAIANAE CENTRAL OFFI	*85-677 FARRINGTON HW*	*NW 1/4 - 1/2 (0.444 mi.)*	*20*	*11*
Facility Status: Site Cleanup Completed (NFA)				

State and tribal registered storage tank lists

UST: A review of the UST list, as provided by EDR, and dated 12/18/2014 has revealed that there are 5 UST sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
C&CH WAIANAE POLICE	*85-939 FARRINGTON HW*	*SW 1/8 - 1/4 (0.141 mi.)*	*A5*	*7*
MAHALO 7-ELEVEN WAIA	*85-830 FARRINGTON HW*	*NW 1/8 - 1/4 (0.180 mi.)*	*C8*	*8*
AIM WAIANAE	*85-803 FARRINGTON HW*	*NW 1/8 - 1/4 (0.204 mi.)*	*C10*	*8*
7-11 WAIANAE	*85-997 FARRINGTON HW*	*SSW 1/8 - 1/4 (0.219 mi.)*	*11*	*9*
WAIANAE SHELL	*86-003 FARRINGTON HW*	*SSW 1/8 - 1/4 (0.225 mi.)*	*13*	*9*

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

RCRA NonGen / NLR: A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 12/09/2014 has revealed that there are 3 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

EXECUTIVE SUMMARY

Lower Elevation	Address	Direction / Distance	Map ID	Page
CNK TRUCKING CO. LLC	85-138 C WAIANAE VAL	S 0 - 1/8 (0.095 mi.)	1	7
TOSCO WAIANAE BULK P	***87 523 FARRINGTON HW***	***W 1/8 - 1/4 (0.153 mi.)***	***6***	***8***
CONSUMER TIRE WAREHO	***85 850 FARRINGTON HW***	***WNW 1/8 - 1/4 (0.163 mi.)***	***B7***	***8***

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Auto Stat: A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there are 7 EDR US Hist Auto Stat sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	85143 LUALUALEI HOM	S 1/8 - 1/4 (0.223 mi.)	12	9

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	85942 FARRINGTON HW	SW 0 - 1/8 (0.113 mi.)	A2	7
Not reported	85850 FARRINGTON HW	WNW 1/8 - 1/4 (0.136 mi.)	B3	7
Not reported	85915 FARRINGTON HW	WSW 1/8 - 1/4 (0.136 mi.)	4	7
Not reported	85830 FARRINGTON HW	NW 1/8 - 1/4 (0.191 mi.)	C9	8
Not reported	85351 IMIPONO PL	NE 1/8 - 1/4 (0.236 mi.)	15	10
Not reported	85803 FARRINGTON HW	NW 1/8 - 1/4 (0.238 mi.)	D16	10

Count: 6 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
WAIANAE	1015730971	USARMY MAKUA MILITARY RESERVATION	FARRINGTON HWY	96792	RCRA-TSDF, CERCLIS, CORRACTS, RCRA-CESQG
WAIANAE	1006819047	P & S SANITARY HAULING INC	87-746 FARRINGTON HWY	96792	SHWS
WAIANAE	S115488727	WAIANAE ELEMENTARY SCHOOL DIESEL U	82-220 MCARTHUR		SHWS, SPILLS
WAIANAE	1014472031	ORDNANCE REEF BARGE	POKAI BAY	96792	RCRA-TSDF, RCRA NonGen / NLR
WAIANAE	1003879135	WAIANAE LDFL	WAIANAE VALLEY RD	96792	CERC-NFRAP
WAIANAE	1006819659	WAIANAE LANDFILL	572 WAIANAE VALLEY RD	96792	SHWS

OVERVIEW MAP - 4237094.194S

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Waimaha-Sunflower ADDRESS: 85-186 Mcarthur St. Walanae HI 96792 LAT/LONG: 21.4447 / 158.1858	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.194s DATE: March 17, 2015 5:41 pm

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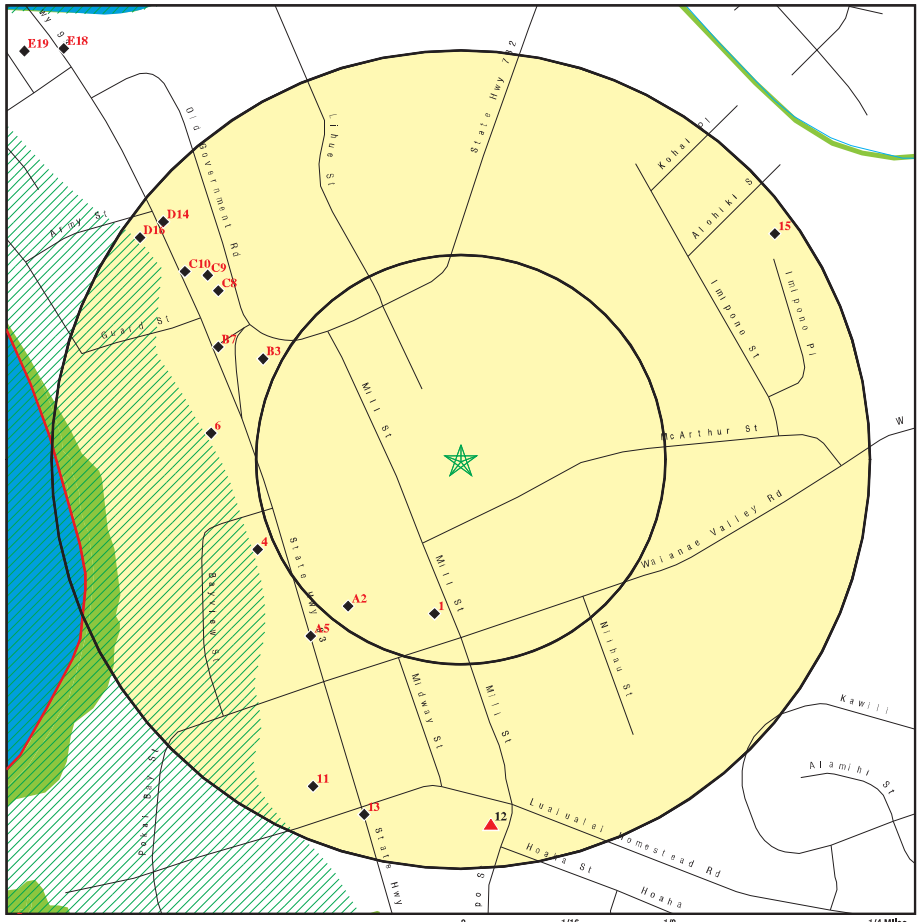
DETAIL MAP - 4237094.194S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	1	NR	NR	NR	1
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
SHWS	1.000		0	0	1	3	NR	4
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	5	3	NR	NR	8
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250		0	5	NR	NR	NR	5

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		0	0	0	NR	NR	0
INST CONTROL	0.500		0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		1	2	NR	NR	NR	3
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		1	6	NR	NR	NR	7
EDR US Hist Cleaners	0.250		0	0	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
RGA HWS	TP		NR	NR	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
1 South < 1/8 0.095 mi. 504 ft. Relative: Lower	**CNK TRUCKING CO. LLC 85-138 C WAIANAE VALLEY RD WAIANAE, HI 96792**	**RCRA NonGen / NLR**	**1014389678 HIT000140194**
	Click here for full text details		
	RCRA NonGen / NLR EPA Id: HIT000140194		
A2 SW < 1/8 0.113 mi. 596 ft. Relative: Lower	**85942 FARRINGTON HWY WAIANAE, HI 96792**	**EDR US Hist Auto Stat**	**1015657559 N/A**
	Click here for full text details		
B3 WNW 1/8-1/4 0.136 mi. 716 ft. Relative: Lower	**85850 FARRINGTON HWY WAIANAE, HI 96792**	**EDR US Hist Auto Stat**	**1015657453 N/A**
	Click here for full text details		
4 WSW 1/8-1/4 0.136 mi. 716 ft. Relative: Lower	**85915 FARRINGTON HWY WAIANAE, HI 96792**	**EDR US Hist Auto Stat**	**1015657545 N/A**
	Click here for full text details		
A5 SW 1/8-1/4 0.141 mi. 747 ft. Relative: Lower	**C&CH WAIANAE POLICE STATION 85-939 FARRINGTON HWY WAIANAE, HI 96792**	**LUST UST Financial Assurance**	**U001236063 N/A**
	Click here for full text details		
	LUST Facility Id: 9-200115 Facility Status: Site Cleanup Completed (NFA)		
	UST Facility Id: 9-200115 Tank Status: Permanently Out of Use Tank Status: Permanently out of Use		

6
West
1/8-1/4
0.153 mi.
810 ft.

Relative: Lower

TOSCO WAIANAE BULK PLANT 0837
87 523 FARRINGTON HWY
WAIANAE, HI 96792

RCRA NonGen / NLR **1000823256**
EPA WATCH LIST **HID984468959**

Click here for full text details

RCRA NonGen / NLR
EPA Id: HID984468959

B7
WNW
1/8-1/4
0.163 mi.
862 ft.

Relative: Lower

CONSUMER TIRE WAREHOUSE
85 850 FARRINGTON HWY
WAIANAE, HI 96792

RCRA NonGen / NLR **1000390336**
FINDS **HID981657422**

Click here for full text details

RCRA NonGen / NLR
EPA Id: HID981657422

C8
NW
1/8-1/4
0.180 mi.
953 ft.

Relative: Lower

MAHALO 7-ELEVEN WAIANAE MAUKA
85-830 FARRINGTON HWY
WAIANAE, HI 96792

LUST **U003222048**
UST **N/A**
Financial Assurance

Click here for full text details

LUST
Facility Id: 9-201863
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-201863
Tank Status: Currently in Use

C9
NW
1/8-1/4
0.191 mi.
1010 ft.

Relative: Lower

85830 FARRINGTON HWY
WAIANAE, HI 96792

EDR US Hist Auto Stat **1015657436**
N/A

Click here for full text details

C10
NW
1/8-1/4
0.204 mi.
1076 ft.

Relative: Lower

AIM WAIANAE
85-803 FARRINGTON HWY
WAIANAE, HI 96792

LUST **U003222019**
UST **N/A**
Financial Assurance

Click here for full text details

LUST
Facility Id: 9-201208
Facility Status: Site Cleanup Completed (NFA)

UST

AIM WAIANAE (Continued) **U003222019**

Facility Id: 9-201208
Tank Status: Permanently Out of Use
Tank Status: Currently in Use

11
SSW
1/8-1/4
0.219 mi.
1156 ft.

Relative: Lower

7-11 WAIANAE
85-997 FARRINGTON HWY
WAIANAE, HI 96792

LUST **U001236297**
UST **N/A**
Financial Assurance

Click here for full text details

LUST
Facility Id: 9-201207
Facility Status: Site Cleanup Completed with EHMP

UST
Facility Id: 9-201207
Tank Status: Permanently Out of Use
Tank Status: Currently In Use

12
South
1/8-1/4
0.223 mi.
1180 ft.

Relative: Higher

85143 LUALUALEI HOMESTEAD RD
WAIANAE, HI 96792

EDR US Hist Auto Stat **1015656194**
N/A

Click here for full text details

13
SSW
1/8-1/4
0.225 mi.
1186 ft.

Relative: Lower

WAIANAE SHELL
86-003 FARRINGTON HWY
WAIANAE, HI 96792

LUST **U003222005**
UST **N/A**
Financial Assurance

Click here for full text details

LUST
Facility Id: 9-201014
Facility Status: Soil Vapor Sampling

UST
Facility Id: 9-201014
Tank Status: Permanently Out of Use

D14
NW
1/8-1/4
0.233 mi.
1228 ft.
Relative: Lower

WAIANAE CLEANERS INC — **RCRA-SQG** — **1000151023**
85 784 FARRINGTON HWY — **FINDS** — **HID981990161**
WAIANAE, HI 96792

Click here for full text details

RCRA-SQG
EPA Id: HID981990161

15
NE
1/8-1/4
0.236 mi.
1248 ft.
Relative: Lower

EDR US Hist Auto Stat — **1015656664**
85351 IMIPONO PL — **N/A**
WAIANAE, HI 96792

Click here for full text details

D16
NW
1/8-1/4
0.238 mi.
1258 ft.
Relative: Lower

EDR US Hist Auto Stat — **1015657413**
85803 FARRINGTON HWY — **N/A**
WAIANAE, HI 96792

Click here for full text details

17
South
1/4-1/2
0.335 mi.
1767 ft.
Relative: Lower

LARRY'S CHEVRON — **LUST** — **U003222024**
86-038 FARRINGTON HWY — **Financial Assurance** — **N/A**
WAIANAE, HI 96792

Click here for full text details

LUST
Facility Id: 9-201242
Facility Status: Site Cleanup Completed (NFA)

E18
NW
1/4-1/2
0.349 mi.
1843 ft.
Relative: Lower

LEEWARD PETROLEUM INC #300837 — **SHWS** — **S106818753**
85-723 FARRINGTON HWY — **SPILLS** — **N/A**
WAIANAE, HI 96792

Click here for full text details

E19
NW
1/4-1/2
0.365 mi.
1928 ft.
Relative: Lower

LEEWARD PETROLEUM COMPANY - BULK PLANT — **LUST** — **U004196892**
85-723 FARRINGTON HWY — **UST** — **N/A**
WAIANAE, HI 96792

Click here for full text details

LUST
Facility Id: 9-201141
Facility Status: Active Remediation

UST
Facility Id: 9-201141
Tank Status: Permanently Out of Use
Tank Status: Temporarily out of Use

20
NW
1/4-1/2
0.444 mi.
2342 ft.
Relative: Lower

WAIANAE CENTRAL OFFICE — **LUST** — **U003221982**
85-677 FARRINGTON HWY — **UST** — **N/A**
MAKAHA, HI 96792 — **Financial Assurance**

Click here for full text details

LUST
Facility Id: 9-200534
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-200534
Tank Status: Currently in Use

21
ESE
1/2-1
0.705 mi.
3724 ft.
Relative: Higher

JAYMER INC — **CERC-NFRAP** — **1000297901**
86-363 HALE ELUA ST — **RCRA NonGen / NLR** — **HID091797647**
WAIANAE, HI 96792 — **FINDS**
SHWS

Click here for full text details

CERC-NFRAP
EPA Id: HID091797647

RCRA NonGen / NLR
EPA Id: HID091797647

22
ENE
1/2-1
0.706 mi.
3728 ft.
Relative: Higher

85-443 WAIANAE VALLEY ROAD GRADING — **FINDS** — **1006819606**
85-443 WAIANAE VALLEY ROAD — **SHWS** — **N/A**
WAIANAE, HI 96792 — **SPILLS**

Click here for full text details

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
23 **SSE** **1/2-1** **0.961 mi.** **5076 ft.**	**C&CH WAIANAE CORP YARD** **86-220 FARRINGTON HWY** **WAIANAE, HI 96792**	**SHWS** **LUST** **UST** **Financial Assurance**	**U003221952** **N/A**

Relative:
Lower

Click here for full text details

LUST
Facility Id: 9-200133
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-200133
Tank Status: Permanently Out of Use
Tank Status: Permanently out of Use

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
HI	AIRS	List of Permitted Facilities	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	BROWNFIELDS	Brownfields Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	CDL	Clandestine Drug Lab Listing	Department of Health	08/04/2010	09/10/2010	10/22/2010
HI	DRYCLEANERS	Permitted Drycleaner Facility Listing	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	ENG CONTROLS	Engineering Control Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	Financial Assurance	Financial Assurance Information Listing	Department of Health	12/01/2014	12/19/2014	01/28/2015
HI	INST CONTROL	Sites with Institutional Controls	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	LUST	Leaking Underground Storage Tank Database	Department of Health	12/16/2014	12/19/2014	01/28/2015
HI	RGA HWS	Recovered Government Archive State Hazardous Waste Facilitie	Department of Health		07/01/2013	01/08/2014
HI	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Health		07/01/2013	01/17/2014
HI	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	Department of Health		07/01/2013	01/03/2014
HI	SHWS	Sites List	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	SPILLS	Release Notifications	Department of Health	12/02/2014	12/22/2014	01/28/2015
HI	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	03/10/2012	01/03/2013	02/11/2013
HI	SWF/LF	Permitted Landfills in the State of Hawaii	Department of Health	09/17/2012	04/03/2013	05/10/2013
HI	UIC	Underground Injection Wells Listing	Department of Health	02/07/2013	02/12/2013	04/09/2013
HI	UST	Underground Storage Tank Database	Department of Health	12/18/2014	12/19/2014	01/28/2015
HI	VCP	Voluntary Response Program Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	04/22/2013	03/03/2015	03/09/2015
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2011	02/26/2013	04/19/2013
US	CERCLIS	Comprehensive Environmental Response, Compensation, and Liab	EPA	10/25/2013	11/11/2013	02/13/2014
US	CERCLIS-NFRAP	CERCLIS No Further Remedial Action Planned	EPA	10/25/2013	11/11/2013	02/13/2014
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	07/01/2014	09/10/2014	10/20/2014
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	01/23/2015	02/13/2015	03/09/2015
US	CORRACTS	Corrective Action Report	EPA	12/09/2014	12/29/2014	01/29/2015
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DELISTED NPL	National Priority List Deletions	EPA	12/16/2014	01/08/2015	02/09/2015
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	07/31/2012	08/07/2012	09/18/2012
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EDR US Hist Auto Stat	EDR Exclusive Historic Gas Stations	EDR, Inc.			
US	EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	09/29/2014	09/30/2014	11/06/2014
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	07/21/2014	10/07/2014	10/20/2014
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
US	FEMA UST	Underground Storage Tank Listing	FEMA	01/01/2010	02/16/2010	04/12/2010
US	FINDS	Facility Index System/Facility Registry System	EPA	08/16/2014	09/10/2014	10/20/2014
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	06/06/2014	09/10/2014	09/18/2014
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	12/29/2014	12/30/2014	03/09/2015
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	01/23/2015	02/06/2015	03/09/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	02/01/2013	05/01/2013	11/01/2013

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	01/30/2015	02/05/2015	03/09/2015
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/10/2015	03/13/2015
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	01/28/2015	01/30/2015	03/13/2015
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	01/08/2015	01/08/2015	02/09/2015
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2005	12/08/2006	01/11/2007
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	02/01/2013	05/01/2013	01/27/2014
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	01/30/2015	02/05/2015	03/13/2015
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/13/2015	03/13/2015
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	01/29/2015	01/30/2015	03/13/2015
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	12/14/2014	02/13/2015	03/13/2015
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	09/29/2014	10/01/2014	11/06/2014
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	11/25/2014	11/26/2014	01/29/2015
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	02/18/2014	03/18/2014	04/24/2014
US	LUCIS	Land Use Control Information System	Department of the Navy	12/03/2014	12/12/2014	01/29/2015
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	12/29/2014	01/08/2015	01/29/2015
US	NPL	National Priority List	EPA	12/16/2014	01/08/2015	02/09/2015
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	07/01/2014	10/15/2014	11/17/2014
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	02/01/2011	10/19/2011	01/10/2012
US	PRP	Potentially Responsible Parties	EPA	10/25/2013	10/17/2014	10/20/2014
US	Proposed NPL	Proposed National Priority List Sites	EPA	12/16/2014	01/08/2015	02/09/2015
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	10/07/2014	10/08/2014	10/20/2014
US	RCRA NonGen / NLR	RCRA - Non Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RMP	Risk Management Plans	Environmental Protection Agency	08/01/2014	08/12/2014	11/06/2014
US	ROD	Records Of Decision	EPA	11/25/2013	12/12/2013	02/24/2014
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	03/07/2011	03/09/2011	05/02/2011
US	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2011	07/31/2013	09/13/2013
US	TSCA	Toxic Substances Control Act	EPA	12/31/2012	01/15/2015	01/29/2015
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	09/14/2010	10/07/2011	03/01/2012
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/16/2014	10/31/2014	11/17/2014
US	US AIRS MINOR	Air Facility System Data	EPA	10/16/2014	10/31/2014	11/17/2014

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	12/22/2014	12/22/2014	01/29/2015
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	11/19/2014	11/21/2014	01/29/2015
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	12/30/2014	12/31/2014	01/29/2015
US	Oil/Gas Pipelines	GeoData Digital Line Graphs from 1:100,000-Scale Maps	USGS			
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
US	USGS 7.5' Topographic Map	Scanned Digital USGS 7.5' Topographic Map (DRG)	USGS			

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

WAIMAHA-SUNFLOWER
85-186 MCARTHUR ST.
WAIANAE, HI 96792

TARGET PROPERTY COORDINATES

Latitude (North):	21.4447 - 21˚ 26' 40.92''
Longitude (West):	158.1858 - 158˚ 11' 8.88''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	584369.1
UTM Y (Meters):	2371444.8
Elevation:	19 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	21158-D2 WAIANAE, HI
Most Recent Revision:	Not reported

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

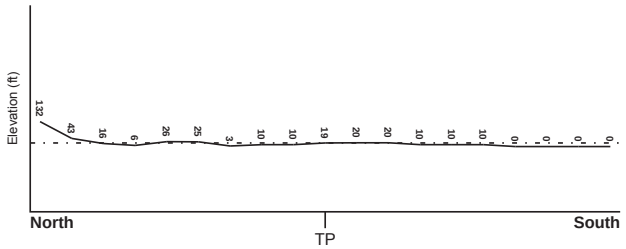
TOPOGRAPHIC INFORMATION

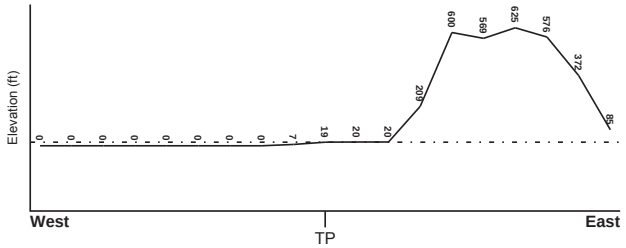
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General WNW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 19 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
HONOLULU, HI	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 15003C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
WAIANAE	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

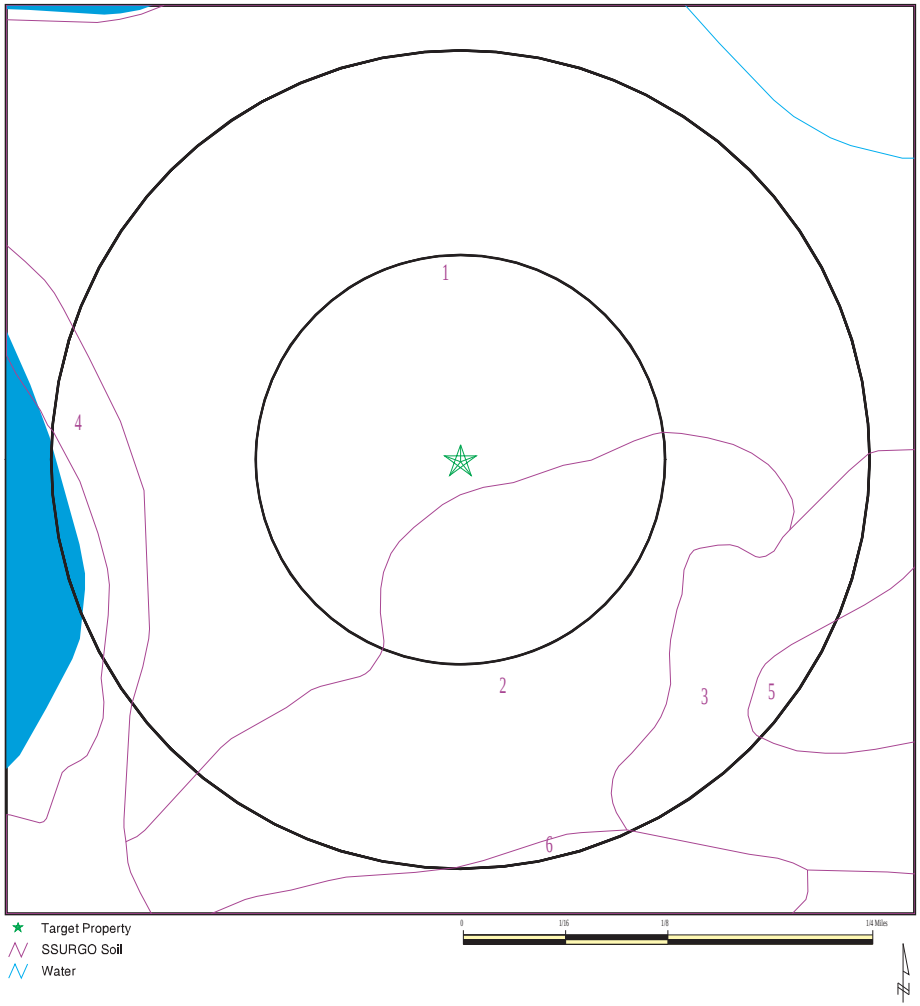
Era: -
System: -
Series: -
Code: N/A *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: -

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4237094.194s



SITE NAME: Waimaha-Sunflower ADDRESS: 85-186 Mcarthur St. Walanae HI 96792 LAT/LONG: 21.4447 / 158.1858	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.194s DATE: March 17, 2015 5:43 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Pulehu

Soil Surface Texture: clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	20 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14.11 Min: 4.23	Max: 7.3 Min: 6.6
2	20 inches	59 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.14 Min: 14.11	Max: 7.8 Min: 6.6

Soil Map ID: 2

Soil Component Name: Ewa

Soil Surface Texture: silty clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6
2	7 inches	29 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6
3	29 inches	38 inches	bedrock	Not reported	Not reported	Max: 0.42 Min: 0.02	Max: Min:

Soil Map ID: 3

Soil Component Name: Lualualei

Soil Surface Texture: extremely stony clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	extremely stony clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4.23 Min: 0.42	Max: 7.3 Min: 6.6
2	9 inches	59 inches	extremely stony clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 7.3 Min: 5.6

Soil Map ID: 4

Soil Component Name: Beaches

Soil Surface Texture: coarse sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 92 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	coarse sand	Granular materials (35 pct. or less passing No. 200), Fine Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42.34	Max: 7.8 Min: 6.1

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	5 inches	59 inches	coarse sand	Granular materials (35 pct. or less passing No. 200), Fine Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42.34	Max: 7.8 Min: 6.1

Soil Map ID: 5

Soil Component Name: Rock land

Soil Surface Texture: silty clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	3 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	3 inches	7 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6
3	7 inches	20 inches	bedrock	Not reported	Not reported	Max: 0.42 Min: 0.02	Max: Min:

Soil Map ID: 6

Soil Component Name: Mokuleia

Soil Surface Texture: clay

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	16 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14.11 Min: 4.23	Max: 7.3 Min: 6.6

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	16 inches	50 inches	sand	Granular materials (35 pct. or less passing No. 200), Fine Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42.34	Max: 8.4 Min: 7.9

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A2	USGS40000270811	1/4 - 1/2 Mile North
B5	USGS40000270745	1/2 - 1 Mile South
C7	USGS40000270819	1/2 - 1 Mile North
D8	USGS40000270805	1/2 - 1 Mile NE
E11	USGS40000270802	1/2 - 1 Mile WNW
F16	USGS40000270742	1/2 - 1 Mile SSE
G17	USGS40000270812	1/2 - 1 Mile NW
G18	USGS40000270813	1/2 - 1 Mile NW
F22	USGS40000270740	1/2 - 1 Mile SSE
H24	USGS40000270830	1/2 - 1 Mile NE
I27	USGS40000270753	1/2 - 1 Mile ESE
J29	USGS40000270733	1/2 - 1 Mile South

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

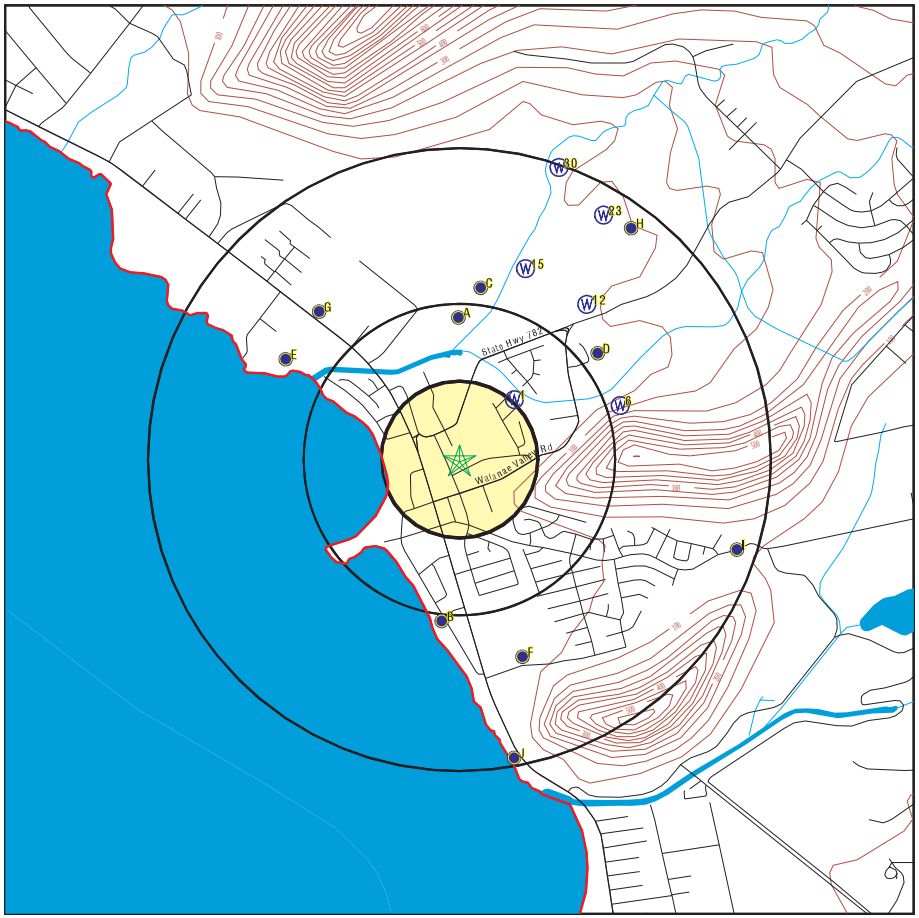
MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	HI8000000003422	1/4 - 1/2 Mile NE
A3	HI8000000003443	1/4 - 1/2 Mile North
B4	HI8000000003369	1/2 - 1 Mile South
6	HI8000000003421	1/2 - 1 Mile ENE
C9	HI8000000003451	1/2 - 1 Mile North
D10	HI8000000003436	1/2 - 1 Mile NE
12	HI8000000003446	1/2 - 1 Mile NE
E13	HI8000000003434	1/2 - 1 Mile WNW
F14	HI8000000003364	1/2 - 1 Mile SSE
15	HI8000000003454	1/2 - 1 Mile NNE
G19	HI8000000003444	1/2 - 1 Mile NW
G20	HI8000000003445	1/2 - 1 Mile NW
F21	HI8000000003361	1/2 - 1 Mile SSE
23	HI8000000003468	1/2 - 1 Mile NNE
H25	HI8000000003465	1/2 - 1 Mile NE
I26	HI8000000003379	1/2 - 1 Mile ESE
J28	HI8000000003355	1/2 - 1 Mile South
30	HI8000000003479	1/2 - 1 Mile NNE

PHYSICAL SETTING SOURCE MAP - 4237094.194s



County Boundary
Major Roads
Contour Lines
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons

Groundwater Flow Direction
Indeterminate Groundwater Flow at Location
Groundwater Flow Varies at Location

SITE NAME: Waimaha-Sunflower ADDRESS: 85-186 Mcarthur St. Walanae HI 96792 LAT/LONG: 21.4447 / 158.1858	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.194s DATE: March 17, 2015 5:43 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
1 NE 1/4 - 1/2 Mile Lower	Click here for full text details	HI WELLS	HI8000000003422
A2 North 1/4 - 1/2 Mile Higher	Click here for full text details	FED USGS	USGS40000270811
A3 North 1/4 - 1/2 Mile Higher	Click here for full text details	HI WELLS	HI8000000003443
B4 South 1/2 - 1 Mile Lower	Click here for full text details	HI WELLS	HI8000000003369
B5 South 1/2 - 1 Mile Lower	Click here for full text details	FED USGS	USGS40000270745
6 ENE 1/2 - 1 Mile Higher	Click here for full text details	HI WELLS	HI8000000003421
C7 North 1/2 - 1 Mile Higher	Click here for full text details	FED USGS	USGS40000270819
D8 NE 1/2 - 1 Mile Higher	Click here for full text details	FED USGS	USGS40000270805
C9 North 1/2 - 1 Mile Higher	Click here for full text details	HI WELLS	HI8000000003451

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
D10 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003436**
E11 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270802**
12 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003446**
E13 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003434**
F14 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003364**
15 **NNE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003454**
F16 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270742**
G17 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270812**
G18 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270813**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
G19 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003444**
G20 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003445**
F21 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003361**
F22 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270740**
23 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003468**
H24 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270830**
H25 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003465**
I26 **ESE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003379**
I27 **ESE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270753**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
J28 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003355**
J29 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270733**
30 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003479**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for HONOLULU County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 96792

Number of sites tested: 5

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.300 pCi/L	100%	0%	0%
Living Area - 2nd Floor	0.200 pCi/L	100%	0%	0%
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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HAWAII PUBLIC HOUSING AUTHORITY

ENVIRONMENTAL REVIEW

KAU`IOKALANI

Wai`anae, O`ahu

AMP 44
HPHA No. 1091

Prepared for:

State of Hawaii
Hawaii Public Housing Authority

Prepared by:

HHF PLANNERS
places for people

U.S. Department of Housing and Urban Development
451 Seventh Street, SW
Washington, DC 20410
www.hud.gov

espanol.hud.gov

Environmental Review for Activity/Project that is Categorically Excluded Subject to Section 58.5

Pursuant to 24 CFR 58.35(a)

Project Information

Project Name: Kauʻiokalani (AMP 44)

Responsible Entity: Hawaii Public Housing Authority
1002 North School Street
Honolulu, HI 96817

Grant Recipient (if different than Responsible Entity)**:**
Same as Responsible Entity

State/Local Identifier: State of Hawaiʻi

Preparer: Mr. Scott Ezer, Vice President
HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaiʻi 96813

Certifying Officer Name and Title: Mr. David Y. Ige
Governor, State of Hawaiʻi

Grant Recipient (if different than Responsible Entity)**:**
Same as Responsible Entity

Consultant (if applicable)**:** HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaiʻi 96813

Direct Comments to: Mr. Hakim Ouansafi, Executive Director
Hawaii Public Housing Authority
1002 North School Street
Honolulu, Hawaiʻi 96817

Project Location: 85-658 Farrington Highway
Waiʻanae, Hawaiʻi 96792

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]**:**

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a "major construction activity" and would involve one or a combination of several HUD designated categories of actions.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent;
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons;
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland;
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation;
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls);
7. Interior and exterior renovations and rehabilitation;
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site;
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Level of Environmental Review Determination:

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.5. Compliance with and completion of conformance determinations for other statute, executive order, or regulation has been completed and support the Categorical Exclusion.

Funding Information

Grant Number	HUD Program	Funding Amount
To be determined	Capital Fund	To be determined
To be determined	Economic Development Initiative Special Project Grant	To be determined
To be determined	Other Grants	To be determined

Estimated Total HUD Funded Amount:

To be determined by HUD using a formula and based upon federal budget.

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]**:**

Depends upon funds available.

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	*The project is not within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.*
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☒	*The State of Hawai'i does not have any designated coastal barrier resource units. (http://www.fws.gov/CBRA/Maps/Mapper.html)*
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes ☐ No ☒	*As indicated in the Flood Insurance Rate Map Panel 15003C0183H, the southwest half of the project site is located within Zone XS (0.2% annual chance of flood), while the northeast half of the site is located in the Zone X. Zone XS is a non-special flood hazard area that is a low to moderate risk flood area. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities. A field inspection and information obtained from the AMP Manager confirmed no major flooding issues within the site. The housing project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance is not mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.*

STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5		
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes ☐ No ☒	*The State of Hawai'i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. EPA's Green Book for currently designated "nonattainment areas" as of June 2015. Planned repair and rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.*
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes ☐ No ☒	*Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai'i's Coastal Zone Management (CZM) program.*
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☐ No ☒	*There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.*
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes ☒ No ☐	*The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices, while project-specific mitigation measures are identified in the following section.*

Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes ☐ No ☒	*A field inspection identified an existing above-ground liquid propane gas tank of approximately 1,000 gallons which is surrounded by a six-foot high chain link fence. The tank is about 20 feet away from the east side of Building 12, and was installed by and is owned by the gas company. Repair and rehabilitation improvements for this project should not impact this fuel storage tank. Should rehabilitation improvements increase the density of the project (e.g. increase the number of units and associated persons exposed to the hazard within the acceptable separation distance), mitigative measures would need to be implemented for the fuel tank in compliance with HUD requirements.*
Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes ☐ No ☒	*The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.*
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes ☐ No ☒	*The southwest half of the project site is located within Zone XS (0.2% annual chance of flood), while the northeast half of the site is located in the Zone X. A field inspection and information obtained from the AMP Manager confirmed no major flooding issues within the site. No significant impacts to existing housing units or Zone XS floodplain conditions are expected as a result of repair and rehabilitation improvements. However, should new housing units be constructed in the future, design plans would be submitted to pertinent State and County agencies for review and approval as part of the design review process. Any required site modifications would comply with applicable flood regulations and design standards. The implementation of the design review process and compliance with pertinent flood regulations should minimize any impacts on public health, safety, and welfare*

Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes ☐ No ☒	*Kau‘iokalani is 20 years old and was first occupied in 1995. To be eligible for listing in the National Register of Historic Places (NRHP), a property must meet the National Register criteria for evaluation which involves examining its integrity, significance, and age (generally at least 50 years old). Due to its age, this housing project does not meet the eligibility criteria to be evaluated for the NRHP. In a letter to the State Historic Preservation Officer dated July 23, 2015, the HPHA determined that no historic properties would be affected by repair and rehabilitation improvements for this housing project. No comments or objections about this no effect determination were received.*
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes ☐ No ☒	*The project site is not situated along a highway or arterial roadway with a high volume of vehicular traffic that may generate significant noise. Farrington Highway (Route 93) is State arterial roadway in West O‘ahu that serves the communities along the leeward coast of O‘ahu including Wai‘anae. Route 93 accommodates vehicle traffic entering and leaving Wai‘anae and forms a cross intersection with Kau‘iokalani Place which provides access to the project site, a nearby townhouse project, and a regional office for the City Department of Motor Vehicles. The HUD noise level calculator estimated noise levels at the project site to be 49.7 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.*
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes ☐ No ☒	*The housing project is located within the O‘ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation.*

Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☐ No ☒	*There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.* *(http://www.fws.gov/wetlands/data/mapper.HTML)*
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes ☐ No ☒	*There are no Wild and Scenic Rivers in Hawai'i, which excludes this project from mitigation or formal consultation requirements (http://www.rivers.gov/map.php)*
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes ☐ No ☒	*Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, these improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects on minority populations and low-income populations. Improvements should benefit low-income and minority populations living within this housing project.*

Field Inspection (Date and completed by)**:** June 15, 2015
Glenn Tadaki, Planner
HHF Planners

Summary of Findings and Conclusions:

Repair and rehabilitation improvements implemented for this existing housing project by HPHA should not result in significant environmental impacts based upon research data collected, a field inspection, consultation with the site manager and maintenance staff, consultation with pertinent resource agencies, and prior HPHA experience implementing repair and rehabilitation improvements. Therefore, repair and rehabilitation improvements would comply and be consistent with the statutes, executive orders, and regulations addressed. Furthermore, HPHA would evaluate improvements planned to ensure the work is consistent with the designated categories of actions described under the project description section. Compliance with these factors evaluated are further addressed in the attached Source Documentation Statutory Worksheet along with relevant technical reports/assessments.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Law, Authority, or Factor	Mitigation Measure
Executive Order 11988, particularly section 2(a); 24 CFR Part 55	*Should new housing units be constructed in the future, design plans would be submitted to the applicable government agencies for review and approval. Any required site modifications would comply with applicable flood regulations and design standards. The implementation of this design review process and compliance with pertinent flood regulations should minimize any impacts to public health, safety, and welfare.*
Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	*Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.* *Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.* *Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.* *Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.* *Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo'i, impoundments or other vegetated water bodies.* *1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols.* *2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings*

	have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted. *3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.* *In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.* *<u>Additional Measures</u>: The following additional measures would be implemented:* *1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.*

Determination:

☐ This categorically excluded activity/project converts to **EXEMPT** per Section 58.34(a)(12), because it does not require any mitigation for compliance with any listed statutes or authorities, nor requires any formal permit or license; **Funds may be committed and drawn down after certification of this part** for this (now) EXEMPT project; OR

☒ This categorically excluded activity/project cannot convert to Exempt status because one or more statutes or authorities listed at Section 58.5 requires formal consultation or mitigation. Complete consultation/mitigation protocol requirements, **publish NOI/RROF and obtain "Authority to Use Grant Funds"** (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR

☐ This project is not categorically excluded OR, if originally categorically excluded, is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

Preparer Signature: Scott Ezer Date: 11-10-15

Name/Title/Organization: Mr. Scott Ezer, Vice President
HHF Planners

Responsible Entity Agency Official Signature:

David Y. Ige Date: APR 28 2016

Name/Title: Mr. David Y. Ige, Governor

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

KAUʻIOKALANI (HA # 1091)

TMK: (1) 8-5-028: 045

Hawaiʻi Public Housing Authority (HPHA) Environmental Review

SOURCE DOCUMENTATION (SD) STATUTORY WORKSHEET

Site Visit Date: June 15, 2015
Prepared By: Glenn Tadaki

PROJECT DESCRIPTION

The Kauʻiokalani housing project is located in the Waiʻanae community on the island of Oʻahu. Waiʻanae is situated between the communities of Mākaha to the north and Maʻili to the south. Waiʻanae Intermediate School is north of and adjacent to the project site

Access to the project site is provided by a driveway located at the end of Kauʻiokalani Place, which also provides access to the Waiʻanae office of the Department of Motor Vehicles. This housing project lies within HPHA's Asset Management Project (AMP) 44 which includes four other housing projects.

Kauʻiokalani was first occupied in 1995 and has a street address of 85-658 Farrington Highway. The property encompasses 4.04 acres and is identified by Tax Map Key (1) 8-5-028: 045. The housing project consists of 12 two-story townhouses with 3-bedroom units, as well as a single-story community center. The property is designated for "Urban" use by the State Land Use Commission and is zoned for "R-5 Residential" use by the City and County of Honolulu.

The project site is not located within a tsunami evacuation zone. The southwest half of the project site is located within Zone XS (0.2% annual chance of flood), while the northeast half of the site is located in Zone X (Outside the 0.2% annual chance of flood) (Community Panel Numbers 15003C0183H, Revised November 5, 2014).

The following figures in Exhibit A provide supporting information on this housing project:

Figure 1: Location Map
Figure 2: TMK Map
Figure 3: Site Map
Figure 4: Flood Map

COMPLIANCE FACTORS

I. AIRPORT CLEAR ZONES AND ACCIDENT POTENTIAL ZONES (24 CFR PART 51D)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The housing project does not lie within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: 24 CFR 51 (D).

Honolulu International Airport Master Plan - 2010 (August 1994), State Department of Transportation, Airports Division; and

*Hawai`i Airports and Flying Safety Guide (2012-13, Fifth Edition, Revision 1)* Hawai`i Department of Transportation, Airports Division.

HDOT website at: http://hidot.hawaii.gov/airports/files/2013/01/Airport-Safety-Guide-2012-2013-5rev1.pdf

II. COASTAL BARRIER RESOURCES (COASTAL BARRIER IMPROVEMENT ACT OF 1990 [16 USC 3501])

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawaiʻi does not have any designated coastal barrier resource units.

SUPPORTING DOCUMENTATION:

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/cbra/maps/mapper.html (Date accessed: 6/30/15).

III. FLOOD INSURANCE (FLOOD DISASTER PROTECTION ACT OF 1973 AND NATIONAL FLOOD INSURANCE REFORM ACT OF 1994 [42 USC 4001-4128 AND 42 USC 5154a])

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
X	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program

As indicated in Flood Insurance Rate Map Panel 15003C0183H, the southwest half of the project site is located within Zone XS (0.2% annual chance of flood), while the northeast half of the site is located in the Zone X (outside the 0.2% annual chance of flood). Zone XS is a non-special flood hazard area that is a low to moderate risk flood area. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities. A field inspection and information obtained from the AMP Manager confirmed no major flooding issues within the site. The Kauʻiokalani housing project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance is not mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the Kauʻiokalani housing project did not visually reveal any signs of previous flooding problems. An interview with the AMP Manager determined that no major ponding or flooding issues have occurred on the project site.

Printed: Flood Insurance Rate Map, City and County of Honolulu, Hawaiʻi Community Panel Number 15003C0183H, Revised November 5, 2014.

Hawai`i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 6/30/15)

Experience: Flood Insurance Rate Map (FIRM), City and County of Honolulu, Hawaiʻi Community Panel Number 15003C0183H, Revised September 30, 2004. In 2004, the entire project site was designated Zone X (outside the 0.2% annual chance of flood) based upon the FIRM. However, the recent 2014 update of this FIRM has added an area of Zone XS (0.2% annual chance of flood) which includes a portion of the project site.

IV. CLEAN AIR ACT (40 CFR PARTS 6, 51, 93)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai'i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. Environmental Protection Agency's Green Book for currently designated "nonattainment areas" as of June 2015. Planned rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.

SUPPORTING DOCUMENTATION:

Printed: *State of Hawai'i Annual Summary 2013 Air Quality Data*. State of Hawai'i, Department of Health, July 2014.

U.S. Environmental Protection Agency website at: http://epa.gov/airquality/greenbk/ (Date accessed: 6/30/2015).

V. COASTAL ZONE MANAGEMENT ACT (16 USC 1451, SECTIONS 307 (C), (D)

CONTACT:
Mr. John Nakagawa
Office of Planning
Department of Business, Economic Development & Tourism
State of Hawai'i
P.O. Box 2359
Honolulu, Hawai'i, 96804-2359

SUPPORTING DOCUMENTS

	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai'i's Coastal Zone Management (CZM) program.

SUPPORTING DOCUMENTATION:

Contact: In an e-mail to the Office of Planning (OP) dated July 27, 2015, the HPHA determined that the use of HUD funds for the implementation of repair and rehabilitation improvements does not require review for consistency with Hawai'i's CZM program. The OP confirmed this determination in an e-mail dated July 28, 2015 and included in the Appendices.

Experience: As part of past environmental reviews in December 2010, a letter from the OP dated July 20, 2005 determined that their review for consistency with Hawaiʻi's CZM program was not required. A copy of this letter is included in the Appendices.

VI. CONTAMINATION AND TOXIC SUBSTANCES (24 CFR PART 50.3 & 58.5(I)(2))

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Project Not Affected.

There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.

SUPPORTING DOCUMENTATION:

Field: A site inspection and interview with the AMP Manager revealed no presence of any toxic or radioactive materials on the project site that warrant any concern. A secure storage room in the Kauʻiokalani community center is used to store flammable and hazardous materials for the housing projects in AMP 44. The storage room is in acceptable condition and labeled with signage.

Study: Environmental Data Resources, Inc. (EDR), conducted a search of available environmental records and prepared a Radius Map Report (Inquiry Number 4237094.178s, March 18, 2015). EDR reviewed more than 25 federal and statewide regulatory databases for information regarding the treatment, storage, disposal and release of toxic chemicals at the project site and within specific radii (generally 1 mile) of the site. A Detail Map within the EDR report documents those sites identified within a 0.25 mile radius of the project site. Some of the sites contain underground storage tanks (UST) that are currently in use or are permanently out of use The EDR report in Exhibit B includes the results of their research findings.

The EDR report notes that a waste oil spill occurred at Kauʻiokalani in the past (1995) and that no further action was required after site cleanup was completed. In the vicinity of the project site, the EDR report notes that Precision Demo and Construction at 85-229 Ala Akau Street is currently classified as a non-generator because it does not generate hazardous waste. The report also notes that a 3,000 gallon diesel UST at the Waiʻanae Fire Station on 85-645 Farrington Highway is permanently out of use and that cleanup for a leaking UST at this facility was completed in 2005.

The project site was not identified as a Formerly Used Defense Site (FUDS) by the U.S. Army Corps of Engineers and is not subject to any cleanup actions for Department of Defense-generated contamination.

VII. ENDANGERED SPECIES (50 CFR PART 402)

CONTACT:
Mr. Loyal Mehrhoff, Field Supervisor
Pacific Islands Administrator
Fish and Wildlife Services
U.S. Department of the Interior
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawaiʻi 96813
Tel. #: 792-9400

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Adverse Effect Subject to Mitigation

The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence of this determination was received from the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices.

SUPPORTING DOCUMENTATION:

Contact: A letter from the HPHA dated July 24, 2015 was submitted to the Pacific Island Administrator for the FWS determining that repair and rehabilitation improvements that may be implemented using HUD funds for this housing project would have no likelihood of effect on any listed species or proposed species, or existing or proposed designated critical habitat subject to certain measures. Concurrence with this determination along with proposed minimization and avoidance measures was received from the FWS in a letter dated September 28, 2015 which is included in the Appendices. This housing project is subject to the following measures.

Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.

Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.

Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.

Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and

maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.

Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro loʻi, impoundments or other vegetated water bodies.

1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols.
2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.
3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.

In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.

Additional Measures: The following additional measures would be implemented:

1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.

Experience: The FWS was previously consulted as part of environmental reviews that were completed in 2005 (39 housing projects) and 2010 (70 housing projects) which supported the determination that repair and rehabilitation improvements would either: 1) have no likelihood of effect for certain housing projects; or 2) not likely adversely affect federally listed species or critical habitat for certain housing projects subject to mitigative measures. A summary of these consultation efforts follows.

2005 Consultation: In a letter dated July 15, 2005, the Housing and Community Development Corporation of Hawaiʻi (predecessor to the HPHA), determined that the implementation of minor repair and rehabilitation improvements for 39 housing projects would not have an adverse effect on federally-listed species or critical habitat. In a letter dated August 11, 2005, the FWS concurred with the HCDCH determination.

2010 Consultation: In a letter dated May 17, 2010, the HPHA informed the FWS that HUD funds would be used to immediately implement repair and rehabilitation improvements for six housing projects on Oʻahu and the island of Hawai`i. In a subsequent letter dated May 21, 2010, the FWS was informed that HPHA would be using HUD funds to implement minor repair and rehabilitation improvements for 64 projects throughout the State. In both letters, the HPHA determined that the repair and rehabilitation improvements were not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat. Based on further consultation and a

meeting with FWS staff on June 24, 2010, the HPHA determined that repair and rehabilitation improvements for most of their housing projects would not likely adversely affect any listed or proposed species, or existing or proposed designated habitat, subject to various mitigative measures for certain housing projects.

VIII. EXPLOSIVE AND FLAMMABLE OPERATIONS (24 CFR PART 51C)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact Subject to Conditions and Mitigation, if Applicable.

A field inspection identified an existing above-ground explosive or flammable material storage container in excess of 100 gallons. The liquid propane gas (LPG) tank is approximately 1,000 gallons and is surrounded by a 6-foot high chain link fence. The tank is about 20 feet away from the east side of Building 12, and was installed by and is owned by the gas company. Repair and rehabilitation improvements for this project should not impact this fuel storage tank. Should rehabilitation improvements increase the density of the project (e.g. increase the number of units and associated persons exposed to the hazard within the acceptable separation distance), mitigative measures would need to be implemented for the fuel tank in compliance with HUD requirements.

Under CFR Title 24, Part 51, Subpart C, increasing the residential density and number of people under a rehabilitation project using HUD funding would be considered a "HUD-assisted project." Consequently, the existing fuel storage tank would be subject to standards under this regulation for establishing acceptable separation distances, or the application of the standards can be eliminated or modified if other conditions apply or mitigative measures are provided as identified below. HPHA would need to evaluate site conditions, comply with regulatory requirements, and determine the appropriate measure to implement.

1. The nature of the topography shields the proposed project form the hazard.
2. An existing permanent fire resistant structure of adequate size and strength will shield the proposed project from the hazard.
3. A barrier is constructed surrounding the hazard, at the site of the project, or in between the potential hazard and the proposed project.
4. The structure and outdoor areas used by people are designed to withstand blast overpressure and thermal radiation anticipated from the potential hazard (e.g., the project is of masonry and steel or reinforced concrete and steel construction).

SUPPORTING DOCUMENTATION:

Field: There is an approximately 1,000 gallon above-ground fuel storage tank located about 20 feet away from the east side of Building 12. The LPG tank was installed by and is owned by the gas company.

Printed: 24 CFR, Part 51, Subpart C.

Per CFR Title 24 Part 51.201 (Definitions), rehabilitation and modernization improvements that do not increase the density and number of people being exposed to hazardous operations do not meet the definition of a "HUD-assisted project," and are not subject to acceptable separation distance requirements under this regulation. Increasing the density (e.g. increase the number of units and associated persons exposed to the hazard within the acceptable separation distance) under a rehabilitation project using HUD funding would be considered a "HUD-assisted project." Consequently, the existing fuel storage tank would be subject to standards under this regulation for establishing acceptable separation distances, or the application of the standards can be eliminated or modified if other conditions apply or mitigative measures are provided as identified below. HPHA would need to evaluate site conditions, comply with regulatory requirements, and determine the appropriate measure to implement.

1. The nature of the topography shields the proposed project form the hazard.
2. An existing permanent fire resistant structure of adequate size and strength will shield the proposed project from the hazard.
3. A barrier is constructed surrounding the hazard, at the site of the project, or in between the potential hazard and the proposed project.
4. The structure and outdoor areas used by people are designed to withstand blast overpressure and thermal radiation anticipated from the potential hazard (e.g., the project is of masonry and steel or reinforced concrete and steel construction).

IX. FARMLANDS PROTECTION (7 CFR PART 658)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. Since the property consists of an existing housing development within an urbanized area, no farmlands would be impacted by the implementation of repair and rehabilitation improvements.

Printed: The property is designated for "Urban" use by the State Land Use Commission and is zoned for "R-5 Residential" use by the City and County of Honolulu.

Hawai`i Office of Planning website at: http://planning.hawaii.gov/gis/
(Date accessed: 6/30/2015).

X. FLOODPLAIN MANAGEMENT (EXECUTIVE ORDER 11988, 24 CFR PART 55)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
X	Experience
	Study

DETERMINATION:

Status Category: Complies with Program; Subject to Review and Permits for New Housing Units, if Applicable

The southwest half of the project site is located within Zone XS (0.2% annual chance of flood), while the northeast half of the site is located in the Zone X. A field inspection and information obtained from the AMP Manager confirmed no major flooding issues within the site. No significant impacts to existing housing units or Zone XS floodplain conditions are expected as a result of repair and rehabilitation improvements. However, should new housing units be constructed in the future, design plans would be submitted to pertinent State and County agencies for review and approval as part of the design review process. Any required site modifications would comply with applicable flood regulations and design standards. The implementation of the design review process and compliance with pertinent flood regulations should minimize any impacts on public health, safety, and welfare.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the Kau'iokalani housing project did not visually reveal any signs of previous flooding problems. An interview with the AMP Manager determined that no major ponding or flooding issues have occurred on the project site.

Printed: Flood Insurance Rate Map, City and County of Honolulu, Community Panel Number Community Panel Number 15003C0183H, Revised November 5, 2014.

Hawai`i Department of Land and Natural Resources website at:
http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 6/30/15)

Experience: Flood Insurance Rate Map (FIRM), City and County of Honolulu, Hawai'i Community Panel Number 15003C0183H, Revised September 30, 2004. In 2004, the entire project site was designated Zone X (outside the 0.2% annual chance of flood) based upon the FIRM. However, the recent 2014 update of this FIRM has added an area of Zone XS (0.2% annual chance of flood) which includes a portion of the project site.

XI. HISTORIC PRESERVATION (NATIONAL HISTORIC PRESERVATION ACT OF 1966; SECTIONS 106 AND 110; 36 CFR, PART 800)

CONTACT:

Ms. Suzanne Case, Chairperson
Department of Land and Natural Resources (DLNR)
State of Hawaiʻi
1151 Punchbowl Street
Honolulu, Hawaiʻi 96813
Tel. #: 587-0400

SUPPORTING DOCUMENTS

X	Field
X	Contact
X	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Effect on Historic Properties

Kauʻiokalani is 20 years old and was initially occupied in 1995. To be eligible for listing in the National Register of Historic Places (NRHP), a property must meet the National Register criteria for evaluation which involves examining its integrity, significance, and age (generally at least 50 years old). Due to its age, this housing project does not meet the eligibility criteria to be evaluated for the NRHP. In a letter to the State Historic Preservation Officer (SHPO) dated July 23, 2015, the HPHA determined that no historic properties would be affected (no effect) by repair and rehabilitation improvements for this housing project. No comments or objections about this no effect determination were received.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not locate any existing or potential archaeological sites (e.g., heiau) or cultural features on the property. The project site has undergone extensive ground-altering activities since it was initially developed and improved with buildings, driveways, parking lots, sidewalks, and other related improvements. An interview with the AMP Manager indicates that no known sites or features are present on the property.

Contact: A letter from the HPHA dated July 23, 2015, which is included in the Appendix, was submitted to the State Historic Preservation Officer [SHPO] (Chair of State Board of Land and Natural Resources) as part of Section 106 consultation determining that no historic properties would be affected (no effect) by repair and rehabilitation improvements that may be implemented using HUD funds for this housing project. The SHPO did not submit any comments or objections on the "no effect" determination for this housing project, which included follow-up e-mails with the State Historic Preservation Division regarding a response. On September 28, 2015, notice of HPHA's determination was also distributed to several native Hawaiian organizations and the various County Planning Departments. No concerns or opposition to this determination was received.

Printed: A review of the U.S. National Parks Service website for the National Register of Historic Places did not identify any historic properties within the limits of this housing project. A similar review of the State DLNR website for the State Register of Historic Places revealed that there are no historic properties within the project site.

National Register: U.S. National Park Service website at: http://www.nps.gov/nr/research/ (Date accessed: 7/2/15).

State Register: Hawai`i Department of Land and Natural Resources website at: http://dlnr.hawaii.gov/shpd/state-register/ (Date accessed: 7/2/15).

Experience: In letter to the SHPO dated April 19, 2011, the HPHA determined that minor repair and rehabilitation improvement at 57 public housing projects throughout Hawaiʻi (including Kauʻiokalani) would have "no effect" on historic properties. The SHPO had no comments or objections on the "no effect" determination.

XII. NOISE ABATEMENT CONTROL (24 CFR PART 51B)

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Within HUD Noise Standards

The project site is not situated along a highway or arterial roadway with a high volume of vehicular traffic that may generate significant noise. Farrington Highway (Route 93) is State arterial roadway in West Oʻahu that serves the communities along the leeward coast of Oʻahu including Waiʻanae. Route 93 accommodates vehicle traffic entering and leaving Waiʻanae and forms a cross intersection with Kauʻiokalani Place which provides access to the Kauʻiokalani housing project, a nearby townhouse project, and the Waiʻanae office of the City Department of Motor Vehicles. The HUD noise level calculator estimated noise levels at the project site to be 49.7 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

SUPPORTING DOCUMENTATION:

Field: Kauʻiokalani Place providing vehicular access to the housing project site results in a dead end and provides access to Farrington Highway for the residents along its reach. The distance from the intersection of the highway with Kauʻiokalani Place to the project site is approximately 445 feet. As a result, noise generated by traffic along Farrington Highway is very minimal due to this distance. Intervening buildings between the highway and the housing project also help dampen any ambient traffic noise to insignificant levels. In addition, because Kauʻiokalani Place is a dead end road and only serves a few properties, vehicle traffic along this roadway is very light and traffic noise is very minimal. No significant noise generating sources were identified at the project site during the site inspection and an interview with the AMP Manager did not identify any loud noise producing sources in the area. Noise sources are predominantly associated with vehicular traffic along adjacent roadways and voices from surrounding activities

Study: Land use in the vicinity of the project site mostly consists of multi-family apartments and townhouses. The HUD day/night noise level calculator was used to estimate approximate traffic noise levels at the project site. Farrington Highway is a State arterial roadway that is generally aligned in a northerly to southerly direction. It accommodates vehicle traffic

entering and leaving Waianae, and handles about 25,741 vehicles a day based upon State Department of Transportation 2013 traffic data. Given the distance between the project site and the center line of this roadway, the estimated noise levels at the project site using the HUD calculator was 49.7 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

XIII. SOLE SOURCE AQUIFER (40 CFR PART 149)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact on Sole Source Aquifer

The housing project is located within the O'ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation. However, if exceptional circumstances require compliance steps with any of these authorities, such compliance must be established and documented prior to approving the site-specific loan or grant.

SUPPORTING DOCUMENTATION:

Printed: This determination was based upon review of the Sole Source Aquifer Memorandum of 4/30/90 (Sections II.B.1 and II.B.2) and consideration of the type of rehabilitation related improvements that would be conducted for this project.

XIV. WETLANDS PROTECTION (EXECUTIVE ORDER 11990)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the property did not identify the presence of any wetlands.

Printed: U.S Fish and Wildlife Service website at: http://www.fws.gov/wetlands/data/mapper.html (Date accessed 6/30/2015).

XV. WILD AND SCENIC RIVERS ACT (16 USC 1271, SECTION 7 (B), (C))

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no Wild and Scenic Rivers in Hawaiʻi, which excludes this project from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: National Wild and Scenic Rivers System website at: http://www.rivers.gov/index.php (Date accessed: 6/30/2015).

XVI. ENVIRONMENTAL JUSTICE (EXECUTIVE ORDER NO. 12898)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact on Requirements.

Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, repair and rehabilitation improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects, on minority

populations and low-income populations. Repair and rehabilitation improvements should benefit low-income and minority populations living within this housing project.

SUPPORTING DOCUMENTATION:

Printed: Executive Order 12898.

U.S. Department of Housing and Urban Development website at:
https://www.hudexchange.info/environmental-review/environmental-justice/

EXHIBIT A

Location Map, TMK Map, Site Map, Flood Map, and Site Photos

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

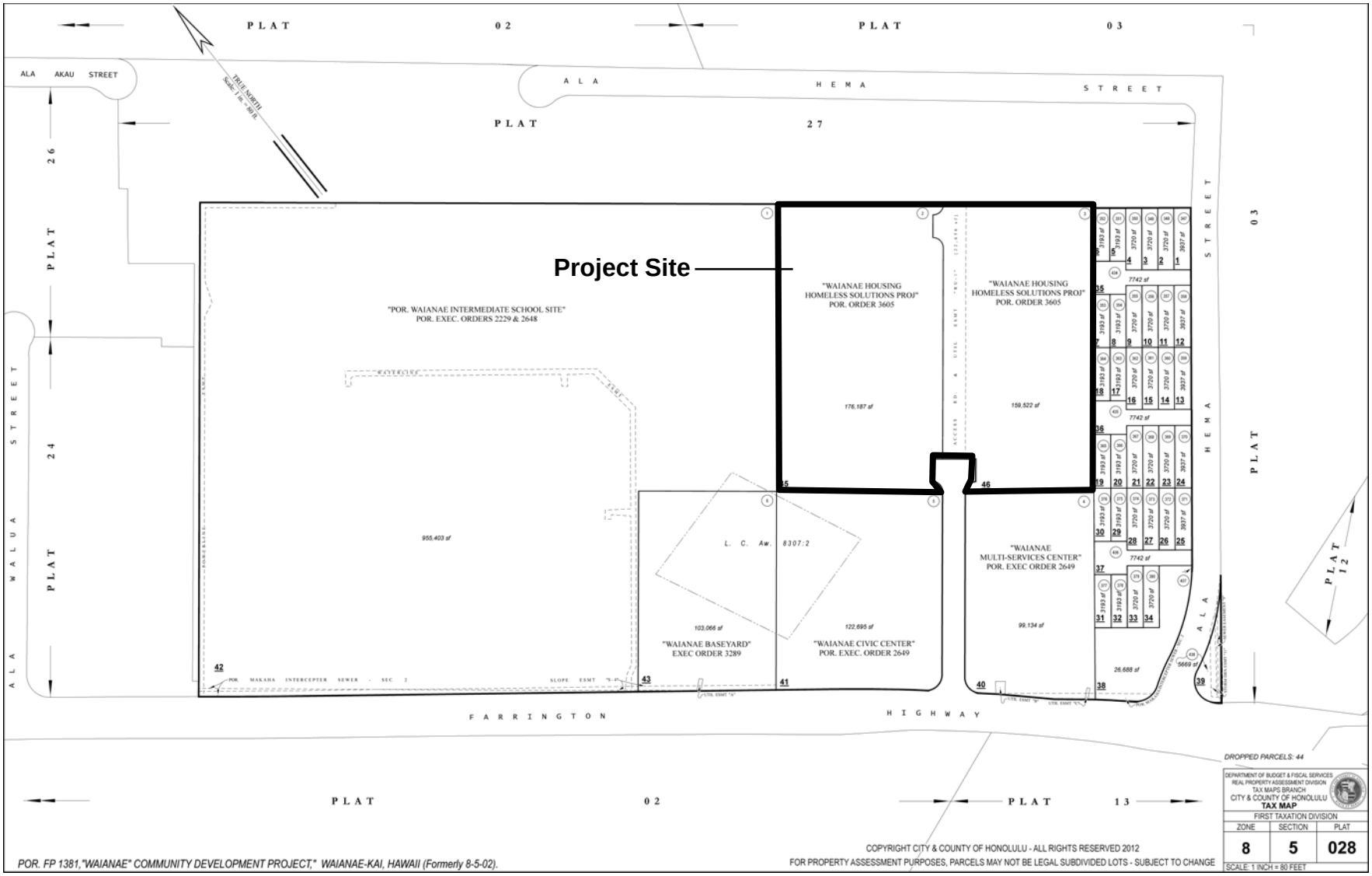
HPHA No. 1091 - Kau'iokalani (AMP 44)

Figure 1 - Project Location Map

Wai'anae, O'ahu

1,500 FT

HHF PLANNERS
places for people

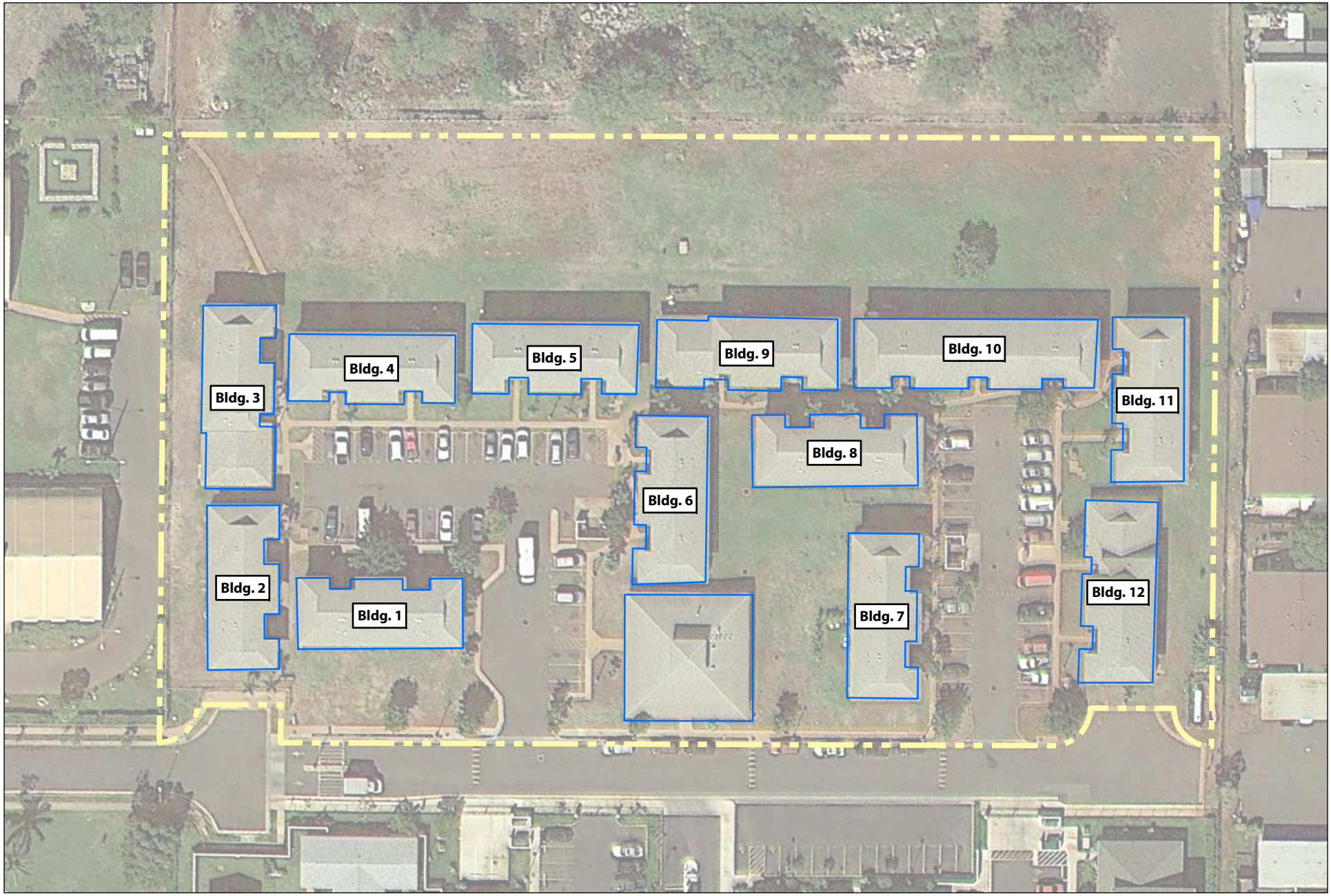


HPHA No. 1091 - Kauʻiokalani (AMP 44)

Figure 2 - TMK Map

Waiʻanae, Oʻahu

HHF PLANNERS
places for people



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

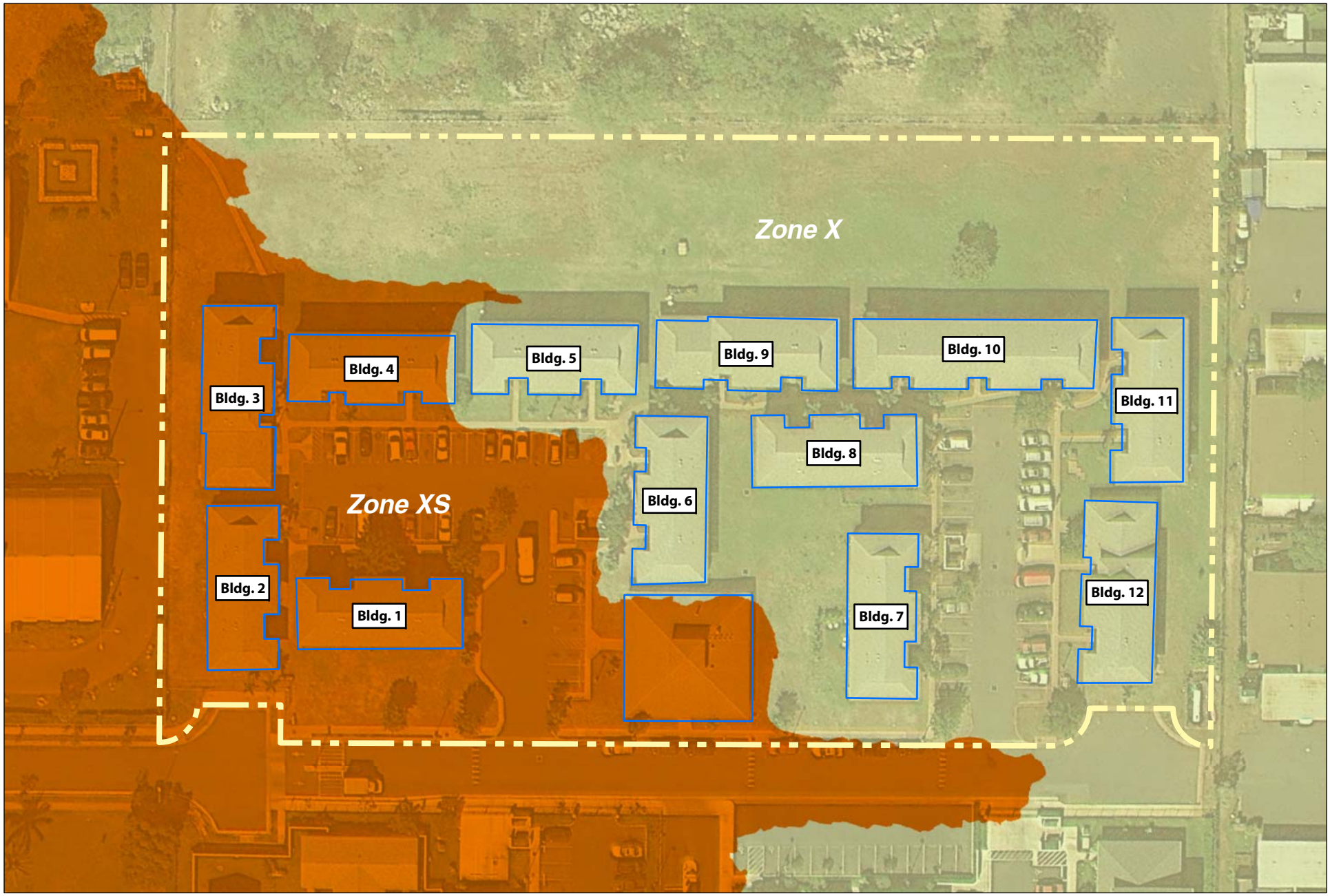
HPHA No. 1091 - Kau'iokalani (AMP 44)

Figure 3 - Site Map

Wai'anae, O'ahu

50 FEET

HHF PLANNERS
places for people



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

LEGEND

- Zone XS - 0.2% Annual Chance of Flood
- Zone X - Outside the 0.2% Annual Chance of Flood

HPHA No. 1091 - Kau'iokalani (AMP 44)

Figure 4 - Flood Map

Wai'anae, O'ahu

50 FEET

HHF PLANNERS
places for people

KAU'IOKALANI
SITE PHOTOS

View towards Farrington Highway from project site

View of project entrance (project on left)

View of project's access roadway, as seen from end of roadway

Building 10 and parking lot

Community Center (left), Building 8 (center) and 7 (right)

Grated drain inlet by Buildings 8, 9 10

KAUʻIOKALANI
SITE PHOTOS

Project's SW boundary, Building 2 (right) 3 (beyond, right)

Project's rear, facing NE (towards mountains)

Project's rear, facing SW (towards ocean)

Storage Area in Community Center

Project's NE boundary, Building 12 & 11 (left)

Gas Tank at project's NW corner

EXHIBIT B

EDR Radius Map Report

Kauiokalani
85-658 Farrington Hwy.
Waianae, HI 96792

Inquiry Number: 4237094.178s
March 18, 2015

EDR Summary Radius Map Report

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

FORM-NULL-PVC

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

85-658 FARRINGTON HWY.
HONOLULU County, HI 96792

COORDINATES

Latitude (North):	21.4518000 - 21' 27' 6.48''
Longitude (West):	158.1902000 - 158' 11' 24.72''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	583909.1
UTM Y (Meters):	2372228.2
Elevation:	10 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	USGS 7.5 min quad index

MAPPED SITES SUMMARY

Target Property Address:
85-658 FARRINGTON HWY.
, HI 96792

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
1	KAUIOKALANI - STATE	85-658 FARRINGTON HW	SPILLS		TP
2	PRECISION DEMO AND C	85 229 ALA AKAU ST	RCRA NonGen / NLR, FINDS	Higher	553, NW
3	C&CH WAIANAE FIRE ST	85-645 FARRINGTON HW	LUST, UST, Financial Assurance	Lower	737, SSW
4	WAIANAE CENTRAL OFFI	85-677 FARRINGTON HW	LUST, UST, Financial Assurance	Lower	872, South
A5	LEEWARD PETROLEUM CO	85-723 FARRINGTON HW	LUST, UST	Lower	1264, South
A6	LEEWARD PETROLEUM IN	85-723 FARRINGTON HW	SHWS, SPILLS	Lower	1271, South
B7	AIM WAIANAE	85-803 FARRINGTON HW	LUST, UST, Financial Assurance	Higher	2063, SSE
B8	MAHALO 7-ELEVEN WAIA	85-830 FARRINGTON HW	LUST, UST, Financial Assurance	Higher	2155, SSE
9	85-443 WAIANAE VALLE	85-443 WAIANAE VALLE	FINDS, SHWS, SPILLS	Higher	5056, ESE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 7 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
KAUIOKALANI - STATE 85-658 FARRINGTON HW WAIANAE, HI 96792	SPILLS	N/A

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

State- and tribal - equivalent CERCLIS

SHWS: A review of the SHWS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 2 SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
85-443 WAIANAE VALLE	*85-443 WAIANAE VALLE*	*ESE 1/2 - 1 (0.958 mi.)*	*9*	*9*

Lower Elevation	Address	Direction / Distance	Map ID	Page
LEEWARD PETROLEUM IN	*85-723 FARRINGTON HW*	*S 1/8 - 1/4 (0.241 mi.)*	*A6*	*8*

State and tribal leaking storage tank lists

LUST: A review of the LUST list, as provided by EDR, and dated 03/02/2015 has revealed that there are 5 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AIM WAIANAE Facility Status: Site Cleanup Completed (NFA)	*85-803 FARRINGTON HW*	*SSE 1/4 - 1/2 (0.391 mi.)*	*B7*	*8*
MAHALO 7-ELEVEN WAIA Facility Status: Site Cleanup Completed (NFA)	*85-830 FARRINGTON HW*	*SSE 1/4 - 1/2 (0.408 mi.)*	*B8*	*8*

EXECUTIVE SUMMARY

Lower Elevation	Address	Direction / Distance	Map ID	Page
C&CH WAIANAE FIRE ST Facility Status: Site Cleanup Completed (NFA)	*85-645 FARRINGTON HW*	*SSW 1/8 - 1/4 (0.140 mi.)*	*3*	*7*
WAIANAE CENTRAL OFFI Facility Status: Site Cleanup Completed (NFA)	*85-677 FARRINGTON HW*	*S 1/8 - 1/4 (0.165 mi.)*	*4*	*7*
LEEWARD PETROLEUM CO Facility Status: Active Remediation	*85-723 FARRINGTON HW*	*S 1/8 - 1/4 (0.239 mi.)*	*A5*	*8*

State and tribal registered storage tank lists

UST: A review of the UST list, as provided by EDR, and dated 03/02/2015 has revealed that there are 3 UST sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
C&CH WAIANAE FIRE ST	*85-645 FARRINGTON HW*	*SSW 1/8 - 1/4 (0.140 mi.)*	*3*	*7*
WAIANAE CENTRAL OFFI	*85-677 FARRINGTON HW*	*S 1/8 - 1/4 (0.165 mi.)*	*4*	*7*
LEEWARD PETROLEUM CO	*85-723 FARRINGTON HW*	*S 1/8 - 1/4 (0.239 mi.)*	*A5*	*8*

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

RCRA NonGen / NLR: A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 12/09/2014 has revealed that there is 1 RCRA NonGen / NLR site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PRECISION DEMO AND C	*85 229 ALA AKAU ST*	*NW 0 - 1/8 (0.105 mi.)*	*2*	*7*

Count: 4 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
WAIANAE	1015730971	USARMY MAKUA MILITARY RESERVATION	FARRINGTON HWY	96792	RCRA-TSDF, CERCLIS, CORRACTS, RCRA-CESQG
WAIANAE	1006819047	P & S SANITARY HAULING INC	87-746 FARRINGTON HWY	96792	SHWS
WAIANAE	S115488727	WAIANAE ELEMENTARY SCHOOL DIESEL U	82-220 MCARTHUR		SHWS, SPILLS
WAIANAE	1006819659	WAIANAE LANDFILL	572 WAIANAE VALLEY RD	96792	SHWS

OVERVIEW MAP - 4237094.178S

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Kauiokalani ADDRESS: 85-658 Farrington Hwy. Walanae HI 96792 LAT/LONG: 21.4518 / 158.1902	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.178s DATE: March 18, 2015 7:54 am

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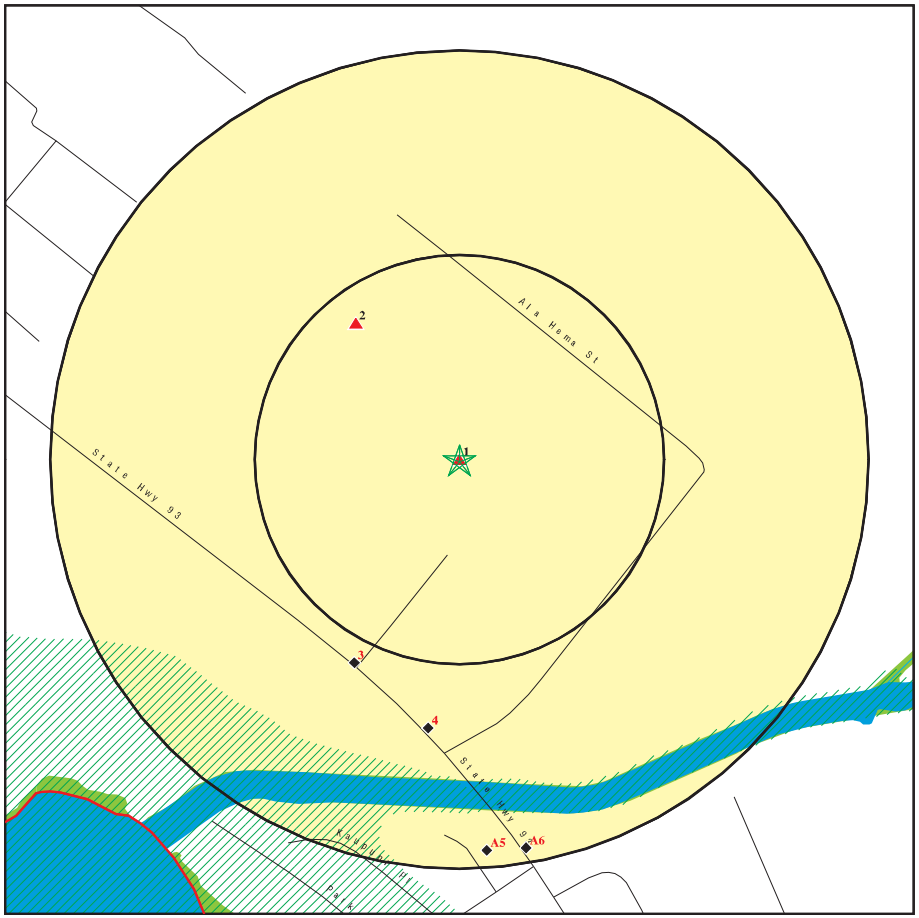
DETAIL MAP - 4237094.178S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Oil & Gas pipelines from USGS
- 100-year flood zone
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- National Wetland Inventory

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
SHWS	1.000		0	1	0	1	NR	2
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	3	2	NR	NR	5
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250		0	3	NR	NR	NR	3

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		0	0	0	NR	NR	0
INST CONTROL	0.500		0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP	1	NR	NR	NR	NR	NR	1
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		1	0	NR	NR	NR	1
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		0	0	NR	NR	NR	0
EDR US Hist Cleaners	0.250		0	0	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
RGA HWS	TP		NR	NR	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

1
Target Property
Actual: 10 ft.

KAUIOKALANI - STATE HOUSING PROJECT — **SPILLS** — **S106818267**
85-658 FARRINGTON HWY — **N/A**
WAIANAE, HI 96792

Click here for full text details

2
NW
< 1/8
0.105 mi.
553 ft.
Relative: Higher

PRECISION DEMO AND CONSTRUCTION INC — **RCRA NonGen / NLR, FINDS** — **1001816090**
85 229 ALA AKAU ST STE E — **HIR000057281**
WAIANAE, HI 96792

Click here for full text details

RCRA NonGen / NLR
EPA Id: HIR000057281

3
SSW
1/8-1/4
0.140 mi.
737 ft.
Relative: Lower

C&CH WAIANAE FIRE STATION — **LUST, UST, Financial Assurance** — **U003221946**
85-645 FARRINGTON HWY — **N/A**
WAIANAE, HI 96792

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-200096

UST
Tank Status: Permanently Out of Use
Facility Id: 9-200096

4
South
1/8-1/4
0.165 mi.
872 ft.
Relative: Lower

WAIANAE CENTRAL OFFICE — **LUST, UST, Financial Assurance** — **U003221982**
85-677 FARRINGTON HWY — **N/A**
MAKAHA, HI 96792

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-200534

UST
Tank Status: Currently in Use
Facility Id: 9-200534

A5
South
1/8-1/4
0.239 mi.
1264 ft.
Relative: Lower

LEEWARD PETROLEUM COMPANY - BULK PLANT — **LUST, UST** — **U004196892**
85-723 FARRINGTON HWY — **N/A**
WAIANAE, HI 96792

Click here for full text details

LUST
Facility Status: Active Remediation
Facility Id: 9-201141

UST
Tank Status: Permanently Out of Use
Tank Status: Temporarily out of Use
Facility Id: 9-201141

A6
South
1/8-1/4
0.241 mi.
1271 ft.
Relative: Lower

LEEWARD PETROLEUM INC #300837 — **SHWS, SPILLS** — **S106818753**
85-723 FARRINGTON HWY — **N/A**
WAIANAE, HI 96792

Click here for full text details

B7
SSE
1/4-1/2
0.391 mi.
2063 ft.
Relative: Higher

AIM WAIANAE — **LUST, UST, Financial Assurance** — **U003222019**
85-803 FARRINGTON HWY — **N/A**
WAIANAE, HI 96792

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-201208

UST
Tank Status: Permanently Out of Use
Tank Status: Currently in Use
Facility Id: 9-201208

B8
SSE
1/4-1/2
0.408 mi.
2155 ft.
Relative: Higher

MAHALO 7-ELEVEN WAIANAE MAUKA — **LUST, UST, Financial Assurance** — **U003222048**
85-830 FARRINGTON HWY — **N/A**
WAIANAE, HI 96792

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-201863

UST
Tank Status: Currently in Use

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
	MAHALO 7-ELEVEN WAIANAE MAUKA (Continued)		**U003222048**
	Facility Id: 9-201863		
9 **ESE** **1/2-1** **0.958 mi.** **5056 ft.** **Relative:** **Higher**	**85-443 WAIANAE VALLEY ROAD GRADING** **85-443 WAIANAE VALLEY ROAD** **WAIANAE, HI 96792** Click here for full text details	**FINDS** **SHWS** **SPILLS**	**1006819606** **N/A**

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
HI	AIRS	List of Permitted Facilities	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	BROWNFIELDS	Brownfields Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	CDL	Clandestine Drug Lab Listing	Department of Health	08/04/2010	09/10/2010	10/22/2010
HI	DRYCLEANERS	Permitted Drycleaner Facility Listing	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	ENG CONTROLS	Engineering Control Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	Financial Assurance	Financial Assurance Information Listing	Department of Health	12/01/2014	12/19/2014	01/28/2015
HI	INST CONTROL	Sites with Institutional Controls	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	LUST	Leaking Underground Storage Tank Database	Department of Health	03/02/2015	03/04/2015	03/17/2015
HI	RGA HWS	Recovered Government Archive State Hazardous Waste Facilitie	Department of Health		07/01/2013	01/08/2014
HI	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Health		07/01/2013	01/17/2014
HI	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	Department of Health		07/01/2013	01/03/2014
HI	SHWS	Sites List	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	SPILLS	Release Notifications	Department of Health	12/02/2014	12/22/2014	01/28/2015
HI	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	03/10/2012	01/03/2013	02/11/2013
HI	SWF/LF	Permitted Landfills in the State of Hawaii	Department of Health	09/17/2012	04/03/2013	05/10/2013
HI	UIC	Underground Injection Wells Listing	Department of Health	02/07/2013	02/12/2013	04/09/2013
HI	UST	Underground Storage Tank Database	Department of Health	03/02/2015	03/04/2015	03/17/2015
HI	VCP	Voluntary Response Program Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	04/22/2013	03/03/2015	03/09/2015
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2011	02/26/2013	04/19/2013
US	CERCLIS	Comprehensive Environmental Response, Compensation, and Liab	EPA	10/25/2013	11/11/2013	02/13/2014
US	CERCLIS-NFRAP	CERCLIS No Further Remedial Action Planned	EPA	10/25/2013	11/11/2013	02/13/2014
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	07/01/2014	09/10/2014	10/20/2014
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	01/23/2015	02/13/2015	03/09/2015
US	CORRACTS	Corrective Action Report	EPA	12/09/2014	12/29/2014	01/29/2015
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DELISTED NPL	National Priority List Deletions	EPA	12/16/2014	01/08/2015	02/09/2015
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	07/31/2012	08/07/2012	09/18/2012
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EDR US Hist Auto Stat	EDR Exclusive Historic Gas Stations	EDR, Inc.			
US	EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	09/29/2014	09/30/2014	11/06/2014
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	07/21/2014	10/07/2014	10/20/2014
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
US	FEMA UST	Underground Storage Tank Listing	FEMA	01/01/2010	02/16/2010	04/12/2010
US	FINDS	Facility Index System/Facility Registry System	EPA	08/16/2014	09/10/2014	10/20/2014
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	06/06/2014	09/10/2014	09/18/2014
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	12/29/2014	12/30/2014	03/09/2015
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	01/23/2015	02/06/2015	03/09/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	02/01/2013	05/01/2013	11/01/2013

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	01/30/2015	02/05/2015	03/09/2015
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/10/2015	03/13/2015
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	01/28/2015	01/30/2015	03/13/2015
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	01/08/2015	01/08/2015	02/09/2015
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2005	12/08/2006	01/11/2007
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	02/01/2013	05/01/2013	01/27/2014
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	01/30/2015	02/05/2015	03/13/2015
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/13/2015	03/13/2015
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	01/29/2015	01/30/2015	03/13/2015
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	12/14/2014	02/13/2015	03/13/2015
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	09/29/2014	10/01/2014	11/06/2014
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	11/25/2014	11/26/2014	01/29/2015
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	02/18/2014	03/18/2014	04/24/2014
US	LUCIS	Land Use Control Information System	Department of the Navy	12/03/2014	12/12/2014	01/29/2015
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	12/29/2014	01/08/2015	01/29/2015
US	NPL	National Priority List	EPA	12/16/2014	01/08/2015	02/09/2015
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	07/01/2014	10/15/2014	11/17/2014
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	02/01/2011	10/19/2011	01/10/2012
US	PRP	Potentially Responsible Parties	EPA	10/25/2013	10/17/2014	10/20/2014
US	Proposed NPL	Proposed National Priority List Sites	EPA	12/16/2014	01/08/2015	02/09/2015
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	10/07/2014	10/08/2014	10/20/2014
US	RCRA NonGen / NLR	RCRA - Non Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RMP	Risk Management Plans	Environmental Protection Agency	08/01/2014	08/12/2014	11/06/2014
US	ROD	Records Of Decision	EPA	11/25/2013	12/12/2013	02/24/2014
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	03/07/2011	03/09/2011	05/02/2011
US	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2011	07/31/2013	09/13/2013
US	TSCA	Toxic Substances Control Act	EPA	12/31/2012	01/15/2015	01/29/2015
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	09/14/2010	10/07/2011	03/01/2012
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/16/2014	10/31/2014	11/17/2014
US	US AIRS MINOR	Air Facility System Data	EPA	10/16/2014	10/31/2014	11/17/2014

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	12/22/2014	12/22/2014	01/29/2015
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	11/19/2014	11/21/2014	01/29/2015
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	12/30/2014	12/31/2014	01/29/2015
US	Oil/Gas Pipelines	GeoData Digital Line Graphs from 1:100,000-Scale Maps	USGS			
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
US	USGS 7.5' Topographic Map	Scanned Digital USGS 7.5' Topographic Map (DRG)	USGS			

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

KAUIOKALANI
85-658 FARRINGTON HWY.
WAIANAE, HI 96792

TARGET PROPERTY COORDINATES

Latitude (North):	21.4518 - 21˚ 27' 6.48''
Longitude (West):	158.1902 - 158˚ 11' 24.72''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	583909.1
UTM Y (Meters):	2372228.2
Elevation:	10 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	21158-D2 WAIANAE, HI
Most Recent Revision:	Not reported

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

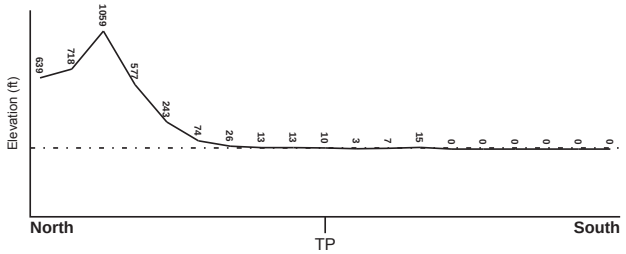
TOPOGRAPHIC INFORMATION

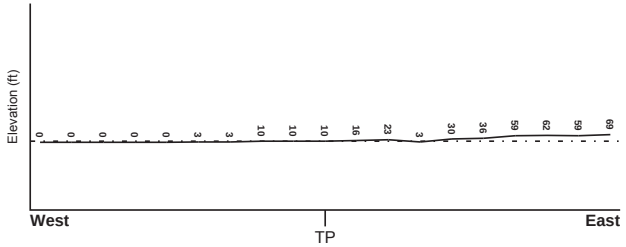
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General WSW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 10 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
HONOLULU, HI	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 15003C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
WAIANAE	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

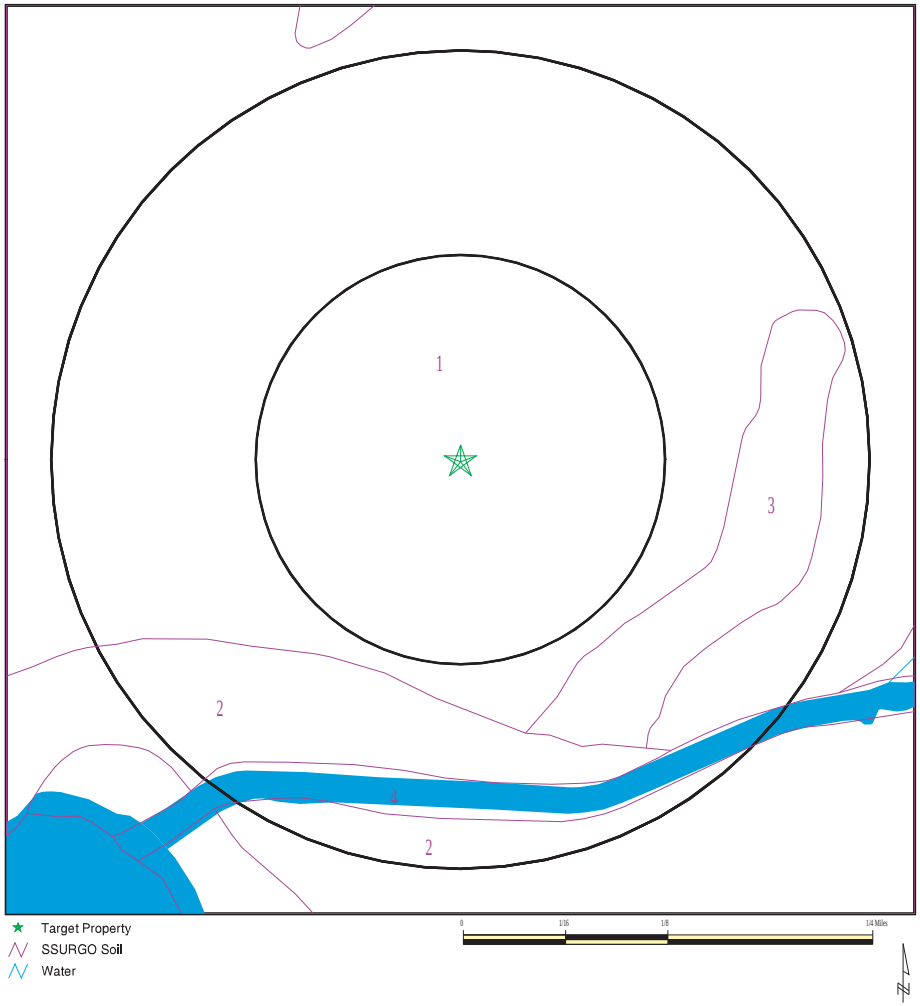
Era: -
System: -
Series: -
Code: N/A *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: -

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4237094.178s



★ Target Property
SSURGO Soil
Water

SITE NAME: Kauiokalani ADDRESS: 85-658 Farrington Hwy. Walanae HI 96792 LAT/LONG: 21.4518 / 158.1902	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.178s DATE: March 18, 2015 7:55 am

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Coral outcrop

Soil Surface Texture: bedrock

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	59 inches	bedrock	Not reported	Not reported	Max: 42 Min: 1.41	Max: Min:

Soil Map ID: 2

Soil Component Name: Pulehu

Soil Surface Texture: clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	20 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14.11 Min: 4.23	Max: 7.3 Min: 6.6
2	20 inches	59 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.14 Min: 14.11	Max: 7.8 Min: 6.6

Soil Map ID: 3

Soil Component Name: Ewa

Soil Surface Texture: silty clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	7 inches	29 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6
3	29 inches	38 inches	bedrock	Not reported	Not reported	Max: 0.42 Min: 0.02	Max: Min:

Soil Map ID: 4

Soil Component Name: Water > 40 acres

Soil Surface Texture: silty clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class:
Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A3	USGS40000270812	1/8 - 1/4 Mile West
A4	USGS40000270813	1/8 - 1/4 Mile West
B5	USGS40000270811	1/4 - 1/2 Mile East
C8	USGS40000270802	1/4 - 1/2 Mile WSW
D9	USGS40000270819	1/4 - 1/2 Mile East
E15	USGS40000270805	1/2 - 1 Mile ESE
F18	USGS40000270862	1/2 - 1 Mile NW
F19	USGS40000270863	1/2 - 1 Mile NW
F20	USGS40000270864	1/2 - 1 Mile NW
F21	USGS40000270861	1/2 - 1 Mile NW
F22	USGS40000270858	1/2 - 1 Mile NW
F23	USGS40000270859	1/2 - 1 Mile NW
F24	USGS40000270860	1/2 - 1 Mile NW
F25	USGS40000270865	1/2 - 1 Mile NW
F26	USGS40000270870	1/2 - 1 Mile NW
F27	USGS40000270871	1/2 - 1 Mile NW
F28	USGS40000270873	1/2 - 1 Mile NW
F29	USGS40000270869	1/2 - 1 Mile NW
F30	USGS40000270866	1/2 - 1 Mile NW
F31	USGS40000270867	1/2 - 1 Mile NW
F32	USGS40000270868	1/2 - 1 Mile NW
F33	USGS40000270850	1/2 - 1 Mile NW
F34	USGS40000270851	1/2 - 1 Mile NW
F35	USGS40000270849	1/2 - 1 Mile NW
F36	USGS40000270847	1/2 - 1 Mile NW
F37	USGS40000270848	1/2 - 1 Mile NW
F38	USGS40000270852	1/2 - 1 Mile NW
F39	USGS40000270856	1/2 - 1 Mile NW
F40	USGS40000270857	1/2 - 1 Mile NW
F41	USGS40000270855	1/2 - 1 Mile NW
F42	USGS40000270853	1/2 - 1 Mile NW
F43	USGS40000270854	1/2 - 1 Mile NW
F73	USGS40000270872	1/2 - 1 Mile NW
F75	USGS40000270874	1/2 - 1 Mile NW
F76	USGS40000270875	1/2 - 1 Mile NW
F78	USGS40000270876	1/2 - 1 Mile NW
G81	USGS40000270830	1/2 - 1 Mile ENE
H83	USGS40000270842	1/2 - 1 Mile WNW

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
F74	HI0000335	1/2 - 1 Mile NW

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

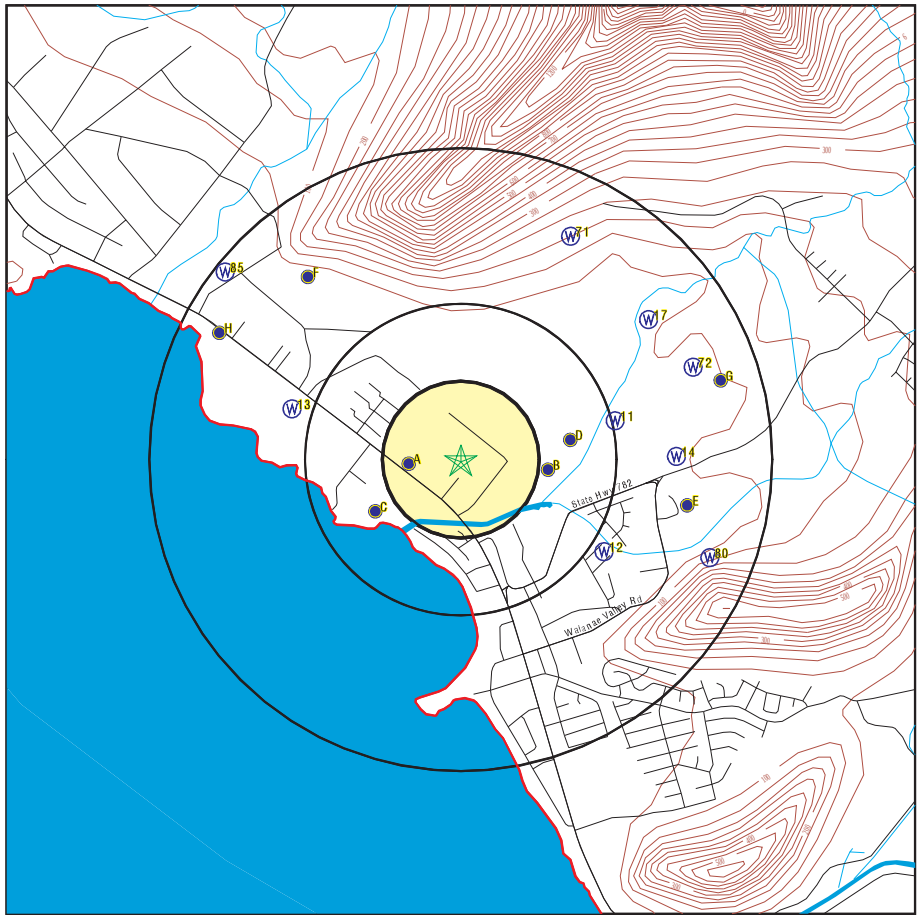
MAP ID	WELL ID	LOCATION FROM TP
A1	HI8000000003444	1/8 - 1/4 Mile West
A2	HI8000000003445	1/8 - 1/4 Mile West
B6	HI8000000003443	1/4 - 1/2 Mile East
C7	HI8000000003434	1/4 - 1/2 Mile WSW
D10	HI8000000003451	1/4 - 1/2 Mile East
11	HI8000000003454	1/2 - 1 Mile ENE
12	HI8000000003422	1/2 - 1 Mile ESE
13	HI8000000003461	1/2 - 1 Mile WNW
14	HI8000000003446	1/2 - 1 Mile East
E16	HI8000000003436	1/2 - 1 Mile East
17	HI8000000003479	1/2 - 1 Mile NE
F44	HI8000000003502	1/2 - 1 Mile NW
F45	HI8000000003501	1/2 - 1 Mile NW
F46	HI8000000003504	1/2 - 1 Mile NW
F47	HI8000000003503	1/2 - 1 Mile NW
F48	HI8000000003500	1/2 - 1 Mile NW
F49	HI8000000003497	1/2 - 1 Mile NW
F50	HI8000000003496	1/2 - 1 Mile NW
F51	HI8000000003499	1/2 - 1 Mile NW
F52	HI8000000003498	1/2 - 1 Mile NW
F53	HI8000000003511	1/2 - 1 Mile NW
F54	HI8000000003510	1/2 - 1 Mile NW
F55	HI8000000003513	1/2 - 1 Mile NW
F56	HI8000000003512	1/2 - 1 Mile NW
F57	HI8000000003509	1/2 - 1 Mile NW
F58	HI8000000003506	1/2 - 1 Mile NW
F59	HI8000000003505	1/2 - 1 Mile NW
F60	HI8000000003508	1/2 - 1 Mile NW
F61	HI8000000003507	1/2 - 1 Mile NW
F62	HI8000000003495	1/2 - 1 Mile NW
F63	HI8000000003489	1/2 - 1 Mile NW
F64	HI8000000003490	1/2 - 1 Mile NW
F65	HI8000000003487	1/2 - 1 Mile NW
F66	HI8000000003488	1/2 - 1 Mile NW
F67	HI8000000003493	1/2 - 1 Mile NW
F68	HI8000000003494	1/2 - 1 Mile NW
F69	HI8000000003491	1/2 - 1 Mile NW
F70	HI8000000003492	1/2 - 1 Mile NW
71	HI8000000003522	1/2 - 1 Mile NNE
72	HI8000000003468	1/2 - 1 Mile ENE
F77	HI8000000003518	1/2 - 1 Mile NW
F79	HI8000000003517	1/2 - 1 Mile NW
80	HI8000000003421	1/2 - 1 Mile ESE

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
G82	HI8000000003465	1/2 - 1 Mile ENE
H84	HI8000000003476	1/2 - 1 Mile WNW
85	HI8000000003514	1/2 - 1 Mile NW

PHYSICAL SETTING SOURCE MAP - 4237094.178s



County Boundary
Major Roads
Contour Lines
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons

0 1/4 1/2 1 Miles

Groundwater Flow Direction
Indeterminate Groundwater Flow at Location
Groundwater Flow Varies at Location

N

SITE NAME: Kauiokalani ADDRESS: 85-658 Farrington Hwy. Walanae HI 96792 LAT/LONG: 21.4518 / 158.1902	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.178s DATE: March 18, 2015 7:55 am

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
A1 **West** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003444**
A2 **West** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003445**
A3 **West** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270812**
A4 **West** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270813**
B5 **East** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270811**
B6 **East** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003443**
C7 **WSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003434**
C8 **WSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270802**
D9 **East** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270819**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
D10 **East** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003451**
11 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003454**
12 **ESE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003422**
13 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003461**
14 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003446**
E15 **ESE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270805**
E16 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003436**
17 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003479**
F18 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270862**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
F19 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270863**
F20 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270864**
F21 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270861**
F22 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270858**
F23 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270859**
F24 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270860**
F25 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270865**
F26 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270870**
F27 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270871**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
F28 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270873**
F29 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270869**
F30 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270866**
F31 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270867**
F32 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270868**
F33 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270850**
F34 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270851**
F35 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270849**
F36 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270847**

Map ID Direction Distance Elevation		Database	EDR ID Number
F37 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270848**
F38 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270852**
F39 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270856**
F40 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270857**
F41 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270855**
F42 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270853**
F43 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270854**
F44 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003502**
F45 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003501**

Map ID Direction Distance Elevation		Database	EDR ID Number
F46 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003504**
F47 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003503**
F48 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003500**
F49 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003497**
F50 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003496**
F51 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003499**
F52 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003498**
F53 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003511**
F54 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003510**

Map ID Direction Distance Elevation		Database	EDR ID Number
F55 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003513**
F56 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003512**
F57 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003509**
F58 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003506**
F59 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003505**
F60 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003508**
F61 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003507**
F62 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003495**
F63 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003489**

Map ID Direction Distance Elevation		Database	EDR ID Number
F64 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003490**
F65 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003487**
F66 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003488**
F67 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003493**
F68 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003494**
F69 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003491**
F70 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003492**
71 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003522**
72 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003468**

Map ID Direction Distance Elevation		Database	EDR ID Number
F73 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270872**
F74 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FRDS PWS**	**HI0000335**
F75 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270874**
F76 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270875**
F77 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003518**
F78 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270876**
F79 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003517**
80 **ESE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003421**
G81 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270830**

Map ID Direction Distance Elevation		Database	EDR ID Number
G82 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003465**
H83 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270842**
H84 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003476**
85 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003514**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for HONOLULU County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 96792

Number of sites tested: 5

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.300 pCi/L	100%	0%	0%
Living Area - 2nd Floor	0.200 pCi/L	100%	0%	0%
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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HAWAII PUBLIC HOUSING AUTHORITY

ENVIRONMENTAL REVIEW

MĀ`ILI II

Wai`anae, O`ahu

AMP 44
HPHA No. 1108

Prepared for:

State of Hawaii
Hawaii Public Housing Authority

Prepared by:

HHF PLANNERS
places for people

U.S. Department of Housing and Urban Development
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Washington, DC 20410
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espanol.hud.gov

Environmental Review for Activity/Project that is Categorically Excluded Subject to Section 58.5

Pursuant to 24 CFR 58.35(a)

Project Information

Project Name: Māʻili II (AMP 44)

Responsible Entity: Hawaii Public Housing Authority
1002 North School Street
Honolulu, HI 96817

Grant Recipient (if different than Responsible Entity)**:**
Same as Responsible Entity

State/Local Identifier: State of Hawaiʻi

Preparer: Mr. Scott Ezer, Vice President
HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaiʻi 96813

Certifying Officer Name and Title: Mr. David Y. Ige
Governor, State of Hawaiʻi

Grant Recipient (if different than Responsible Entity)**:**
Same as Responsible Entity

Consultant (if applicable)**:** HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaiʻi 96813

Direct Comments to: Mr. Hakim Ouansafi, Executive Director
Hawaii Public Housing Authority
1002 North School Street
Honolulu, Hawaiʻi 96817

Project Location: 87-159 Keliʻikipi Street
Waiʻanae, Hawaiʻi 96792

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]**:**

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a "major construction activity" and would involve one or a combination of several HUD designated categories of actions.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent;
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons;
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland;
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation;
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls);
7. Interior and exterior renovations and rehabilitation;
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site;
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Level of Environmental Review Determination:

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.5. Compliance with and completion of conformance determinations for other statute, executive order, or regulation has been completed and support the Categorical Exclusion.

Funding Information

Grant Number	HUD Program	Funding Amount
To be determined	Capital Fund	To be determined
To be determined	Economic Development Initiative Special Project Grant	To be determined
To be determined	Other Grants	To be determined

Estimated Total HUD Funded Amount:

To be determined by HUD using a formula and based upon federal budget.

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]**:**

Depends upon funds available.

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	*The project is not within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.*
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☒	*The State of Hawai'i does not have any designated coastal barrier resource units. (http://www.fws.gov/CBRA/Maps/Mapper.html)*
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes ☐ No ☒	*As indicated in Flood Insurance Rate Map Panel 15003C0192J, the project site is located in Zone X (an area of minimal flooding). A field inspection and information obtained from the AMP Manager confirmed no major flooding issues within the site. Based on its description, the Māili II housing project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance is not mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.*

STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5		
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes ☐ No ☒	*The State of Hawai'i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. EPA's Green Book for currently designated "nonattainment areas" as of June 2015. Planned repair and rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.*
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes ☐ No ☒	*Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai'i's Coastal Zone Management (CZM) program.*
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☐ No ☒	*There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.*
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes ☒ No ☐	*The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (USFWS) in their letter dated September 28, 2015 which is included in the Appendices, while project-specific mitigation measures are identified in the following section.*
Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes ☐ No ☒	*There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a*

		building to habitation, or increase the number of people being exposed to hazardous operations.
Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes ☐ No ☒	*The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.*
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes ☐ No ☒	*The project site is located in Zone X (an area of minimal flooding). A field inspection and information obtained from the AMP Manager confirmed no major flooding issues within the site. The project is in compliance with Executive Order 11988.*
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes ☐ No ☒	*Mā‘ili II is 16 years old and was first occupied in 1999. To be eligible for listing in the National Register of Historic Places (NRHP), a property must meet the National Register criteria for evaluation which involves examining its integrity, significance, and age (generally at least 50 years old). Due to its age, this housing project does not meet the eligibility criteria to be evaluated for the NRHP. In a letter to the State Historic Preservation Officer dated July 23, 2015, the HPHA determined that no historic properties would be affected by repair and rehabilitation improvements for this housing project. No comments or objections about this no effect determination were received.*
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes ☐ No ☒	*The project site is not situated along a highway or arterial roadway with a high volume of vehicular traffic that may generate significant noise. Farrington Highway (Route 93) is State arterial roadway in West O`ahu that serves the communities along the leeward coast of O`ahu including Ma‘ili. Route 93 accommodates vehicle traffic entering and leaving Ma‘ili and forms a cross intersection with Keli‘ikipi Street which provides access to the western part of the project site and other residences in the area. Kula‘aupuni Street provides access to the eastern part of the site through various connector roads to Farrington Highway. The HUD noise level calculator estimated noise levels at the project site to be 53 dBA. Therefore, traffic noise levels at*

		this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes ☐ No ☒	*The housing project is located within the O'ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation.*
Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☐ No ☒	*There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.* *(http://www.fws.gov/wetlands/data/mapper.HTML)*
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes ☐ No ☒	*There are no Wild and Scenic Rivers in Hawai'i, which excludes this project from mitigation or formal consultation requirements (http://www.rivers.gov/map.php)*

ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes ☐ No ☒	*Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, these improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects on minority populations and low-income populations. Improvements should benefit low-income and minority populations living within this housing project.*

Field Inspection (Date and completed by)**:** June 15, 2015
Glenn Tadaki, Planner
HHF Planners

Summary of Findings and Conclusions:

Repair and rehabilitation improvements implemented for this existing housing project by HPHA should not result in significant environmental impacts based upon research data collected, a field inspection, consultation with the site manager and maintenance staff, consultation with pertinent resource agencies, and prior HPHA experience implementing repair and rehabilitation improvements. Therefore, repair and rehabilitation improvements would comply and be consistent with the statutes, executive orders, and regulations addressed. Furthermore, HPHA would evaluate improvements planned to ensure the work is consistent with the designated categories of actions described under the project description section. Compliance with these factors evaluated are further addressed in the attached Source Documentation Statutory Worksheet along with relevant technical reports/assessments.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Law, Authority, or Factor	Mitigation Measure
Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	*Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.* *Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.* *Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.* *Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.* *Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo'i, impoundments or other vegetated water bodies.*

	1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols. *2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.* *3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.* *In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.* *<u>Additional Measures</u>: The following additional measures would be implemented:* *1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.*

Determination:

☐ This categorically excluded activity/project converts to **EXEMPT** per Section 58.34(a)(12), because it does not require any mitigation for compliance with any listed statutes or authorities, nor requires any formal permit or license; **Funds may be committed and drawn down after certification of this part** for this (now) EXEMPT project; OR

☒ This categorically excluded activity/project cannot convert to Exempt status because one or more statutes or authorities listed at Section 58.5 requires formal consultation or mitigation. Complete consultation/mitigation protocol requirements, **publish NOI/RROF and obtain "Authority to Use Grant Funds"** (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR

☐ This project is not categorically excluded OR, if originally categorically excluded, is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

Preparer Signature: Scott Ezer Date: 11-10-15

Name/Title/Organization: Mr. Scott Ezer, Vice President
HHF Planners

Responsible Entity Agency Official Signature:

David Y Ige Date: APR 28 2016

Name/Title: Mr. David Y. Ige, Governor

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

MĀIʻLI II (HA # 1108)

TMK: (1) 8-7-001: 001 and 037

Hawaiʻi Public Housing Authority (HPHA) Environmental Review

SOURCE DOCUMENTATION (SD) STATUTORY WORKSHEET

Site Visit Date: June 15, 2015
Prepared By: Glenn Tadaki

PROJECT DESCRIPTION

The Māʻili II housing project is located in the Māʻili community of the Waiʻanae Coast on the island of Oʻahu. Māʻili II is situated between the communities of Waiʻanae to the north and Nānākuli to the south.

The project site consists of two tax parcels separated by a concrete drainage channel. The parcel to the west of the channel is identified by Tax Map Key (1) 8-7-001: 001, while the parcel to the east is identified by Tax Map Key (1) 8-7-001: 037. Māʻili II lies within HPHA's Asset Management Project (AMP) 44 which includes four other housing projects.

Māʻili II was first occupied in 1999 and has a street address of 87-159 Keliʻikipi Street. Access to the western portion of the site (Parcel 1) is provided by Keliʻikipi Street, while access to the eastern portion (Parcel 37) is provided by Kulaʻaupuni Street. The housing project consists of 12 single-family homes with four bedrooms per unit, and six duplexes with two bedrooms per unit. The property is designated for "Urban" use by the State Land Use Commission and is zoned for "R-5 Residential" use by the City and County of Honolulu (City).

The project site is not located within a tsunami evacuation zone, and the entire site is located in Flood Zone X based upon the Flood Insurance Rate Map (Community Panel Number 15003C0192J, Revised November 5, 2014). Zone X is an area determined to be outside the 0.2% annual chance floodplain.

The following figures in Exhibit A provide supporting information on this housing project:

Figure 1: Location Map
Figure 2: TMK Map
Figure 3: Site Map
Figure 4: Flood Map

COMPLIANCE FACTORS

I. AIRPORT CLEAR ZONES AND ACCIDENT POTENTIAL ZONES (24 CFR PART 51D)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The housing project does not lie within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: 24 CFR 51 (D).

Honolulu International Airport Master Plan - 2010 (August 1994), State Department of Transportation, Airports Division; and

*Hawai`i Airports and Flying Safety Guide (2012-13, Fifth Edition, Revision 1)* Hawai`i Department of Transportation, Airports Division.

HDOT website at: http://hidot.hawaii.gov/airports/files/2013/01/Airport-Safety-Guide-2012-2013-5rev1.pdf

II. COASTAL BARRIER RESOURCES (COASTAL BARRIER IMPROVEMENT ACT OF 1990 [16 USC 3501])

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai'i does not have any designated coastal barrier resource units.

SUPPORTING DOCUMENTATION:

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/cbra/maps/mapper.html (Date accessed: 6/30/15).

III. FLOOD INSURANCE (FLOOD DISASTER PROTECTION ACT OF 1973 AND NATIONAL FLOOD INSURANCE REFORM ACT OF 1994 [42 USC 4001-4128 AND 42 USC 5154a])

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program

The project site is located in Zone X (area of minimal flood hazard) and is located outside the 500-year flood zone. A field inspection and information obtained from the AMP Manager confirmed no major flooding issues within the site. Based on its description, the Mā'ili II housing project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance is not mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the Mā'ili II housing project did not visually reveal any signs of previous flooding problems. An interview with the AMP Manager determined that no major ponding or flooding issues have occurred on the project site.

Printed: Flood Insurance Rate Map, City and County of Honolulu, Community Panel Number 15003C0192J, Revised November 5, 2014.

Hawai`i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 6/30/15)

IV. CLEAN AIR ACT (40 CFR PARTS 6, 51, 93)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawaiʻi is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. Environmental Protection Agency's Green Book for currently designated "nonattainment areas" as of June 2015. Planned rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.

SUPPORTING DOCUMENTATION:

Printed: *State of Hawaiʻi Annual Summary 2013 Air Quality Data*. State of Hawai'i, Department of Health, July 2014.

U.S. Environmental Protection Agency website at: http://epa.gov/airquality/greenbk/ (Date accessed: 6/30/2015).

V. COASTAL ZONE MANAGEMENT ACT (16 USC 1451, SECTIONS 307 (C), (D)

CONTACT:
Mr. John Nakagawa
Office of Planning
Department of Business, Economic Development & Tourism
State of Hawaiʻi
P.O. Box 2359
Honolulu, Hawai'i, 96804-2359

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawaiʻi's Coastal Zone Management (CZM) program.

SUPPORTING DOCUMENTATION:

Contact: In an e-mail to the Office of Planning (OP) dated July 27, 2015, the HPHA determined that the use of HUD funds for the implementation of repair and rehabilitation improvements does not require review for consistency with Hawaiʻi's CZM program. The OP confirmed this determination in an e-mail dated July 28, 2015 and included in the Appendices.

Experience: As part of past environmental reviews in December 2010, a letter from the OP dated July 20, 2005 determined that their review for consistency with Hawaiʻi's CZM program was not required. A copy of this letter is included in the Appendices.

VI. CONTAMINATION AND TOXIC SUBSTANCES (24 CFR PART 50.3 & 58.5(I)(2))

	SUPPORTING DOCUMENTS
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Project Not Affected

There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.

SUPPORTING DOCUMENTATION:

Field: A site inspection and interview with the AMP Manager revealed no presence of any toxic or radioactive materials on the project site that warrant any concern.

Study: Environmental Data Resources, Inc. (EDR), conducted a search of available environmental records and prepared a Radius Map Report (Inquiry Number 4237094.186s, March 17, 2015). EDR reviewed more than 25 federal and statewide regulatory databases for information regarding the treatment, storage, disposal and release of toxic chemicals at the project site and within specific radii (generally 1 mile) of the site. A Detail Map within the EDR report documents those sites identified within a 0.25 mile radius of the project site. Some of the sites contain underground storage tanks (UST) that are currently in use or are permanently out of use The EDR report in Exhibit B includes the results of their research findings.

In the vicinity of the project site, the EDR report notes that two 6,000 gallon gasoline USTs for the former Leeward Petroleum at 87-166 Farrington Highway are permanently out of use.

The project site was not identified as a Formerly Used Defense Site (FUDS) by the U.S. Army Corps of Engineers and is not subject to any cleanup actions for Department of Defense-generated contamination.

VII. ENDANGERED SPECIES (50 CFR PART 402)

CONTACT:
Mr. Loyal Mehrhoff, Field Supervisor
Pacific Islands Administrator
Fish and Wildlife Services
U.S. Department of the Interior
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawai'i 96813
Tel. #: 792-9400

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Adverse Effect Subject to Mitigation

The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices.

SUPPORTING DOCUMENTATION:

Contact: A letter from the HPHA dated July 24, 2015 was submitted to the Pacific Island Administrator for the FWS determining that repair and rehabilitation improvements that may be implemented using HUD funds for this housing project would have no likelihood of effect on any listed species or proposed species, or existing or proposed designated critical habitat subject to certain measures. Concurrence with this determination along with proposed minimization and avoidance measures was received from the FWS in a letter dated September 28, 2015 which is included in the Appendices. This housing project is subject to the following minimization and avoidance measures.

Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.

Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.

Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.

Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and

maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.

Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro loʻi, impoundments or other vegetated water bodies.

1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols.
2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.
3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.

In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.

Additional Measures: The following additional measures would be implemented:

1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.

Experience: The FWS was previously consulted as part of environmental reviews that were completed in 2005 (39 housing projects) and 2010 (70 housing projects) which supported the determination that repair and rehabilitation improvements would either: 1) have no likelihood of effect for certain housing projects; or 2) not likely adversely affect federally listed species or critical habitat for certain housing projects subject to mitigative measures. A summary of these consultation efforts follows.

2005 Consultation: In a letter dated July 15, 2005, the Housing and Community Development Corporation of Hawaiʻi (predecessor to the HPHA), determined that the implementation of minor repair and rehabilitation improvements for 39 housing projects would not have an adverse effect on federally-listed species or critical habitat. In a letter dated August 11, 2005, the FWS concurred with the HCDCH determination.

2010 Consultation: In a letter dated May 17, 2010, the HPHA informed the FWS that HUD funds would be used to immediately implement repair and rehabilitation improvements for six housing projects on Oʻahu and the island of Hawai`i. In a subsequent letter dated May 21, 2010, the FWS was informed that HPHA would be using HUD funds to implement minor repair and rehabilitation improvements for 64 projects throughout the State. In both letters, the HPHA determined that the repair and rehabilitation improvements were not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat. Based on further consultation and a

meeting with FWS staff on June 24, 2010, the HPHA determined that repair and rehabilitation improvements for most of their housing projects would not likely adversely affect any listed or proposed species, or existing or proposed designated habitat, subject to various mitigative measures for certain housing projects.

VIII. EXPLOSIVE AND FLAMMABLE OPERATIONS (24 CFR PART 51C)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

SUPPORTING DOCUMENTATION:

Field: Field inspection was limited to the exterior of residential buildings and associated structures for this housing project. No above-ground explosive or flammable material storage containers in excess of 100 gallons were observed at the site.

Printed: 24 CFR Part 51, Subpart C addresses acceptable separation distance from above-ground explosive or flammable fuels or chemical containers. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

IX. FARMLANDS PROTECTION (7 CFR PART 658)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. Since the property consists of an existing housing development within an urbanized area, no farmlands would be impacted by the implementation of repair and rehabilitation improvements.

Printed: The property is designated for "Urban" use by the State Land Use Commission and is zoned for "R-5 Residential" use by the City and County of Honolulu.

Hawai`i Office of Planning website at: http://planning.hawaii.gov/gis/
(Date accessed: 6/30/2015).

X. FLOODPLAIN MANAGEMENT (EXECUTIVE ORDER 11988, 24 CFR PART 55)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program

The project site is located in Zone X (area of minimal flood hazard). A field inspection and information obtained from the AMP Manager confirmed no major flooding issues within the site.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the Mā'ili II housing project did not visually reveal any signs of previous flooding problems. An interview with the AMP Manager determined that no major ponding or flooding issues have occurred on the project site.

Printed: Flood Insurance Rate Map, City and County of Honolulu, Hawai'i Community Panel Number Community Panel Number 15003C0192J, Revised November 5, 2014).

Hawai`i Department of Land and Natural Resources website at:
http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 6/30/15)

XI. HISTORIC PRESERVATION (NATIONAL HISTORIC PRESERVATION ACT OF 1966; SECTIONS 106 AND 110; 36 CFR, PART 800)

CONTACT:

Ms. Suzanne Case, Chairperson
Department of Land and Natural Resources (DLNR)
State of Hawaiʻi
1151 Punchbowl Street
Honolulu, Hawaiʻi 96813
Tel. #: 587-0400

SUPPORTING DOCUMENTS

X	Field
X	Contact
X	Printed
X	Experience
X	Study

DETERMINATION:

Status Category: No Effect on Historic Properties

Māʻili II is16 years old and was initially occupied in 1999. To be eligible for listing in the National Register of Historic Places (NRHP), a property must meet the National Register criteria for evaluation which involves examining its integrity, significance, and age (generally at least 50 years old). Due to its age, this housing project does not meet the eligibility criteria to be evaluated for the NRHP. In a letter to the State Historic Preservation Officer (SHPO) dated July 23, 2015, the HPHA determined that no historic properties would be affected (no effect) by repair and rehabilitation improvements for this housing project. No comments or objections about this no effect determination were received.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the Māʻili II housing project did not locate any existing or potential archaeological sites (e.g., heiau) or cultural features on the property. The project site has undergone extensive ground-altering activities since it was initially developed and improved with buildings, driveways, parking lots, sidewalks, and other related improvements. An interview with the AMP Manager indicates that no known sites or features are present on the property.

Contact: A letter from the HPHA dated July 23, 2015, which is included in the Appendix, was submitted to the State Historic Preservation Officer [SHPO] (Chair of State Board of Land and Natural Resources) as part of Section 106 consultation determining that no historic properties would be affected (no effect) by repair and rehabilitation improvements that may be implemented using HUD funds for this housing project. The SHPO did not submit any comments or objections on the "no effect" determination for this housing project, which included follow-up e-mails with the State Historic Preservation Division regarding a response. On September 28, 2015, notice of HPHA's determination was also distributed to several native Hawaiian organizations and the various County Planning Departments. No concerns or opposition to this determination was received.

Printed: A review of the U.S. National Parks Service website for the National Register of Historic Places did not identify any historic properties within the limits of this housing project. A similar review of the State DLNR website for the State Register of Historic Places revealed that there are no historic properties within the project site.

National Register: U.S. National Park Service website at: http://www.nps.gov/nr/research/ (Date accessed: 7/2/15).

State Register: Hawai`i Department of Land and Natural Resources website at: http://dlnr.hawaii.gov/shpd/state-register/ (Date accessed: 7/2/15).

Experience: In letter to the SHPO dated April 19, 2011, the HPHA determined that minor repair and rehabilitation improvement at 57 public housing projects throughout Hawai‘i (including Mā‘ili II) would have "no effect" on historic properties. The SHPO had no comments or objections on the "no effect" determination.

XII. NOISE ABATEMENT CONTROL (24 CFR PART 51B)

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Within HUD Noise Standards

The project site is not situated along a highway or arterial roadway with a high volume of vehicular traffic that may generate significant noise. Farrington Highway (Route 93) is State arterial roadway in West O‘ahu that serves the communities along the leeward coast including Mā‘ili Route 93 accommodates vehicle traffic entering and leaving Mā‘ili and forms a cross intersection with Keli‘ikipi Street which provides access to the western part of the project site and other residences in the area. Kula‘aupuni Street provides access to the eastern part of the site through various connector roads to Farrington Highway. The HUD noise level calculator estimated noise levels at the project site to be 53 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA

SUPPORTING DOCUMENTATION:

Field: Keli‘ikipi Street provides access to Farrington Highway for most of the residents of Mā‘ili II, while Kula‘aupuni Street provides access for the rest. The distance from the intersection of the highway and Keli‘ikipi Street to the project site is approximately 560 feet. As a result, noise generated by traffic along Farrington Highway is very minimal due to this distance. Intervening buildings between the highway and the housing project also help dampen any ambient traffic noise to insignificant levels. No significant noise generating sources were identified at either part of the project site during the site inspection and an interview with the AMP Manager did not identify any loud noise producing sources in the area. Noise sources are predominantly associated with vehicular traffic along adjacent roadways and voices from surrounding activities

Study: Land use in the vicinity of the project site mostly consists of single-family dwellings. The HUD day/night noise level calculator was used to estimate approximate traffic noise levels at the project site. Farrington Highway is a State arterial roadway that is generally aligned in a northerly to southerly direction. It accommodates vehicle traffic entering and leaving Mā‘ili and handles about 32,435 vehicles a day based upon State Department of

Transportation 2013 traffic data. Given the distance between the project site and the center line of this roadway, the estimated noise levels at the project site using the HUD calculator was 53 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

XIII. SOLE SOURCE AQUIFER (40 CFR PART 149)

	SUPPORTING DOCUMENTS
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact on Sole Source Aquifer.

The housing project is located within the O'ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation. However, if exceptional circumstances require compliance steps with any of these authorities, such compliance must be established and documented prior to approving the site-specific loan or grant.

SUPPORTING DOCUMENTATION:

Printed: This determination was based upon review of the Sole Source Aquifer Memorandum of 4/30/90 (Sections II.B.1 and II.B.2) and consideration of the type of rehabilitation related improvements that would be conducted for this project.

XIV. WETLANDS PROTECTION (EXECUTIVE ORDER 11990)

	SUPPORTING DOCUMENTS
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the property did not identify the presence of any wetlands.

Printed: U.S Fish and Wildlife Service website at: http://www.fws.gov/wetlands/data/mapper.html (Date accessed 6/30/2015).

XV. WILD AND SCENIC RIVERS ACT (16 USC 1271, SECTION 7 (B), (C))

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no Wild and Scenic Rivers in Hawaiʻi, which excludes this project from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: National Wild and Scenic Rivers System website at: http://www.rivers.gov/index.php (Date accessed: 6/30/2015).

XVI. ENVIRONMENTAL JUSTICE (EXECUTIVE ORDER NO. 12898)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact on Requirements.

Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, repair and rehabilitation improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations. Repair and rehabilitation improvements should benefit low-income and minority populations living within this housing project.

SUPPORTING DOCUMENTATION:

Printed: Executive Order 12898.

U.S. Department of Housing and Urban Development website at:
https://www.hudexchange.info/environmental-review/environmental-justice/

EXHIBIT A

Location Map, TMK Map, Site Map, Flood Map, and Site Photos

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

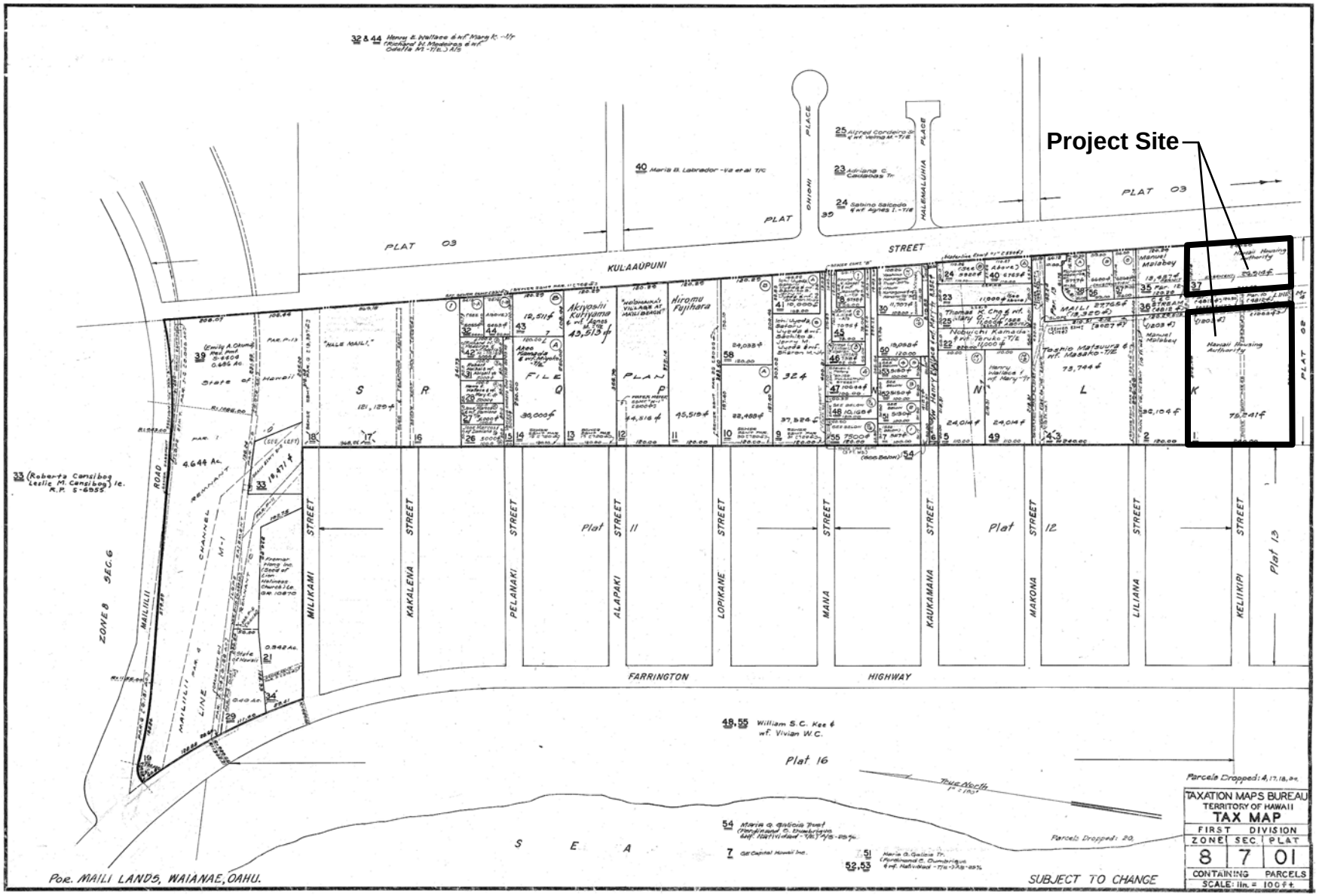
HPHA No. 1108 - Mā'ili II (AMP 44)

Figure 1 - Project Location Map

Wai'anae, O'ahu

1,000 FT

HHF PLANNERS
places for people



HPHA No. 1108 - Māʻili II (AMP 44)

Figure 2 - TMK Map

Waiʻanae, Oʻahu

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

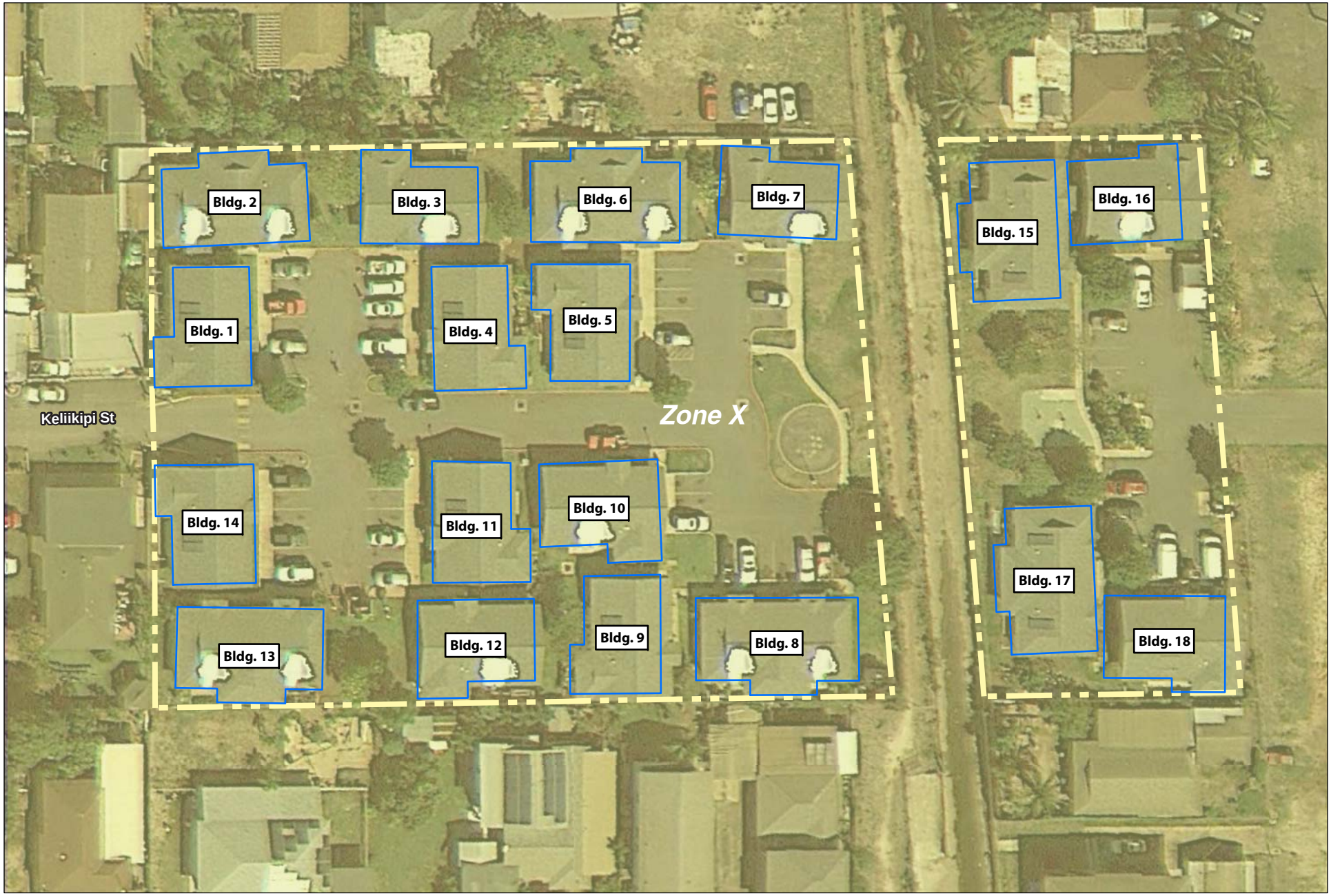
HPHA No. 1108 - Mā'ili II (AMP 44)

Figure 3 - Site Map

Wai'anae, O'ahu

40 FEET

HHF PLANNERS
places for people



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

LEGEND

Zone X - Outside the 0.2% Annual Chance of Flood

HPHA No. 1108 - Mā'ili II (AMP 44)

Figure 4 - Flood Map

Wai'anae, O'ahu

40 FEET

HHF PLANNERS
places for people

Keliikipi Street and subject housing site homes, facing west viewed from Maili Stream

Housing site viewed from project entry, looking towards Maili Stream

Western boundary of housing site: Building 14 right side yard

Western boundary of housing site: Building 1 left side yard

Parking lot, facing Building 12 & 13

Parking lot, faing Building 8, 9 and 10

Drain inlet

Building 7, looking north.

Fenceline separates housing project. Maili Stream (to the right, not shown)

Concrete lined Maili Stream bisects subject housing site into two separate areas.

The following photos are of the portion of homes to the east of Maili Stream.

Kulaaupuni Street. Subject housing site is to the left, not shown.

Building 17 & 18 viewed from Kulaaupuni Street

Building 15 & 16 viewed from Kulaaupuni Street

EXHIBIT B

EDR Radius Map Report

Maili II
87-159 Keliikipi St.
Waianae, HI 96792

Inquiry Number: 4237094.186s
March 17, 2015

EDR Summary Radius Map Report

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

FORM-NULL-PVC

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

87-159 KELIIKIPI ST.
HONOLULU County, HI 96792

COORDINATES

Latitude (North):	21.4224000 - 21˚ 25' 20.64''
Longitude (West):	158.1757000 - 158˚ 10' 32.52''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	585428.7
UTM Y (Meters):	2368982.0
Elevation:	10 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	USGS 7.5 min quad index

MAPPED SITES SUMMARY

Target Property Address:
87-159 KELIIKIPI ST.
, HI 96792

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
Reg	LUALUALEI NAVAL RADI		DOD	Same	2549, NE
Reg	NAVAL COMPUTER AND T	500 CENTER STREET	NPL, CERCLIS, US ENG CONTROLS, US INST CONTROL,...	Same	2495, NE
1		87154 LILIANA ST	EDR US Hist Auto Stat	Higher	331, NNW
A2		87166 FARRINGTON HW	EDR US Hist Auto Stat	Lower	1182, NW
A3	LEEWARD PETROLEUM	87-166 FARRINGTON HW	UST	Higher	1241, NW
4	UNOCAL SERVICE STATI	84-1114 FARRINGTON H	SHWS	Higher	3044, NNW
5	C&CH WAIANAE CORP YA	86-220 FARRINGTON HW	SHWS, LUST, UST, Financial Assurance	Higher	3953, NW
6	HECO SUBSTATION: MIK	87-575 PAAKEA RD	SHWS, SPILLS	Higher	4488, East

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: A review of the NPL list, as provided by EDR, and dated 12/16/2014 has revealed that there is 1 NPL site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NAVAL COMPUTER AND T	***500 CENTER STREET***	***NE 1/4 - 1/2 (0.473 mi.)***	***0***	***7***

Federal CERCLIS list

CERCLIS: A review of the CERCLIS list, as provided by EDR, and dated 10/25/2013 has revealed that there is 1 CERCLIS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NAVAL COMPUTER AND T	***500 CENTER STREET***	***NE 1/4 - 1/2 (0.473 mi.)***	***0***	***7***

Federal institutional controls / engineering controls registries

US ENG CONTROLS: A review of the US ENG CONTROLS list, as provided by EDR, and dated 09/18/2014 has revealed that there is 1 US ENG CONTROLS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NAVAL COMPUTER AND T	***500 CENTER STREET***	***NE 1/4 - 1/2 (0.473 mi.)***	***0***	***7***

EXECUTIVE SUMMARY

US INST CONTROL: A review of the US INST CONTROL list, as provided by EDR, and dated 09/18/2014 has revealed that there is 1 US INST CONTROL site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NAVAL COMPUTER AND T	***500 CENTER STREET***	***NE 1/4 - 1/2 (0.473 mi.)***	***0***	***7***

State- and tribal - equivalent CERCLIS

SHWS: A review of the SHWS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 3 SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
UNOCAL SERVICE STATI	84-1114 FARRINGTON H	NNW 1/2 - 1 (0.577 mi.)	4	8
C&CH WAIANAE CORP YA	***86-220 FARRINGTON HW***	***NW 1/2 - 1 (0.749 mi.)***	***5***	***8***
HECO SUBSTATION: MIK	***87-575 PAAKEA RD***	***E 1/2 - 1 (0.850 mi.)***	***6***	***8***

State and tribal registered storage tank lists

UST: A review of the UST list, as provided by EDR, and dated 12/18/2014 has revealed that there is 1 UST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LEEWARD PETROLEUM	87-166 FARRINGTON HW	NW 1/8 - 1/4 (0.235 mi.)	A3	7

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

DOD: A review of the DOD list, as provided by EDR, and dated 12/31/2005 has revealed that there is 1 DOD site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LUALUALEI NAVAL RADI		NE 1/4 - 1/2 (0.483 mi.)	0	7

ROD: A review of the ROD list, as provided by EDR, and dated 11/25/2013 has revealed that there is 1 ROD site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NAVAL COMPUTER AND T	***500 CENTER STREET***	***NE 1/4 - 1/2 (0.473 mi.)***	***0***	***7***

EXECUTIVE SUMMARY

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Auto Stat: A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there are 2 EDR US Hist Auto Stat sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	87154 LILIANA ST	NNW 0 - 1/8 (0.063 mi.)	1	7

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	87166 FARRINGTON HW	NW 1/8 - 1/4 (0.224 mi.)	A2	7

Count: 3 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
WAIANAE	1015730971	USARMY MAKUA MILITARY RESERVATION	FARRINGTON HWY	96792	RCRA-TSDF, CERCLIS, CORRACTS, RCRA-CESQG
WAIANAE	1006819047	P & S SANITARY HAULING INC	87-746 FARRINGTON HWY	96792	SHWS
WAIANAE	1004654730	NANAKULI GROUNDWATER CONTAMINATION	PAAKEA ROAD & LUALUALEI ACCESS	96792	CERC-NFRAP

OVERVIEW MAP - 4237094.186S

- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites

0 1/4 1/2 1 Miles

- Indian Reservations BIA
- County Boundary
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Maili II ADDRESS: 87-159 Keliikipi St. Walanae HI 96792 LAT/LONG: 21.4224 / 158.1757	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.186s DATE: March 17, 2015 5:42 pm

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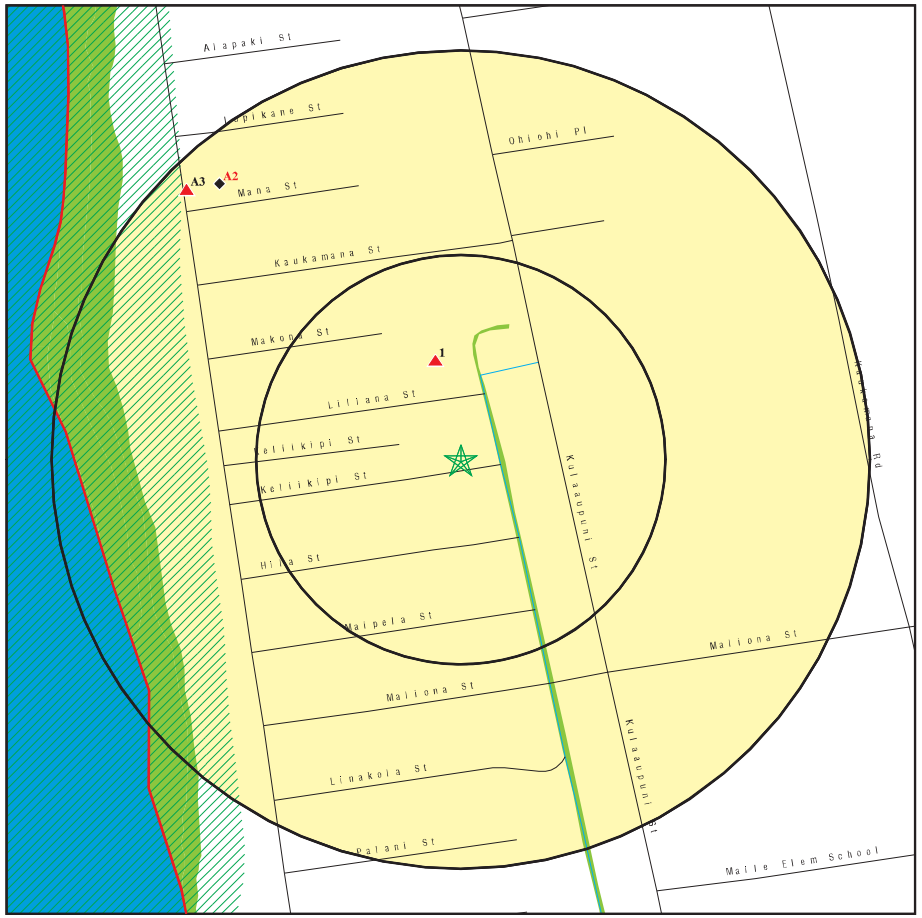
DETAIL MAP - 4237094.186S



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites

0 1/16 1/8 1/4 Miles

- Indian Reservations BIA
- County Boundary
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	1	0	NR	1
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	1	NR	NR	1
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	1	NR	NR	1
US INST CONTROL	0.500		0	0	1	NR	NR	1
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
SHWS	1.000		0	0	0	3	NR	3
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250		0	1	NR	NR	NR	1

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		0	0	0	NR	NR	0
INST CONTROL	0.500		0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	1	0	NR	1
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	1	0	NR	1
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		1	1	NR	NR	NR	2
EDR US Hist Cleaners	0.250		0	0	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
RGA HWS	TP		NR	NR	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
DOD **Region** **NE** **1/4-1/2** **2549 ft.**	**LUALUALEI NAVAL RADIO STATION** **LUALUALEI NAVAL RADIO STA (County), HI** Click here for full text details	**DOD**	**CUSA147739** **N/A**
NPL **Region** **NE** **1/4-1/2** **2495 ft.**	**NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EA** **500 CENTER STREET** **WAHIAWA, HI 96786** Click here for full text details **NPL** EPA Id: HI0170090054 **CERCLIS** EPA Id: HI0170090054	**NPL** **CERCLIS** **US ENG CONTROLS** **US INST CONTROL** **ROD** **ICIS**	**1000167735** **HI0170090054**
1 **NNW** **< 1/8** **0.063 mi.** **331 ft.** **Relative:** **Higher**	**87154 LILIANA ST** **WAIANAE, HI 96792** Click here for full text details	**EDR US Hist Auto Stat**	**1015660393** **N/A**
A2 **NW** **1/8-1/4** **0.224 mi.** **1182 ft.** **Relative:** **Lower**	**87166 FARRINGTON HWY** **WAIANAE, HI 96792** Click here for full text details	**EDR US Hist Auto Stat**	**1015660410** **N/A**
A3 **NW** **1/8-1/4** **0.235 mi.** **1241 ft.** **Relative:** **Higher**	**LEEWARD PETROLEUM** **87-166 FARRINGTON HWY** **WAIANAE, HI 96792** Click here for full text details **UST** Facility Id: 9-202791 Tank Status: Permanently out of Use	**UST**	**U003222118** **N/A**

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
4 NNW 1/2-1 0.577 mi. 3044 ft. Relative: Higher	**UNOCAL SERVICE STATION, FORMER #5245** **84-1114 FARRINGTON HWY** **MAKAHA, HI 96792** Click here for full text details	**SHWS**	**S104657527** **N/A**
5 NW 1/2-1 0.749 mi. 3953 ft. Relative: Higher	**C&CH WAIANAE CORP YARD** **86-220 FARRINGTON HWY** **WAIANAE, HI 96792** Click here for full text details **LUST** Facility Id: 9-200133 Facility Status: Site Cleanup Completed (NFA) **UST** Facility Id: 9-200133 Tank Status: Permanently Out of Use Tank Status: Permanently out of Use	**SHWS** **LUST** **UST** **Financial Assurance**	**U003221952** **N/A**
6 East 1/2-1 0.850 mi. 4488 ft. Relative: Higher	**HECO SUBSTATION: MIKILUA SUBSTATION** **87-575 PAAKEA RD** **WAIANAE, HI 96792** Click here for full text details	**SHWS** **SPILLS**	**S107024362** **N/A**

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
HI	AIRS	List of Permitted Facilities	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	BROWNFIELDS	Brownfields Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	CDL	Clandestine Drug Lab Listing	Department of Health	08/04/2010	09/10/2010	10/22/2010
HI	DRYCLEANERS	Permitted Drycleaner Facility Listing	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	ENG CONTROLS	Engineering Control Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	Financial Assurance	Financial Assurance Information Listing	Department of Health	12/01/2014	12/19/2014	01/28/2015
HI	INST CONTROL	Sites with Institutional Controls	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	LUST	Leaking Underground Storage Tank Database	Department of Health	12/16/2014	12/19/2014	01/28/2015
HI	RGA HWS	Recovered Government Archive State Hazardous Waste Facilitie	Department of Health		07/01/2013	01/08/2014
HI	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Health		07/01/2013	01/17/2014
HI	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	Department of Health		07/01/2013	01/03/2014
HI	SHWS	Sites List	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	SPILLS	Release Notifications	Department of Health	12/02/2014	12/22/2014	01/28/2015
HI	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	03/10/2012	01/03/2013	02/11/2013
HI	SWF/LF	Permitted Landfills in the State of Hawaii	Department of Health	09/17/2012	04/03/2013	05/10/2013
HI	UIC	Underground Injection Wells Listing	Department of Health	02/07/2013	02/12/2013	04/09/2013
HI	UST	Underground Storage Tank Database	Department of Health	12/18/2014	12/19/2014	01/28/2015
HI	VCP	Voluntary Response Program Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	04/22/2013	03/03/2015	03/09/2015
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2011	02/26/2013	04/19/2013
US	CERCLIS	Comprehensive Environmental Response, Compensation, and Liab	EPA	10/25/2013	11/11/2013	02/13/2014
US	CERCLIS-NFRAP	CERCLIS No Further Remedial Action Planned	EPA	10/25/2013	11/11/2013	02/13/2014
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	07/01/2014	09/10/2014	10/20/2014
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	01/23/2015	02/13/2015	03/09/2015
US	CORRACTS	Corrective Action Report	EPA	12/09/2014	12/29/2014	01/29/2015
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DELISTED NPL	National Priority List Deletions	EPA	12/16/2014	01/08/2015	02/09/2015
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	07/31/2012	08/07/2012	09/18/2012
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EDR US Hist Auto Stat	EDR Exclusive Historic Gas Stations	EDR, Inc.			
US	EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	09/29/2014	09/30/2014	11/06/2014
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	07/21/2014	10/07/2014	10/20/2014
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
US	FEMA UST	Underground Storage Tank Listing	FEMA	01/01/2010	02/16/2010	04/12/2010
US	FINDS	Facility Index System/Facility Registry System	EPA	08/16/2014	09/10/2014	10/20/2014
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	06/06/2014	09/10/2014	09/18/2014
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	12/29/2014	12/30/2014	03/09/2015
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	01/23/2015	02/06/2015	03/09/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	02/01/2013	05/01/2013	11/01/2013

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	01/30/2015	02/05/2015	03/09/2015
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/10/2015	03/13/2015
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	01/28/2015	01/30/2015	03/13/2015
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	01/08/2015	01/08/2015	02/09/2015
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2005	12/08/2006	01/11/2007
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	02/01/2013	05/01/2013	01/27/2014
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	01/30/2015	02/05/2015	03/13/2015
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/13/2015	03/13/2015
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	01/29/2015	01/30/2015	03/13/2015
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	12/14/2014	02/13/2015	03/13/2015
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	09/29/2014	10/01/2014	11/06/2014
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	11/25/2014	11/26/2014	01/29/2015
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	02/18/2014	03/18/2014	04/24/2014
US	LUCIS	Land Use Control Information System	Department of the Navy	12/03/2014	12/12/2014	01/29/2015
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	12/29/2014	01/08/2015	01/29/2015
US	NPL	National Priority List	EPA	12/16/2014	01/08/2015	02/09/2015
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	07/01/2014	10/15/2014	11/17/2014
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	02/01/2011	10/19/2011	01/10/2012
US	PRP	Potentially Responsible Parties	EPA	10/25/2013	10/17/2014	10/20/2014
US	Proposed NPL	Proposed National Priority List Sites	EPA	12/16/2014	01/08/2015	02/09/2015
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	10/07/2014	10/08/2014	10/20/2014
US	RCRA NonGen / NLR	RCRA - Non Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RMP	Risk Management Plans	Environmental Protection Agency	08/01/2014	08/12/2014	11/06/2014
US	ROD	Records Of Decision	EPA	11/25/2013	12/12/2013	02/24/2014
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	03/07/2011	03/09/2011	05/02/2011
US	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2011	07/31/2013	09/13/2013
US	TSCA	Toxic Substances Control Act	EPA	12/31/2012	01/15/2015	01/29/2015
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	09/14/2010	10/07/2011	03/01/2012
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/16/2014	10/31/2014	11/17/2014
US	US AIRS MINOR	Air Facility System Data	EPA	10/16/2014	10/31/2014	11/17/2014

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	12/22/2014	12/22/2014	01/29/2015
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	11/19/2014	11/21/2014	01/29/2015
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	12/30/2014	12/31/2014	01/29/2015
US	Oil/Gas Pipelines	GeoData Digital Line Graphs from 1:100,000-Scale Maps	USGS			
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
US	USGS 7.5' Topographic Map	Scanned Digital USGS 7.5' Topographic Map (DRG)	USGS			

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

MAILI II
87-159 KELIIKIPI ST.
WAIANAE, HI 96792

TARGET PROPERTY COORDINATES

Latitude (North):	21.4224 - 21˚ 25' 20.64''
Longitude (West):	158.1757 - 158˚ 10' 32.52''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	585428.7
UTM Y (Meters):	2368982.0
Elevation:	10 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	21158-D2 WAIANAE, HI
Most Recent Revision:	Not reported

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

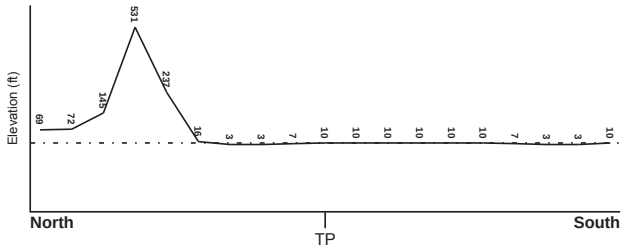
TOPOGRAPHIC INFORMATION

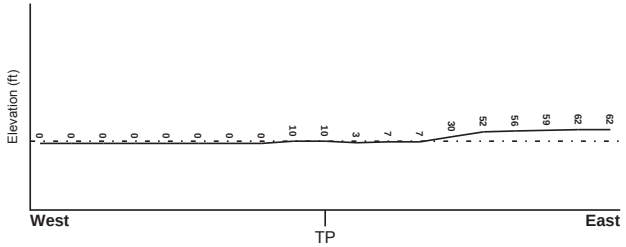
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General NW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 10 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
HONOLULU, HI	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 15003C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
WAIANAE	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era: -
System: -
Series: -
Code: N/A *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: -

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4237094.186s

★ Target Property
SSURGO Soil
Water

SITE NAME: Maili II ADDRESS: 87-159 Keliikipi St. Walanae HI 96792 LAT/LONG: 21.4224 / 158.1757	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.186s DATE: March 17, 2015 5:43 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Mokuleia

Soil Surface Texture: clay

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		Soil Reaction (pH)
1	0 inches	16 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14.11 Min: 4.23	Max: 7.3 Min: 6.6
2	16 inches	50 inches	sand	Granular materials (35 pct. or less passing No. 200), Fine Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42.34	Max: 8.4 Min: 7.9

Soil Map ID: 2

Soil Component Name: Beaches

Soil Surface Texture: coarse sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 92 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	coarse sand	Granular materials (35 pct. or less passing No. 200), Fine Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42.34	Max: 7.8 Min: 6.1
2	5 inches	59 inches	coarse sand	Granular materials (35 pct. or less passing No. 200), Fine Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42.34	Max: 7.8 Min: 6.1

Soil Map ID: 3

Soil Component Name: Keaau

Soil Surface Texture: stony clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 70 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	14 inches	stony clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14.11 Min: 1.41	Max: 7.8 Min: 7.4
2	14 inches	33 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4.23 Min: 0.42	Max: 7.8 Min: 7.4
3	33 inches	38 inches	cemented material	Not reported	Not reported	Max: 705 Min: 42.34	Max: Min:
4	38 inches	57 inches	sand	Granular materials (35 pct. or less passing No. 200), Fine Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 705 Min: 141.14	Max: 8.4 Min: 7.9

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	USGS40000270722	1/8 - 1/4 Mile SW
A2	USGS40000270725	1/8 - 1/4 Mile NE
B4	USGS40000270723	1/4 - 1/2 Mile WNW
C6	USGS40000270724	1/4 - 1/2 Mile ENE
D9	USGS40000270714	1/2 - 1 Mile ESE
E10	USGS40000270730	1/2 - 1 Mile NNE
F12	USGS40000270733	1/2 - 1 Mile NW
G14	USGS40000270737	1/2 - 1 Mile NNE
H18	USGS40000270684	1/2 - 1 Mile SE
I19	USGS40000270740	1/2 - 1 Mile NNW

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A3	HI8000000003343	1/8 - 1/4 Mile NE
B5	HI8000000003341	1/4 - 1/2 Mile WNW
C7	HI8000000003342	1/4 - 1/2 Mile ENE
D8	HI8000000003332	1/2 - 1 Mile ESE
E11	HI8000000003352	1/2 - 1 Mile NNE
F13	HI8000000003355	1/2 - 1 Mile NW
G15	HI8000000003359	1/2 - 1 Mile NNE
16	HI8000000003320	1/2 - 1 Mile ESE
H17	HI8000000003294	1/2 - 1 Mile SE
I20	HI8000000003361	1/2 - 1 Mile NNW

PHYSICAL SETTING SOURCE MAP - 4237094.186s

County Boundary
Major Roads
Contour Lines
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons
Groundwater Flow Direction
Indeterminate Groundwater Flow at Location
Groundwater Flow Varies at Location

SITE NAME: Maili II ADDRESS: 87-159 Keliikipi St. Waianae HI 96792 LAT/LONG: 21.4224 / 158.1757	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.186s DATE: March 17, 2015 5:43 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
1 **SW** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270722**
A2 **NE** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270725**
A3 **NE** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003343**
B4 **WNW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270723**
B5 **WNW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003341**
C6 **ENE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270724**
C7 **ENE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003342**
D8 **ESE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003332**
D9 **ESE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270714**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
E10 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270730**
E11 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003352**
F12 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270733**
F13 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003355**
G14 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270737**
G15 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003359**
16 **ESE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003320**
H17 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003294**
H18 **SE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270684**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
I19 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270740**
I20 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003361**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for HONOLULU County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 96792

Number of sites tested: 5

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.300 pCi/L	100%	0%	0%
Living Area - 2nd Floor	0.200 pCi/L	100%	0%	0%
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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HAWAII PUBLIC HOUSING AUTHORITY

ENVIRONMENTAL REVIEW

WAIMĀNALO HOMES I & II

Waimānalo, O`ahu

AMP 45

HPHA No. 1025 and 1107

Prepared for:

State of Hawaii
Hawaii Public Housing Authority

Prepared by:

HHF PLANNERS
places for people

U.S. Department of Housing and Urban Development
451 Seventh Street, SW
Washington, DC 20410
www.hud.gov

espanol.hud.gov

Environmental Review for Activity/Project that is Categorically Excluded Subject to Section 58.5

Pursuant to 24 CFR 58.35(a)

Project Information

Project Name: Waimānalo Homes I and II (AMP 45)

Responsible Entity: Hawaii Public Housing Authority
1002 North School Street
Honolulu, HI 96817

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

State/Local Identifier: State of Hawaiʻi

Preparer: Mr. Scott Ezer, Vice President
HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaiʻi 96813

Certifying Officer Name and Title: Mr. David Y. Ige
Governor, State of Hawaiʻi

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

Consultant (if applicable): HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaiʻi 96813

Direct Comments to: Mr. Hakim Ouansafi, Executive Director
Hawaii Public Housing Authority
1002 North School Street
Honolulu, Hawaiʻi 96817

Project Location: 41-556 Humuniki Street
Waimānalo, Hawaiʻi 96795

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]**:**

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a "major construction activity" and would involve one or a combination of several HUD designated categories of actions.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent;
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons;
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland;
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation;
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls);
7. Interior and exterior renovations and rehabilitation;
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site;
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Level of Environmental Review Determination:

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.5. Compliance with and completion of conformance determinations for other statute, executive order, or regulation has been completed and support the Categorical Exclusion.

Funding Information

Grant Number	HUD Program	Funding Amount
To be determined	Capital Fund Grants	To be determined
To be determined	Economic Development Initiative Special Project Grant	To be determined
To be determined	Other Grants	To be determined

Estimated Total HUD Funded Amount:

To be determined by HUD using a formula and based upon Federal budget.

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]**:**

Depends on funds available.

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	*The project is not within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.*
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☒	*The State of Hawai'i does not have any designated coastal barrier resource units. (http://www.fws.gov/CBRA/Maps/Mapper.html)*
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes ☐ No ☒	*As indicated in the Flood Insurance Rate Panel 15003C0380H, Panel Effective Date: November 05, 2014, the all existing housing units are located within Flood Hazard Zone X (areas determined to be outside the 0.2% annual chance floodplain). The southern portion of 8 house lot boundaries are partially within Flood Zone AE (special flood hazard areas subject to inundation by the 1% annual chance flood, Base Flood Elevations (BFE) determined) and Zone AEF (Floodway areas in Zone AE. The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without increasing the BFE). These flood areas are associated with a tributary stream identified as Stream A.*

STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5		
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes ☐ No ☒	*The State of Hawai'i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. EPA's Green Book for currently designated "nonattainment areas" as of June 2015. Planned repair and rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.*
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes ☐ No ☒	*Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai'i's Coastal Zone Management (CZM) program.*
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☐ No ☒	*There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.*
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes ☒ No ☐	*The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (USFWS) in their letter dated September 28, 2015 which is included in the Appendices, while project-specific mitigation measures are identified in the following section*

Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes ☐ No ☒	*A field inspection identified an existing above-ground explosive or flammable material storage container in excess of 100 gallons. The tank is surrounded by an approx. 5-foot-high chain link fence, located approximately 25 feet north-east of Building 11. Repair and rehabilitation improvements for this project should not impact this fuel storage tank. Should rehabilitation improvements increase the density of the project (e.g. increase the number of units and associated persons exposed to the hazard within the acceptable separation distance), mitigative measures would need to be implemented for the fuel tank in compliance with HUD requirements.*
Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes ☐ No ☒	*The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.*
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes ☐ No ☒	*Flood Zone AE (special flood hazard areas subject to inundation by the 1% annual chance flood, Base Flood Elevations (BFE) determined) and Zone AEF (Floodway areas in Zone AE. The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without increasing the BFE). These flood areas are associated with a tributary stream identified as Stream A. Field inspection and information obtained from the AMP Manager confirmed no major flooding issues within the project site. Therefore, rehabilitation improvements implemented for this housing project should not have significant impact on existing floodplain conditions or pose a significant threat to human life, health, safety, and property as defined by Federal and State guidelines that would require mitigation.*

Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes ☐ No ☒	*Waimānalo Homes I and II were first occupied in 1998 and are 17 years old. Due to their age, these housing projects do not meet the eligibility criteria to be evaluated for the National Register of Historic Places (NHRP). In a letter to the State Historic Preservation Officer dated July 23, 2015, the HPHA determined that no historic properties would be affected by repair and rehabilitation improvements for this housing project. No comments or objections about this no effect determination were received.*
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes ☐ No ☒	*The project site is not situated along a highway that has a high volume of vehicular traffic. The HUD noise calculator estimated noise levels at the project site to be 40.9 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.*
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes ☐ No ☒	*The housing project is located within the O‘ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation.*
Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☐ No ☒	*There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.* *(http://www.fws.gov/wetlands/data/mapper.HTML)*
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes ☐ No ☒	*There are no Wild and Scenic Rivers in Hawai‘i, which excludes this project from mitigation or formal consultation requirements (http://www.rivers.gov/map.php)*

ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes ☐ No ☒	*Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, these improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects on minority populations and low-income populations. Improvements should benefit low-income and minority populations living within this housing project.*

Field Inspection (Date and completed by)**:** June 04, 2015
Questor Lau, Planner
HHF Planners

Summary of Findings and Conclusions:

Repair and rehabilitation improvements implemented for this existing housing project by HPHA should not result in significant environmental impacts based upon research data collected, a field inspection, consultation with the site manager and maintenance staff, consultation with pertinent resource agencies, and prior HPHA experience implementing repair and rehabilitation improvements. Therefore, repair and rehabilitation improvements would comply and be consistent with the statutes, executive orders, and regulations addressed. Furthermore, HPHA would evaluate improvements planned to ensure the work is consistent with the designated categories of actions described under the project description section. Compliance with these factors evaluated are further addressed in the attached Source Documentation Statutory Worksheet along with relevant technical reports/assessments.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Law, Authority, or Factor	Mitigation Measure
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	*Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.* *Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.* *Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.* *Newell's shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.* *Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.* *Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo'i, impoundments or other vegetated water bodies.*

	1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols. *2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.* *3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.* *In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.* *<u>Additional Measures</u>: The following additional measures would be implemented:* *1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.*

Determination:

☐ This categorically excluded activity/project converts to **EXEMPT** per Section 58.34(a)(12), because it does not require any mitigation for compliance with any listed statutes or authorities, nor requires any formal permit or license; **Funds may be committed and drawn down after certification of this part** for this (now) EXEMPT project; OR

☒ This categorically excluded activity/project cannot convert to Exempt status because one or more statutes or authorities listed at Section 58.5 requires formal consultation or mitigation. Complete consultation/mitigation protocol requirements, **publish NOI/RROF and obtain "Authority to Use Grant Funds"** (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR

☐ This project is not categorically excluded OR, if originally categorically excluded, is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

Preparer Signature: _____ Date: 11-10-15

Name/Title/Organization: Mr. Scott Ezer, Vice President
HHF Planners

Responsible Entity Agency Official Signature:

_____ Date:_____

Name/Title: Mr. David Y. Ige, Governor

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

Waimānalo Homes I (HA # 1025) and Waimanalo Homes II (HA # 1107)

TMK: (1) 4-1-022, (1) 4-1-023, and (1) 4-1-028: various parcels

Hawai‘i Public Housing Authority (HPHA) Environmental Review

SOURCE DOCUMENTATION (SD) STATUTORY WORKSHEET

Site Visit Date: June 04, 2015
Prepared By: Questor Lau

Waimānalo Homes are located in the Waimānalo community on the island of O‘ahu. Waimānalo is situated in Windward O‘ahu, to the south of Kailua.

Waimānalo Homes I and II are intermixed at a single site, with no distinct boundary separating them. The combined housing projects consist of 41 single family homes positioned to the south of Kalaniana‘ole Highway along Humuniki Street and Humuna Place. These housing projects are within HPHA’s Asset Management Project (AMP) 45 which includes five other housing projects.

Waimānalo Homes I and II were originally occupied in 1998 and has a street address of 41-556 Humuniki Street. These two projects combined consist of 41 parcels for a total of 8.34 acres. These properties are located on Tax Map Key, No. (1) 4-1-022:100, (1) 4-1-023 parcels: 050 to 055, 059 to 064 and (1) 4-1-028 parcels: 005 to 008, 010 to 014, 016 to 021, 107, 108, 110, 111, 113, 115, and 117 to 122. The housing projects are comprised of 41 single family homes with a mix of 2-, 3-, and 4-bedroom homes. The State’s land use designation for the property is the “Urban District.” The City’s zoning for these parcels are R-5, Residential.

Waimānalo Homes I is not located within a tsunami evacuation zone. The majority of homes are located in Flood Hazard Zone X, an area of minimal flood hazard. However, a Flood Hazard Zone AE is designated for the northeastern and southernmost portions of the property, and a Zone AE Floodway runs along the southeastern border of the site. These areas are identified as being subject to inundation by the 1-percent-annual-chance flood event (Community Panel Number 15003C0380H, Revised November 5, 2014).

The following figures in Exhibit A provide supporting information on this housing project:

Figure 1: Location Map
Figure 2: TMK Map
Figure 3: Site Map
Figure 4: Flood Map

COMPLIANCE FACTORS

I. AIRPORT CLEAR ZONES AND ACCIDENT POTENTIAL ZONES (24 CFR PART 51D)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The housing project does not lie within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: 24 CFR 51 (D).

Honolulu International Airport Master Plan - 2010 (August 1994), State Department of Transportation, Airports Division;

*Hawai`i Airports and Flying Safety Guide (2012-13, Fifth Edition, Revision 1)* Hawai`i Department of Transportation, Airports Division; and

http://hidot.hawaii.gov/airports/files/2013/01/Airport-Safety-Guide-2012-2013-5rev1.pdf

II. COASTAL BARRIER RESOURCES (COASTAL BARRIER IMPROVEMENT ACT OF 1990 [16 USC 3501])

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i does not have any designated coastal barrier resource units.

SUPPORTING DOCUMENTATION:

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/cbra/maps/mapper.html (Date accessed: 6/30/15).

III. FLOOD INSURANCE (FLOOD DISASTER PROTECTION ACT OF 1973 AND NATIONAL FLOOD INSURANCE REFORM ACT OF 1994 [42 USC 4001-4128 AND 42 USC 5154a])

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program.

As indicated in the Flood Insurance Rate Panel 15003C0380H, Panel Effective Date: November 05, 2014, the all existing housing units are located within Flood Hazard Zone X (areas determined to be outside the 0.2% annual chance floodplain). The southern portion of 8 house lot boundaries are partially within Flood Zone AE (special flood hazard areas subject to inundation by the 1% annual chance flood, Base Flood Elevations (BFE) determined) and Zone AEF (Floodway areas in Zone AE. The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without increasing the BFE). These flood areas are associated with a tributary stream identified as Stream A.

Based on its description, this project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal signs of flooding problems. An interview with the AMP Manager also determined that major ponding or flooding issues are currently not an issue for the project site. A concrete lined storm drainage channel is located at the rear, along Stream A.

Printed: Flood Insurance Rate Map, Community Panel Number 15003C0380H, Panel Effective Date: November 05, 2014.

Hawai`i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 7/27/15)

IV. CLEAN AIR ACT (40 CFR PARTS 6, 51, 93)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. Environmental Protection Agency's Green Book for currently designated "nonattainment areas" as of June 2015. Planned rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.

SUPPORTING DOCUMENTATION:

Printed: *State of Hawai‘i Annual Summary 2013 Air Quality Data*. State of Hawai'i, Department of Health, July 2014.

U.S. Environmental Protection Agency website at: http://epa.gov/airquality/greenbk/

V. COASTAL ZONE MANAGEMENT ACT (16 USC 1451, SECTIONS 307 (C), (D)

CONTACT:

Mr. John Nakagawa
Office of Planning
Department of Business, Economic Development & Tourism
State of Hawai‘i
P.O. Box 2359
Honolulu, Hawai'i, 96804-2359

SUPPORTING DOCUMENTS

	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai‘i's Coastal Zone Management (CZM) program.

SUPPORTING DOCUMENTATION:

Contact: In an email to the Office of Planning (OP) dated July 27, 2015, the HPHA determined that the use of HUD funds for the implementation of repair and rehabilitation improvements does not require review for consistency with Hawai‘i's CZM program. The OP confirmed this determination in an email dated July 28, 2015 and it is included in the Appendices.

Experience: Previous reviews conducted by OP in 2003, 2005, and 2010 determined that projects receiving federal funds from HUD do not require CZM federal consistency review. OP's current determination confirms this condition is still applicable. Copies of these prior documentations are included in the Appendices.

VI. CONTAMINATION AND TOXIC SUBSTANCES (24 CFR PART 50.3 & 58.5(I)(2))

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Project Not Affected.

There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.

SUPPORTING DOCUMENTATION:

Field: A site inspection and interview with the Asset Management Project (AMP) Manager revealed no presence of any toxic or radioactive materials on the project site that warrant concern. There are no known hazardous storage areas within this housing site. AMP Manager reports that sewage from Building 14 and 17 intermittently backs up into the homes.

Study: Environmental Data Resources, Inc. (EDR), conducted a search of available environmental records and prepared a Radius Map Report (Inquiry Number 4237094.214s, March 17, 2015). EDR reviewed more than 25 federal and statewide regulatory databases for information regarding the treatment, storage, disposal and release of toxic chemicals at the project site and within specific radii (generally 1 mile) of the site. A Detail Map within the EDR report documents those sites identified within a 0.25 mile radius of the project site. The EDR report in Exhibit B includes the results of their research findings.

The EDR report notes the following activities within a 0.25 mile radius of the project site: Hawaiian Electric Company, Transformer located approx. (1,000 feet away) reported a spill containing PCB. Use Restrictions: No Hazard Present For Unrestricted Residential Use. Waimānalo Feed Supply (1,500 feet away) LUST, Status: Site Cleanup Completed (NFA). Two UST, Status: Permanently Out of Use. Waimānalo Town Chevron Service Station (1,700 feet away) LUST, Status: Site Cleanup Completed (NFA) and Four UST, Status: Permanently Out if Use. Mid Pac Petroleum (1,900 feet away) LUST, Status: Site Cleanup Completed (NFA). Three UST (12,000 gallons, storing gasoline and diesel) Status; Currently in Use. Six UST, Status: Permanently Out of Use.

This project site was not identified as a Formerly Used Defense Site (FUDS) by the U.S. Army Corps of Engineers and is not subject to any cleanup actions for Department of Defense-generated contamination.

VII. ENDANGERED SPECIES (50 CFR PART 402)

CONTACT:
Mr. Loyal Mehrhoff, Field Supervisor
Pacific Islands Administrator
Fish and Wildlife Services
U.S. Department of the Interior
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawai'i 96813
Tel. #: 792-9400

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Adverse Effect Subject to Mitigation

The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices.

SUPPORTING DOCUMENTATION:

Contact: A letter from the HPHA dated July 24, 2015 was submitted to the Pacific Island Administrator for the FWS determining that repair and rehabilitation improvements that may be implemented using HUD funds for this housing project would have no likelihood of effect on any listed species or proposed species, or existing or proposed designated critical habitat subject to certain measures. Concurrence with this determination along with proposed minimization and avoidance measures was received from the FWS in a letter dated September 28, 2015 which is included in the Appendices. This housing project is subject to the following minimization and avoidance measures.

Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.

Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.

Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.

Newell's shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the

proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.

Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.

Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro loʻi, impoundments or other vegetated water bodies.

1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols.
2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.
3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.

In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.

Additional Measures: The following additional measures would be implemented:

1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.

Experience: The FWS was previously consulted as part of environmental reviews that were completed in 2005 (39 housing projects) and 2010 (70 housing projects) which supported the determination that repair and rehabilitation improvements would either: 1) have no likelihood of effect for certain housing projects; or 2) not likely adversely affect federally listed species or critical habitat for certain housing projects subject to mitigative measures. A summary of these consultation efforts follows.

2005 Consultation: In a letter dated July 15, 2005, the Housing and Community Development Corporation of Hawai'i (predecessor to the HPHA), determined that the implementation of minor repair and rehabilitation improvements for 39 housing projects would not have an adverse effect on federally-listed species or critical habitat. In a letter dated August 11, 2005, the FWS concurred with the HCDCH determination.

2010 Consultation: In a letter dated May 17, 2010, the HPHA informed the FWS that HUD funds would be used to immediately implement repair and rehabilitation improvements for six housing projects on O'ahu and the island of Hawai`i. In a subsequent letter dated May 21, 2010, the FWS was informed that HPHA would be using HUD funds to implement minor repair and rehabilitation improvements for 64 projects throughout the State. In both letters, the HPHA determined that the repair and rehabilitation improvements were not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat. Based on further consultation and a meeting with FWS staff on June 24, 2010, the HPHA determined that repair and rehabilitation improvements for most of their housing projects would not likely adversely affect any listed or proposed species, or existing or proposed designated habitat, subject to various mitigative measures for certain housing projects.

VIII. EXPLOSIVE AND FLAMMABLE OPERATIONS (24 CFR PART 51C)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact Subject to Conditions and Mitigation, if Applicable.

A field inspection identified an existing above-ground explosive or flammable material storage container in excess of 100 gallons. The tank is surrounded by an approx. 5-foot-high chain link fence, located approximately 25 feet north-east of Building 11. Repair and rehabilitation improvements for this project should not impact this fuel storage tank. Should rehabilitation improvements increase the density of the project (e.g. increase the number of units and associated persons exposed to the hazard within the acceptable separation distance), mitigative measures would need to be implemented for the fuel tank in compliance with HUD requirements.

Under CFR Title 24, Part 51, Subpart C, increasing the residential density and number of people under a rehabilitation project using HUD funding would be considered a "HUD-assisted project." Consequently, the existing fuel storage tank would be subject to standards under this regulation for establishing acceptable separation distances, or the application of the standards can be eliminated or modified if other conditions apply or mitigative measures are provided as identified below. HPHA would need to evaluate site conditions, comply with regulatory requirements, and determine the appropriate measure to implement.

1. The nature of the topography shields the proposed project form the hazard.
2. An existing permanent fire resistant structure of adequate size and strength will shield the proposed project from the hazard.

3. A barrier is constructed surrounding the hazard, at the site of the project, or in between the potential hazard and the proposed project.
4. The structure and outdoor areas used by people are designed to withstand blast overpressure and thermal radiation anticipated from the potential hazard (e.g., the project is of masonry and steel or reinforced concrete and steel construction).

SUPPORTING DOCUMENTATION:

Field: There is an approximately 1,000 gallon above-ground fuel storage tank located approximately 25 feet north-east of Building 11. The tank is reportedly installed and owned by the gas company.

Printed: 24 CFR, Part 51, Subpart C.

Per CFR Title 24 Part 51.201 (Definitions), rehabilitation and modernization improvements that do not increase the density and number of people being exposed to hazardous operations do not meet the definition of a "HUD-assisted project," and are not subject to acceptable separation distance requirements under this regulation. Increasing the density (e.g. increase the number of units and associated persons exposed to the hazard within the acceptable separation distance) under a rehabilitation project using HUD funding would be considered a "HUD-assisted project." Consequently, the existing fuel storage tank would be subject to standards under this regulation for establishing acceptable separation distances, or the application of the standards can be eliminated or modified if other conditions apply or mitigative measures are provided as identified below. HPHA would need to evaluate site conditions, comply with regulatory requirements, and determine the appropriate measure to implement.

1. The nature of the topography shields the proposed project form the hazard.
2. An existing permanent fire resistant structure of adequate size and strength will shield the proposed project from the hazard.
3. A barrier is constructed surrounding the hazard, at the site of the project, or in between the potential hazard and the proposed project.
4. The structure and outdoor areas used by people are designed to withstand blast overpressure and thermal radiation anticipated from the potential hazard (e.g., the project is of masonry and steel or reinforced concrete and steel construction).

IX. FARMLANDS PROTECTION (7 CFR PART 658)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. Since the property consists of an existing housing development within an urbanized area, no farmlands would be impacted by the implementation of repair and rehabilitation improvements.

Printed: The property is designated for "Urban" use by the State Land Use Commission and the County's zoning for the parcel is RD-3.75 Double-Family Residential District.

Hawai`i Office of Planning website at: http://planning.hawaii.gov/gis/
(Date accessed: 6/30/2015)

X. FLOODPLAIN MANAGEMENT (EXECUTIVE ORDER 11988, 24 CFR PART 55)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program

All existing housing structures are located within Flood Hazard Zone X (areas determined to be outside the 0.2% annual chance floodplain). The southern portion of 8 house lot boundaries are partially within Flood Zone AE (special flood hazard areas subject to inundation by the 1% annual chance flood, Base Flood Elevations (BFE) determined) and Zone AEF (Floodway areas in Zone AE. The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without increasing the BFE). These flood areas are associated with a tributary stream identified as Stream A. Field inspection and information obtained from the AMP Manager confirmed no major flooding issues within the project site. Therefore, rehabilitation improvements implemented for this housing project should not have significant impact on existing floodplain conditions or pose a significant threat to human life, health, safety, and property as defined by Federal and State guidelines that would require mitigation.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal signs of flooding problems. An interview with the AMP Manager also determined that no major ponding or flooding issues occur on the project site.

Printed: Flood Insurance Rate Map, Community Panel Number 15003C0380H, Panel Effective Date: November 05, 2014.

Hawai`i Department of Land and Natural Resources website at:
http://gis.hawaiinfip.org/FHAT/ (Date accessed7/21/15)

XI. HISTORIC PRESERVATION (NATIONAL HISTORIC PRESERVATION ACT OF 1966; SECTIONS 106 AND 110; 36 CFR, PART 800)

CONTACT:

Ms. Suzanne Case, Chairperson
Department of Land and Natural Resources (DLNR)
State of Hawai'i
1151 Punchbowl Street
Honolulu, Hawai'i 96813
Tel. #: 587-0400

SUPPORTING DOCUMENTS

X	Field
X	Contact
X	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Effect on Historic Properties

Waimānalo Homes I and II are 17 years old and were initially occupied in 1998. To be eligible for listing in the National Register of Historic Places (NRHP), a property must meet the National Register criteria for evaluation which involves examining its integrity, significance, and age (generally at least 50 years old). Due to its age, this housing project does not meet the eligibility criteria to be evaluated for the NRHP. In a letter to the State Historic Preservation Officer (SHPO) dated July 23, 2015, the HPHA determined that no historic properties would be affected (no effect) by repair and rehabilitation improvements for this housing project. No comments or objections about this no effect determination were received.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not locate any existing or potential archaeological sites (e.g., heiau) or cultural features on the property. An interview with the AMP Manager indicates that no known sites or features are present on the property.

Contact: A letter from the HPHA dated July 17, 2015, which is included in the Appendix, was submitted to the State Historic Preservation Officer [SHPO] (Chair of State Board of Land and Natural Resources) as part of Section 106 consultation determining that no historic properties would be affected (no effect) by repair and rehabilitation improvements that may be implemented using HUD funds for this housing project. The SHPO did not submit any comments or objections on the "no effect" determination for this housing project, which included follow-up e-mails with the State Historic Preservation Division regarding a response. On September 28, 2015, notice of HPHA's determination was also distributed to several native Hawaiian organizations and the various County Planning Departments. No concerns or opposition to this determination was received.

Printed: A review of the U.S. National Parks Service website for the National Register of Historic Places did not identify any historic properties within the limits of this housing project. A similar review of the State DLNR website for the State Register of Historic Places revealed that there are no historic properties within the project site.

National Register: U.S. National Park Service website at:
http://www.nps.gov/nr/research/ (Date accessed: 7/2/15).

State Register: Hawai`i Department of Land and Natural Resources website at: http://dlnr.hawaii.gov/shpd/state-register/ (Date accessed: 7/2/15).

Experience: In letter to the State Historic Preservation Officer (SHPO) dated April 19, 2011, the HPHA determined that minor repair and rehabilitation improvement at 57 public housing projects throughout Hawai'i (including this housing site) would have "no effect" on historic properties. The SHPO had no comments or objections on the "no effect" determination.

XII. NOISE ABATEMENT CONTROL (24 CFR PART 51B)

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Within HUD Noise Standards

The project site is not situated along a highway that has a high volume of vehicular traffic. The HUD noise calculator estimated noise levels at the project site to be 40.9 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

SUPPORTING DOCUMENTATION:

Field: No significant noise generating sources were identified within the project site during the site inspection. The subject housing lots are located within a rural residential neighborhood, along Humuniki Street. Humuniki Street is expected to have low volumes of traffic because traffic in this area would primarily be to the existing homes in this area. Furthermore, an interview with the AMP Manager did not identify any loud noise producing sources in the area. As a result, notable noise sources are predominantly associated with vehicular traffic along adjacent Kalaniana'ole Highway. Traffic noise did not appear significant during the site visit.

Study: The HUD day/night noise level calculator was used to estimate approximate traffic noise levels at the project site. Kalaniana'ole Highway is a primary State roadway. Kalanianaole Highway serves vehicular traffic entering and exiting Waimānalo along with providing access to other surrounding rural areas. Traffic counts were based on 2013 Hawai'i State Department of Transportation data and applied to a distance of 520 feet from the project site. Using this HUD calculator, the estimated noise levels at the project site is 40.9 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

XIII. SOLE SOURCE AQUIFER (40 CFR PART 149)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact on Sole Source Aquifer

The housing project is located within the O'ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation. However, if exceptional circumstances require compliance steps with any of these authorities, such compliance must be established and documented prior to approving the site-specific loan or grant.

SUPPORTING DOCUMENTATION:

Printed: This determination was based upon review of the Sole Source Aquifer Memorandum of 4/30/90 (Sections II.B.1 and II.B.2) and consideration of the type of rehabilitation related improvements that would be conducted for this project.

XIV. WETLANDS PROTECTION (EXECUTIVE ORDER 11990)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the property did not identify the presence of any wetlands.

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/wetlands/data/mapper.html (Date accessed 7/23/2015).

XV. WILD AND SCENIC RIVERS ACT (16 USC 1271, SECTION 7 (B), (C))

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no Wild and Scenic Rivers in Hawai‘i, which excludes this project from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: National Wild and Scenic Rivers System website at: http://www.rivers.gov/index.php (Date accessed: 6/30/2015).

XVI. ENVIRONMENTAL JUSTICE (EXECUTIVE ORDER NO. 12898)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Conflict with Requirements

Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, repair and rehabilitation improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations. Repair and rehabilitation improvements should benefit low-income and minority populations living within this housing project.

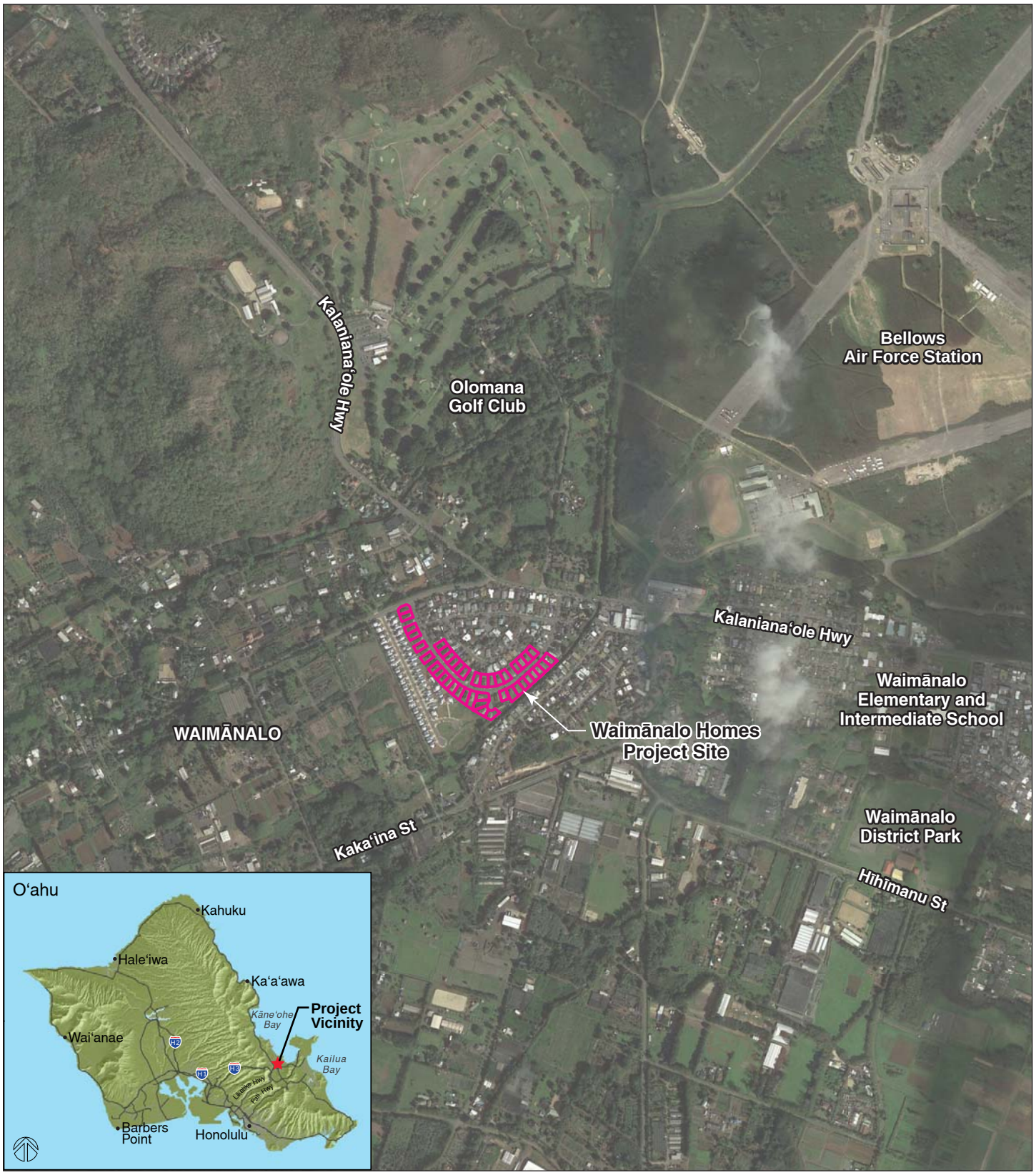
SUPPORTING DOCUMENTATION:

Printed: Executive Order 12898.

U.S. Department of Housing and Urban Development website at:
https://www.hudexchange.info/environmental-review/environmental-justice/

EXHIBIT A

Location Map, TMK Map, Site Map, Flood Map, and Site Photos



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

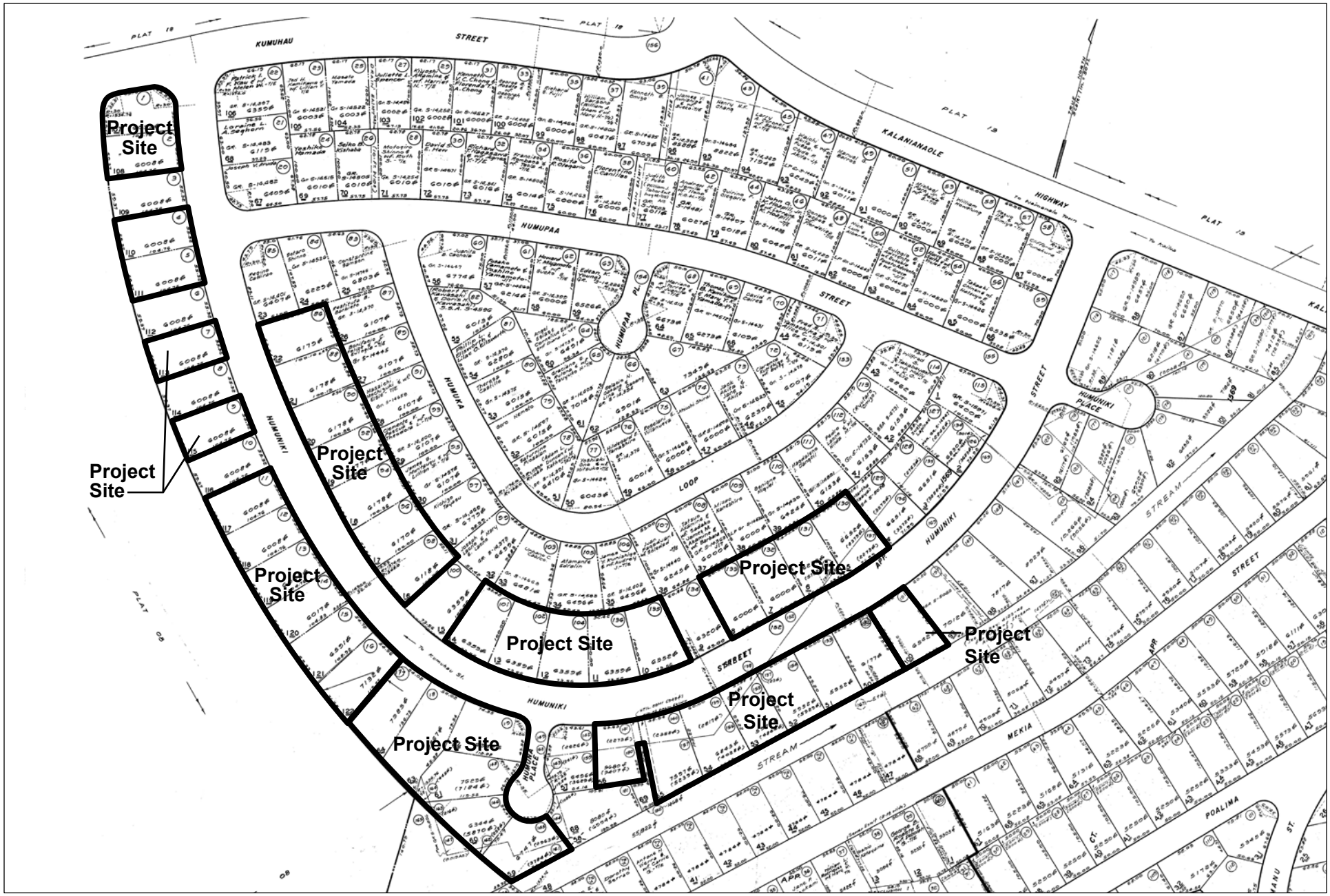
HPHA No. 1025 & 1107- Waimānalo Homes I & II (AMP 45)

Figure 1 - Project Location Map

Waimānalo, O'ahu

1,000 FT

HHF PLANNERS
places for people

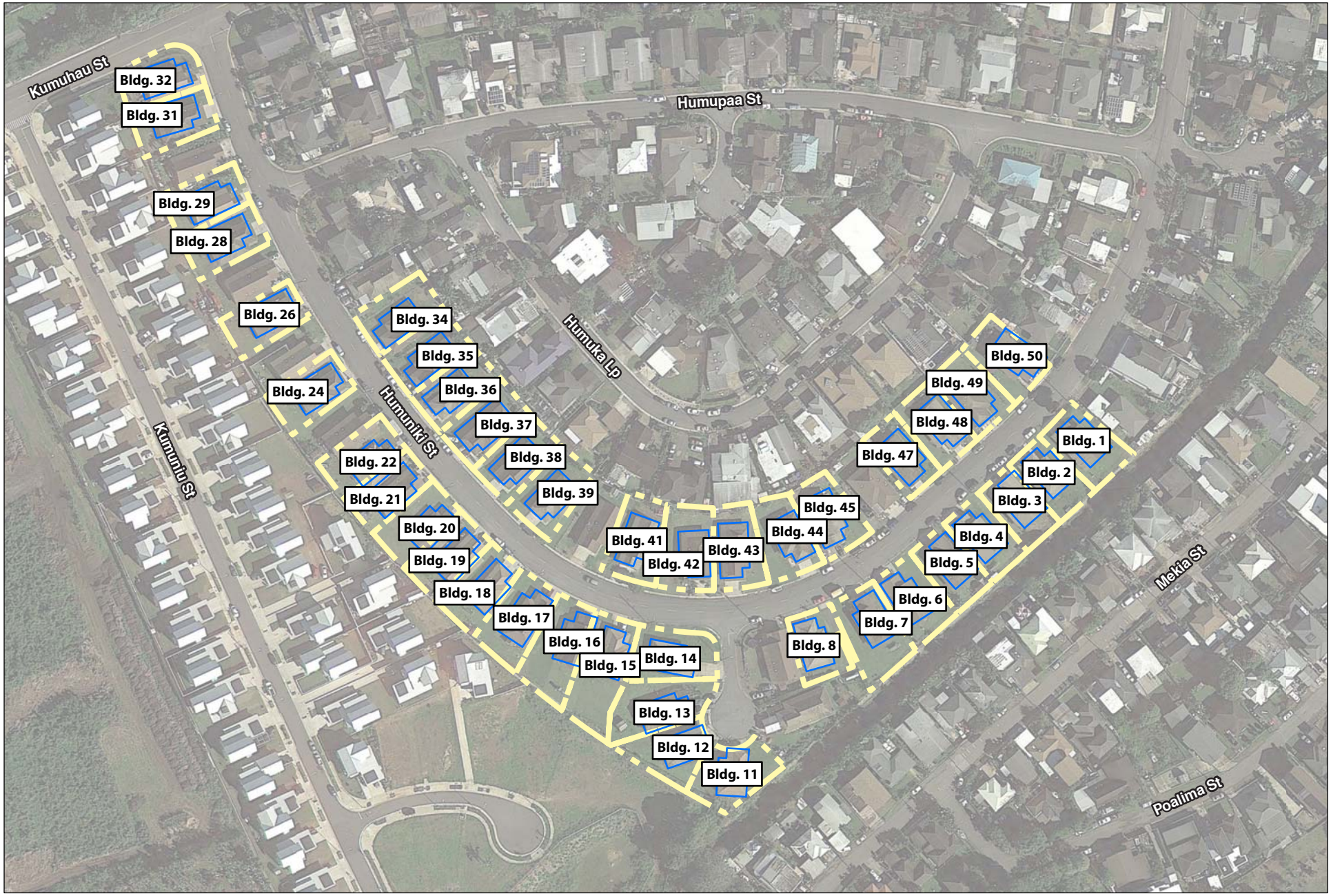


HPHA No. 1025/1107 - Waimānalo Homes (AMP 45)

Figure 2 - TMK Map

Waimānalo, O'ahu

HHF PLANNERS
places for people



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

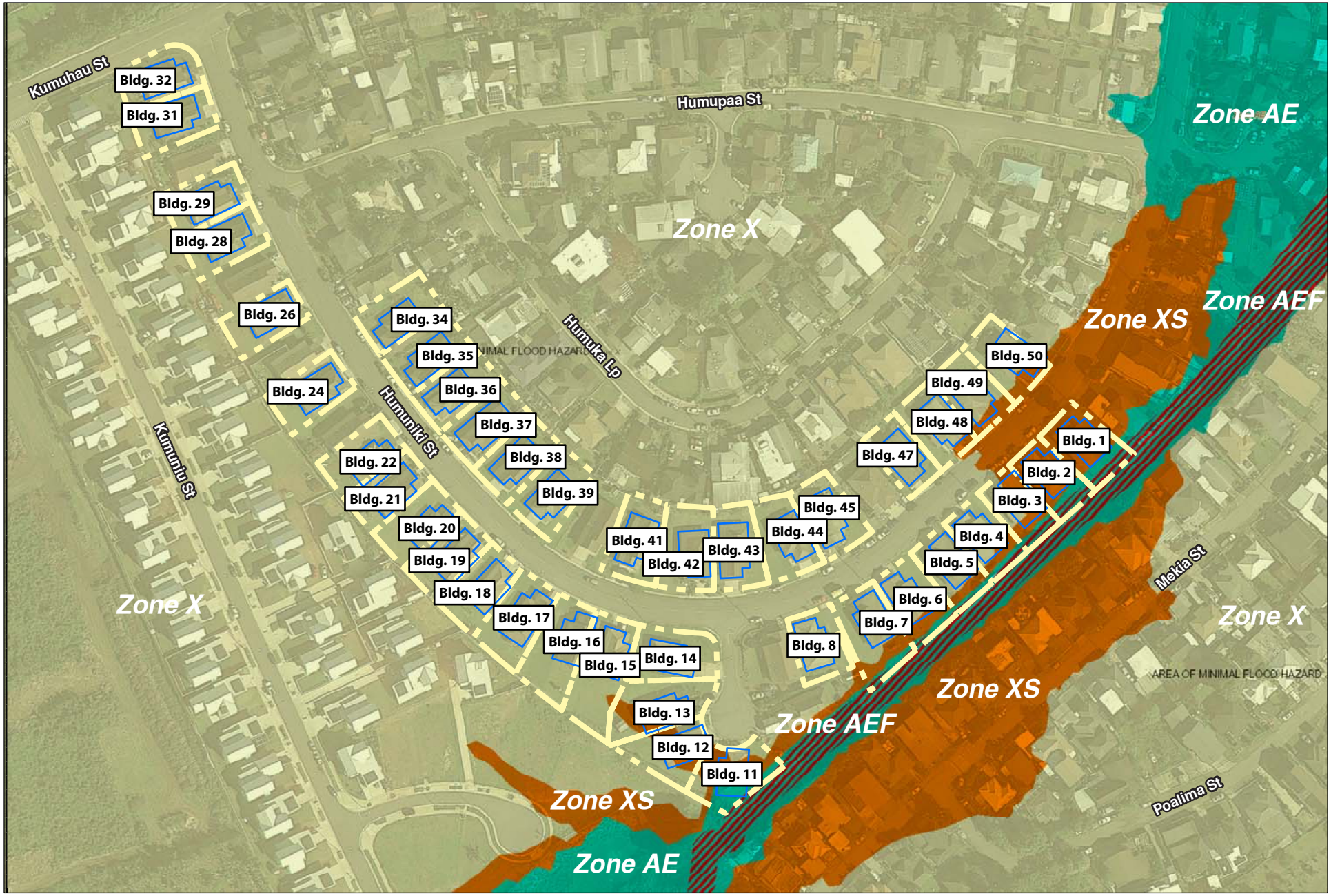
HPHA No. 1025/1107 - Waimānalo Homes (AMP 45)

Figure 3 - Site Map

Waimānalo, O'ahu

120 FEET

HHF PLANNERS
places for people



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1025/1107 - Waimānalo Homes (AMP 45)

Figure 4 - Flood Map

Waimānalo, O'ahu

120 FEET

HHF PLANNERS
places for people

LEGEND

- Zone AEF - Floodway in Zone AE
- Zone AE - 1% Annual Chance of Flood
- Zone XS - 0.2% Annual Chance of Flood
- Zone X - Outside the 0.2% Annual Chance of Flood

WAIMĀNALO HOMES I & II
SITE PHOTOS

Intersection of Humuniki Street and Kumuhau Street

View of Kumuhau Street intersection from Humuniki Street

Street frontage along Humuniki Street, facing east

Street frontage along Humuniki Street, facing east

Yard spacing typical of these housing project sites

Typical rear yard condition; concrete lined drainage channel behind fence.

WAIMĀNALO HOMES I & II
SITE PHOTOS

Fence prevents falls from yard into concrete lined storm drainage

Concrete swale and drain inlet

Approx 1,000 gallon propane or natural gas tank

Spacing of homes relative to above -ground gas tank.

Rural neighborhood context; large yards and roaming chickens.

EXHIBIT B

EDR Radius Map Report

Waimanalo I
41-556 Humuniki St.
Waimanalo, HI 96795

Inquiry Number: 4237094.214s
March 17, 2015

EDR Summary Radius Map Report

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

FORM-NULL-PVC

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Physical Setting SSURGO Soil Map	A-5
Physical Setting Source Map	A-10
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Physical Setting Source Records Searched	PSGR-1

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

41-556 HUMUNIKI ST.
HONOLULU County, HI 96795

COORDINATES

Latitude (North):	21.3462000 - 21˚ 20' 46.32''
Longitude (West):	157.7266000 - 157˚ 43' 35.76''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	632045.5
UTM Y (Meters):	2360858.5
Elevation:	33 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	USGS 7.5 min quad index

MAPPED SITES SUMMARY

Target Property Address:
41-556 HUMUNIKI ST.
, HI 96795

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
1	HECO TRANSFORMER 277	41-1605 KALANIANAOLE	SHWS, SPILLS	Lower	1071, NE
2	WAIMANALO FEED SUPPL	41-1521 LUKANELA ST	LUST, UST	Lower	1505, ENE
3	C&CH KAILUA CORP YAR	42-377 KALANIANAOLE	LUST, UST, Financial Assurance	Lower	1699, East
4	WAIMANALO TOWN CHEVR	41-1510 KALANIANAOLE	LUST, UST, Financial Assurance	Lower	1743, ENE
5	MID PAC PETROLEIUM 2	41-1517 KALANIANAOLE	LUST, UST, Financial Assurance	Lower	1962, ENE
6	PAHE PLANTATION	41-724 KAULUKANU PL	SHWS	Higher	4827, SSW
7	WAIMANALO AREAWIDE G	41-550 WAIKUPANAHA S	SHWS	Higher	4957, SSE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

State- and tribal - equivalent CERCLIS

SHWS: A review of the SHWS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 3 SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PAHE PLANTATION	41-724 KAULUKANU PL	SSW 1/2 - 1 (0.914 mi.)	6	8
WAIMANALO AREAWIDE G	41-550 WAIKUPANAHA S	SSE 1/2 - 1 (0.939 mi.)	7	8

Lower Elevation	Address	Direction / Distance	Map ID	Page
HECO TRANSFORMER 277	***41-1605 KALANIANAOLE***	***NE 1/8 - 1/4 (0.203 mi.)***	***1***	***7***

State and tribal leaking storage tank lists

LUST: A review of the LUST list, as provided by EDR, and dated 12/16/2014 has revealed that there are 4 LUST sites within approximately 0.5 miles of the target property.

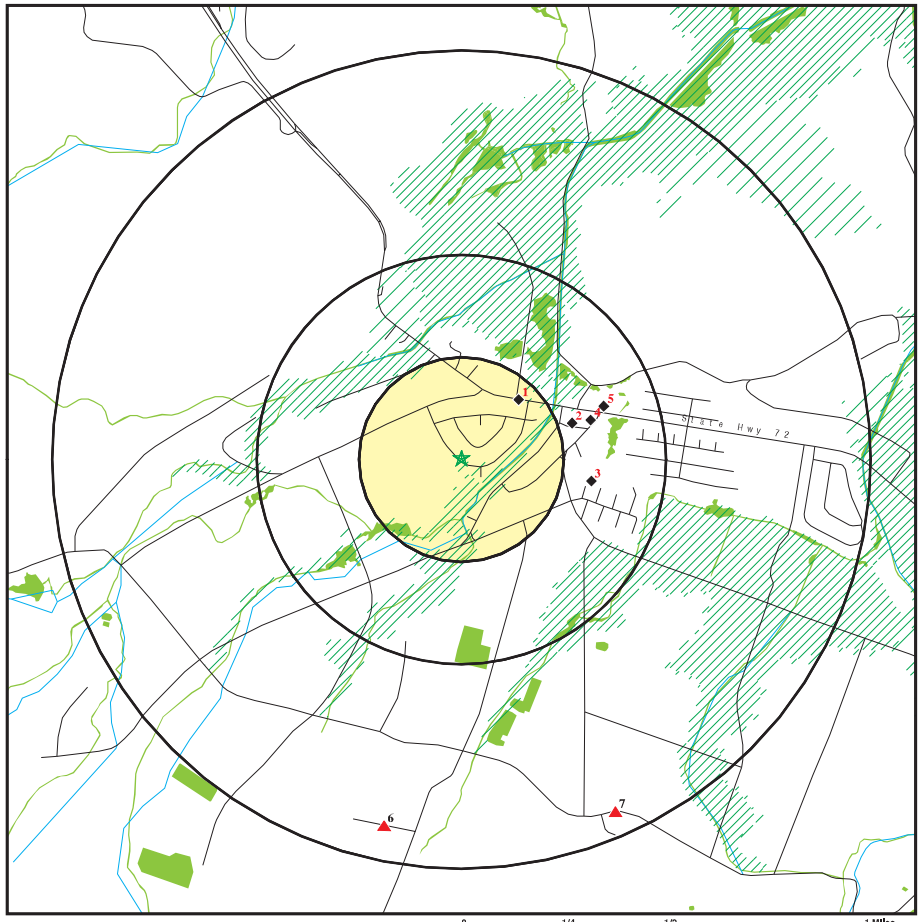
Lower Elevation	Address	Direction / Distance	Map ID	Page
WAIMANALO FEED SUPPL	***41-1521 LUKANELA ST***	***ENE 1/4 - 1/2 (0.285 mi.)***	***2***	***7***
Facility Status: Site Cleanup Completed (NFA)				
C&CH KAILUA CORP YAR	***42-377 KALANIANAOLE***	***E 1/4 - 1/2 (0.322 mi.)***	***3***	***7***
Facility Status: Site Cleanup Completed (NFA)				
WAIMANALO TOWN CHEVR	***41-1510 KALANIANAOLE***	***ENE 1/4 - 1/2 (0.330 mi.)***	***4***	***7***
Facility Status: Site Cleanup Completed (NFA)				
MID PAC PETROLEIUM 2	***41-1517 KALANIANAOLE***	***ENE 1/4 - 1/2 (0.372 mi.)***	***5***	***8***
Facility Status: Site Cleanup Completed (NFA)				

ORPHAN SUMMARY

Count: 2 records.

City	EDR ID	Site Name	Site Address	Zip	Database(s)
WAIMANALO	S113230525	WAIMANALO SUGAR COMPANY DHHL PARCE	CORNER OF HIHIMANU AND KAKAINA	96795	SHWS
WAIMANALO	S115488728	WAIMANALO TIME WARNER CABLE PROPER	41-1510 KALANIANAOLE HWY	96795	SHWS

OVERVIEW MAP - 4237094.214S



0 1/4 1/2 1 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Waimanalo I ADDRESS: 41-556 Humuniki St. Waimanalo HI 96795 LAT/LONG: 21.3462 / 157.7266	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.214s DATE: March 17, 2015 5:42 pm

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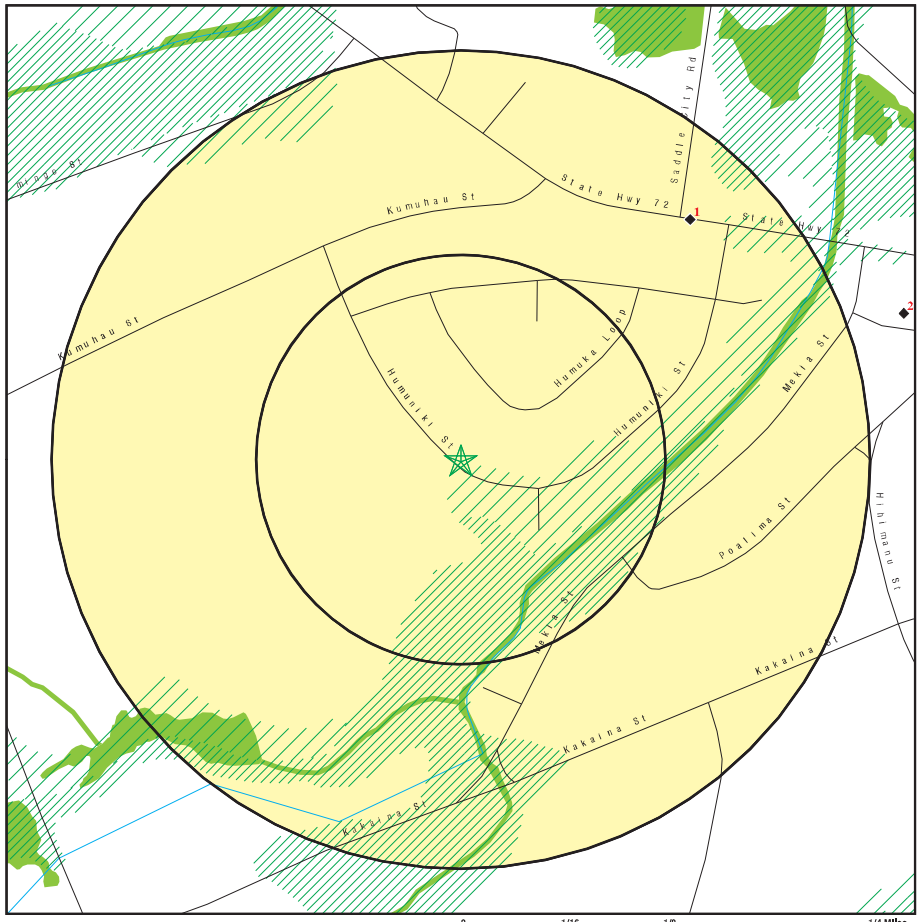
DETAIL MAP - 4237094.214S



0 1/16 1/8 1/4 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
SHWS	1.000		0	1	0	2	NR	3
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	0	4	NR	NR	4
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		0	0	0	NR	NR	0
INST CONTROL	0.500		0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		0	0	NR	NR	NR	0
EDR US Hist Cleaners	0.250		0	0	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
RGA HWS	TP		NR	NR	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
1 NE 1/8-1/4 0.203 mi. 1071 ft. Relative: Lower	**HECO TRANSFORMER 27728 (VAULT 3032) 41-1605 KALANIANAOLE HWY WAIMANALO, HI 96795** Click here for full text details	**SHWS SPILLS**	**S108859681 N/A**
2 ENE 1/4-1/2 0.285 mi. 1505 ft. Relative: Lower	**WAIMANALO FEED SUPPLY 41-1521 LUKANELA ST WAIMANALO, HI 96795** Click here for full text details **LUST** Facility Id: 9-203187 Facility Status: Site Cleanup Completed (NFA) **UST** Facility Id: 9-203187 Tank Status: Permanently Out of Use	**LUST UST**	**U003155051 N/A**
3 East 1/4-1/2 0.322 mi. 1699 ft. Relative: Lower	**C&CH KAILUA CORP YARD 42-377 KALANIANAOLE HWY KAILUA, HI 96734** Click here for full text details **LUST** Facility Id: 9-200125 Facility Status: Site Cleanup Completed (NFA) **UST** Facility Id: 9-200125 Facility Id: 9-200153 Tank Status: Currently In Use Tank Status: Permanently Out of Use	**LUST UST Financial Assurance**	**U003541815 N/A**
4 ENE 1/4-1/2 0.330 mi. 1743 ft. Relative: Lower	**WAIMANALO TOWN CHEVRON SERVICE STATION 41-1510 KALANIANAOLE HWY WAIMANALO, HI 96795** Click here for full text details **LUST** Facility Id: 9-201240 Facility Status: Site Cleanup Completed (NFA) **UST** Facility Id: 9-201240	**LUST UST Financial Assurance**	**1000262084 N/A**

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
	WAIMANALO TOWN CHEVRON SERVICE STATION (Continued)		**1000262084**
	Tank Status: Permanently Out of Use		
5 **ENE** **1/4-1/2** **0.372 mi.** **1962 ft.** **Relative:** **Lower**	**MID PAC PETROLEIUM 2705570** **41-1517 KALANIANAOLE HWY** **WAIMANALO, HI 96795** Click here for full text details **LUST** Facility Id: 9-201280 Facility Status: Site Cleanup Completed (NFA) **UST** Facility Id: 9-201280 Tank Status: Permanently Out of Use Tank Status: Currently in Use Tank Status: Permanently out of Use	**LUST** **UST** **Financial Assurance**	**U001236319** **N/A**
6 **SSW** **1/2-1** **0.914 mi.** **4827 ft.** **Relative:** **Higher**	**PAHE PLANTATION** **41-724 KAULUKANU PL** **WAIMANALO, HI 96795** Click here for full text details	**SHWS**	**S106819545** **N/A**
7 **SSE** **1/2-1** **0.939 mi.** **4957 ft.** **Relative:** **Higher**	**WAIMANALO AREAWIDE GROUNDWATER CONTAMINATION** **41-550 WAIKUPANAHA ST** **WAIMANALO, HI 96795** Click here for full text details	**SHWS**	**S107022545** **N/A**

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
HI	AIRS	List of Permitted Facilities	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	BROWNFIELDS	Brownfields Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	CDL	Clandestine Drug Lab Listing	Department of Health	08/04/2010	09/10/2010	10/22/2010
HI	DRYCLEANERS	Permitted Drycleaner Facility Listing	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	ENG CONTROLS	Engineering Control Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	Financial Assurance	Financial Assurance Information Listing	Department of Health	12/01/2014	12/19/2014	01/28/2015
HI	INST CONTROL	Sites with Institutional Controls	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	LUST	Leaking Underground Storage Tank Database	Department of Health	12/16/2014	12/19/2014	01/28/2015
HI	RGA HWS	Recovered Government Archive State Hazardous Waste Facilitie	Department of Health		07/01/2013	01/08/2014
HI	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Health		07/01/2013	01/17/2014
HI	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	Department of Health		07/01/2013	01/03/2014
HI	SHWS	Sites List	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	SPILLS	Release Notifications	Department of Health	12/02/2014	12/22/2014	01/28/2015
HI	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	03/10/2012	01/03/2013	02/11/2013
HI	SWF/LF	Permitted Landfills in the State of Hawaii	Department of Health	09/17/2012	04/03/2013	05/10/2013
HI	UIC	Underground Injection Wells Listing	Department of Health	02/07/2013	02/12/2013	04/09/2013
HI	UST	Underground Storage Tank Database	Department of Health	12/18/2014	12/19/2014	01/28/2015
HI	VCP	Voluntary Response Program Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	04/22/2013	03/03/2015	03/09/2015
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2011	02/26/2013	04/19/2013
US	CERCLIS	Comprehensive Environmental Response, Compensation, and Liab	EPA	10/25/2013	11/11/2013	02/13/2014
US	CERCLIS-NFRAP	CERCLIS No Further Remedial Action Planned	EPA	10/25/2013	11/11/2013	02/13/2014
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	07/01/2014	09/10/2014	10/20/2014
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	01/23/2015	02/13/2015	03/09/2015
US	CORRACTS	Corrective Action Report	EPA	12/09/2014	12/29/2014	01/29/2015
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DELISTED NPL	National Priority List Deletions	EPA	12/16/2014	01/08/2015	02/09/2015
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	07/31/2012	08/07/2012	09/18/2012
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EDR US Hist Auto Stat	EDR Exclusive Historic Gas Stations	EDR, Inc.			
US	EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	09/29/2014	09/30/2014	11/06/2014
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	07/21/2014	10/07/2014	10/20/2014
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
US	FEMA UST	Underground Storage Tank Listing	FEMA	01/01/2010	02/16/2010	04/12/2010
US	FINDS	Facility Index System/Facility Registry System	EPA	08/16/2014	09/10/2014	10/20/2014
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	06/06/2014	09/10/2014	09/18/2014
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	12/29/2014	12/30/2014	03/09/2015
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	01/23/2015	02/06/2015	03/09/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	02/01/2013	05/01/2013	11/01/2013

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	01/30/2015	02/05/2015	03/09/2015
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/10/2015	03/13/2015
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	01/28/2015	01/30/2015	03/13/2015
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	01/08/2015	01/08/2015	02/09/2015
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2005	12/08/2006	01/11/2007
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	02/01/2013	05/01/2013	01/27/2014
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	01/30/2015	02/05/2015	03/13/2015
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/13/2015	03/13/2015
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	01/29/2015	01/30/2015	03/13/2015
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	12/14/2014	02/13/2015	03/13/2015
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	09/29/2014	10/01/2014	11/06/2014
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	11/25/2014	11/26/2014	01/29/2015
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	02/18/2014	03/18/2014	04/24/2014
US	LUCIS	Land Use Control Information System	Department of the Navy	12/03/2014	12/12/2014	01/29/2015
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	12/29/2014	01/08/2015	01/29/2015
US	NPL	National Priority List	EPA	12/16/2014	01/08/2015	02/09/2015
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	07/01/2014	10/15/2014	11/17/2014
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	02/01/2011	10/19/2011	01/10/2012
US	PRP	Potentially Responsible Parties	EPA	10/25/2013	10/17/2014	10/20/2014
US	Proposed NPL	Proposed National Priority List Sites	EPA	12/16/2014	01/08/2015	02/09/2015
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	10/07/2014	10/08/2014	10/20/2014
US	RCRA NonGen / NLR	RCRA - Non Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RMP	Risk Management Plans	Environmental Protection Agency	08/01/2014	08/12/2014	11/06/2014
US	ROD	Records Of Decision	EPA	11/25/2013	12/12/2013	02/24/2014
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	03/07/2011	03/09/2011	05/02/2011
US	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2011	07/31/2013	09/13/2013
US	TSCA	Toxic Substances Control Act	EPA	12/31/2012	01/15/2015	01/29/2015
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	09/14/2010	10/07/2011	03/01/2012
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/16/2014	10/31/2014	11/17/2014
US	US AIRS MINOR	Air Facility System Data	EPA	10/16/2014	10/31/2014	11/17/2014

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	12/22/2014	12/22/2014	01/29/2015
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	11/19/2014	11/21/2014	01/29/2015
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	12/30/2014	12/31/2014	01/29/2015
US	Oil/Gas Pipelines	GeoData Digital Line Graphs from 1:100,000-Scale Maps	USGS			
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
US	USGS 7.5' Topographic Map	Scanned Digital USGS 7.5' Topographic Map (DRG)	USGS			

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

WAIMANALO I
41-556 HUMUNIKI ST.
WAIMANALO, HI 96795

TARGET PROPERTY COORDINATES

Latitude (North):	21.3462 - 21˚ 20' 46.32''
Longitude (West):	157.7266 - 157˚ 43' 35.76''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	632045.5
UTM Y (Meters):	2360858.5
Elevation:	33 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	21157-C6 KOKO HEAD, HI
Most Recent Revision:	Not reported

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

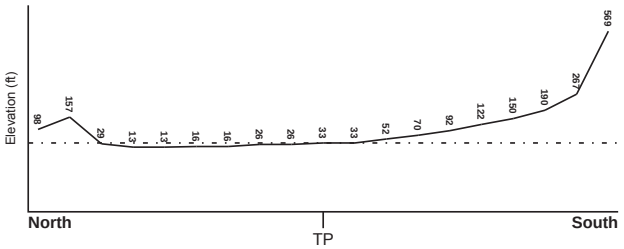
TOPOGRAPHIC INFORMATION

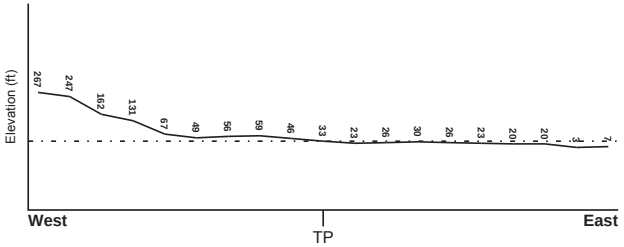
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General NE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 33 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
HONOLULU, HI	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 15003C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
KOKO HEAD	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

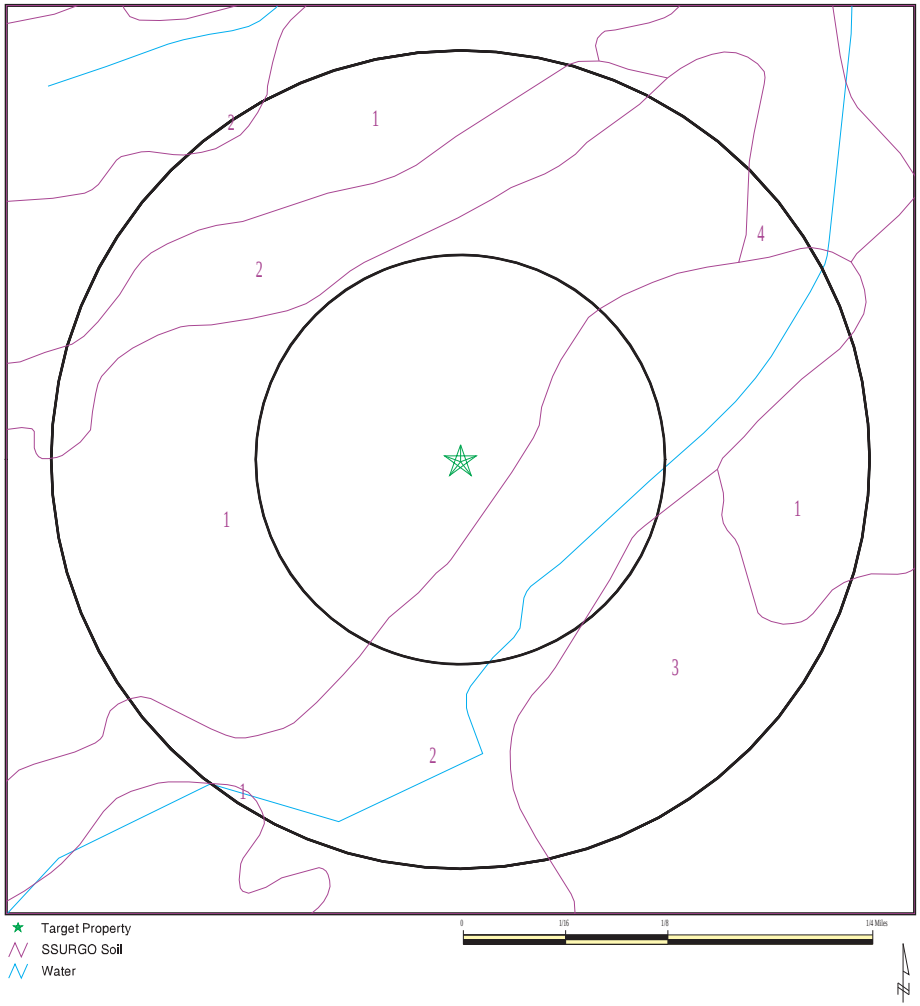
Era: -
System: -
Series: -
Code: N/A *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: -

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4237094.214s



★ Target Property
SSURGO Soil
Water

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Pohakupu

Soil Surface Texture: silty clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		Soil Reaction (pH)
1	0 inches	12 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 42 Min: 4.23	Max: 6.5 Min: 6.1
2	12 inches	75 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 4.23 Min: 0.42	Max: 6.5 Min: 6.1

SITE NAME: Waimanalo I ADDRESS: 41-556 Humuniki St. Waimanalo HI 96795 LAT/LONG: 21.3462 / 157.7266	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.214s DATE: March 17, 2015 5:43 pm

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Soil Map ID: 2

Soil Component Name: Hanalei

Soil Surface Texture: silty clay

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 30 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	12 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 14 Min: 1.41	Max: 6.5 Min: 4.5
2	12 inches	25 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.1
3	25 inches	35 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.1

Soil Map ID: 3

Soil Component Name: Waialua

Soil Surface Texture: clay

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 14.11 Min: 1.41	Max: 7.3 Min: 6.1
2	11 inches	59 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 4.23 Min: 1.41	Max: 7.3 Min: 6.1

Soil Map ID: 4

Soil Component Name: Kaloko variant

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14.11 Min: 1.41	Max: 7.3 Min: 6.1
2	11 inches	20 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4.23 Min: 0.42	Max: 7.3 Min: 6.1
3	20 inches	59 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 7.3 Min: 6.1

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	USGS40000270017	1/8 - 1/4 Mile East
3	USGS40000270072	1/2 - 1 Mile North
4	USGS40000270078	1/2 - 1 Mile North
B5	USGS40000270025	1/2 - 1 Mile East
C7	USGS40000270031	1/2 - 1 Mile ENE

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
D9	USGS40000269915	1/2 - 1 Mile SSE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

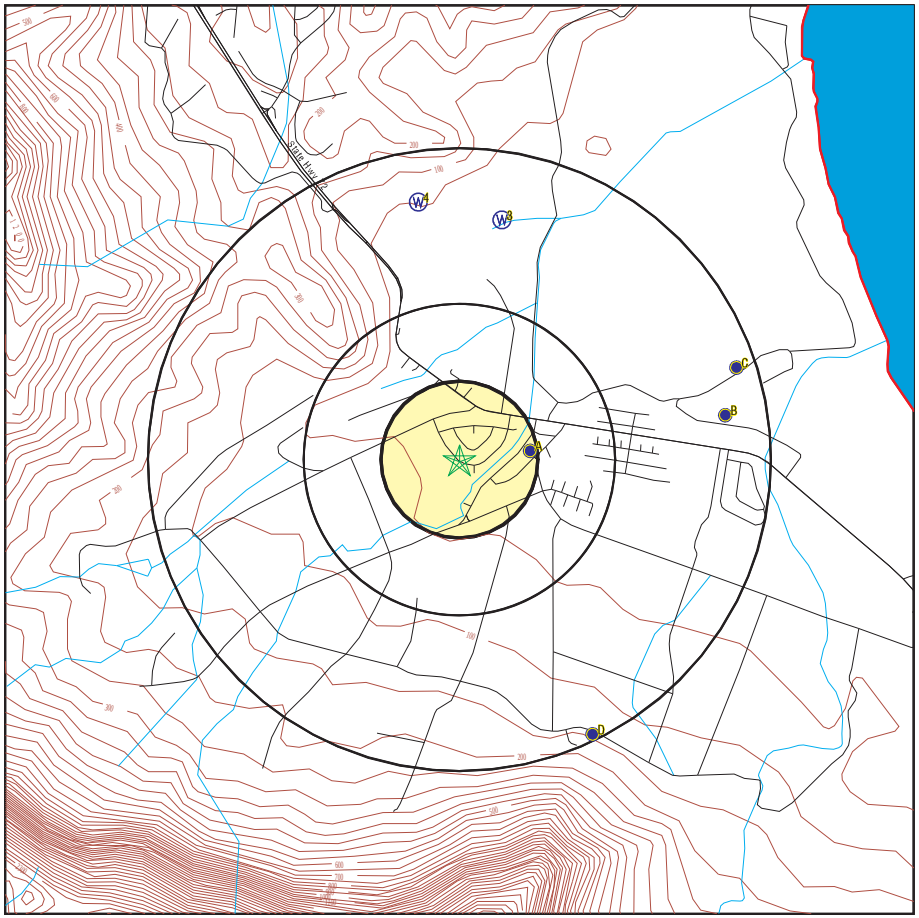
MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A2	HI8000000002635	1/8 - 1/4 Mile East
B6	HI8000000002642	1/2 - 1 Mile East
C8	HI8000000002647	1/2 - 1 Mile ENE
D10	HI8000000002503	1/2 - 1 Mile SSE

PHYSICAL SETTING SOURCE MAP - 4237094.214s



County Boundary
Major Roads
Contour Lines
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons

Groundwater Flow Direction
Indeterminate Groundwater Flow at Location
Groundwater Flow Varies at Location

SITE NAME: Waimanalo I ADDRESS: 41-556 Humuniki St. Waimanalo HI 96795 LAT/LONG: 21.3462 / 157.7266	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.214s DATE: March 17, 2015 5:43 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
A1 **East** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270017**
A2 **East** **1/8 - 1/4 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002635**
3 **North** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270072**
4 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270078**
B5 **East** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270025**
B6 **East** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002642**
C7 **ENE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270031**
C8 **ENE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002647**
D9 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269915**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
D10 SSE 1/2 - 1 Mile Higher	**Click here for full text details**	**HI WELLS**	**HI8000000002503**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for HONOLULU County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 96795

Number of sites tested: 1

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	-0.300 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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HAWAII PUBLIC HOUSING AUTHORITY

ENVIRONMENTAL REVIEW

KO`OLAU VILLAGE

Kāne`ohe, O`ahu

AMP 45
HPHA No. 1030

Prepared for:

State of Hawaii
Hawaii Public Housing Authority

Prepared by:

HHF PLANNERS
places for people

U.S. Department of Housing and Urban Development
451 Seventh Street, SW
Washington, DC 20410
www.hud.gov

espanol.hud.gov

Environmental Review for Activity/Project that is Categorically Excluded Subject to Section 58.5

Pursuant to 24 CFR 58.35(a)

Project Information

Project Name: Koʻolau Village (AMP 45)

Responsible Entity: Hawaii Public Housing Authority
1002 North School Street
Honolulu, HI 96817

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

State/Local Identifier: State of Hawaiʻi

Preparer: Mr. Scott Ezer, Vice President
HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaiʻi 96813

Certifying Officer Name and Title: Mr. David Y. Ige
Governor, State of Hawaiʻi

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

Consultant (if applicable): HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaiʻi 96813

Direct Comments to: Mr. Hakim Ouansafi, Executive Director
Hawaii Public Housing Authority
1002 North School Street
Honolulu, Hawaiʻi 96817

Project Location: 45-1027 Kamau Place
Kaneohe, Hawaiʻi 96744

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]**:**

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a "major construction activity" and would involve one or a combination of several HUD designated categories of actions.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent;
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons;
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland;
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation;
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls);
7. Interior and exterior renovations and rehabilitation;
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site;
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Level of Environmental Review Determination:

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.5. Compliance with and completion of conformance determinations for other statute, executive order, or regulation has been completed and support the Categorical Exclusion.

Funding Information

Grant Number	HUD Program	Funding Amount
	Capital Fund	To be determined
	Economic Development Initiative Special Project Grant	To be determined
	Other Grants	To be determined

Estimated Total HUD Funded Amount:

To be determined by HUD in coordination with HPHA.

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]**:**

To be determined by HUD in coordination with HPHA.

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	*The project is not within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.*
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☒	*The State of Hawai'i does not have any designated coastal barrier resource units. (http://www.fws.gov/CBRA/Maps/Mapper.html)*
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes ☐ No ☒	*As indicated in the Flood Insurance Rate Panel 15003C0270J, Panel Effective Date: November 05, 2014, Flood Hazard Zone AE Floodway and Zone XS run through the property to the north of the townhouses, and two areas to the south of the townhouses are designated as Flood Hazard Zone A. All existing townhouse structures are located within Flood Hazard Zone X (areas determined to be outside the 0.2% annual chance floodplain). Based on its description, this project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.*

STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5		
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes ☐ No ☒	*The State of Hawai'i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. EPA's Green Book for currently designated "nonattainment areas" as of June 2015. Planned repair and rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.*
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes ☐ No ☒	*Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai'i's Coastal Zone Management (CZM) program.*
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☐ No ☒	*There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.*
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes ☒ No ☐	*The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (USFWS) in their letter dated September 28, 2015 which is included in the Appendices, while project-specific mitigation measures are identified in the following section.*

Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes ☐ No ☒	*A field inspection identified an existing above-ground explosive or flammable material storage container in excess of 100 gallons. The liquid gas tank is surrounded by an approx. 5-foot-high CMU wall with a chain link gate, located approximately 20 feet south of Building 4, and was installed and owned by the gas company. Repair and rehabilitation improvements for this project should not impact this fuel storage tank. Should rehabilitation improvements increase the density of the project (e.g. increase the number of units and associated persons exposed to the hazard within the acceptable separation distance), mitigative measures would need to be implemented for the fuel tank in compliance with HUD requirements.*
Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes ☐ No ☒	*The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.*
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes ☐ No ☒	*All existing townhouse structures are located within Flood Hazard Zone X (areas determined to be outside the 0.2% annual chance floodplain). Flood Hazard Zone: AE Floodway and Zone XS run through the property to the north of the townhouses, and two areas to the south of the townhouses are designated as Flood Hazard Zone A. Field inspection and information obtained from the property manager confirmed no major flooding issues within the project site. Therefore, rehabilitation improvements implemented for this housing project should not have significant impact on existing floodplain conditions or pose a significant threat to human life, health, safety, and property as defined by Federal and State guidelines that would require mitigation.*

Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes ☒ No ☐	*Ko'olau Village was first occupied in 1969 (with major renovations in 1999) and is 46 years old. An Architectural Inventory Survey (AIS) conducted in 2015 determined that as a result of the 1999 renovation, this housing project no longer retains its historic integrity and therefore does not meet National Register of Historic Places (NRHP) eligibility criteria. In a letter dated November 16, 2015, the State Historic Preservation Officer determined that repair and rehabilitation improvements for this project would have "no adverse effect" on historic properties pursuant to NHPA Section 106 and subject to certain mitigative measures.*
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes ☐ No ☒	*The project site is situated along a highway that has a high volume of vehicular traffic. The HUD noise calculator estimated noise levels at the project site to be 60.4 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.*
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes ☐ No ☒	*The housing project is located within the O'ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation.*
Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☐ No ☒	*There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.* *(http://www.fws.gov/wetlands/data/mapper.HTML)*

Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes ☐ No ☒	*There are no Wild and Scenic Rivers in Hawai'i, which excludes this project from mitigation or formal consultation requirements (http://www.rivers.gov/map.php)*
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes ☐ No ☒	*Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, these improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects on minority populations and low-income populations. Improvements should benefit low-income and minority populations living within this housing project.*

Field Inspection (Date and completed by)**:** June 04, 2015
Questor Lau
HHF Planners

Summary of Findings and Conclusions:

Repair and rehabilitation improvements implemented for this existing housing project by HPHA should not result in significant environmental impacts based upon research data collected, a field inspection, consultation with the site manager and maintenance staff, consultation with pertinent resource agencies, and prior HPHA experience implementing repair and rehabilitation improvements. Therefore, repair and rehabilitation improvements would comply and be consistent with the statutes, executive orders, and regulations addressed. Furthermore, HPHA would evaluate improvements planned to ensure the work is consistent with the designated categories of actions described under the project description section. Compliance with these factors evaluated are further addressed in the attached Source Documentation Statutory Worksheet along with relevant technical reports/assessments.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Law, Authority, or Factor	Mitigation Measure
Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	*Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.* *Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.* *Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.* *Newell's shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.* *Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.* *Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo'i, impoundments or other vegetated water bodies.*

	1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols. *2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.* *3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.* *In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.* *<u>Additional Measures</u>: The following additional measures would be implemented:* *1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.*
National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	*1. If ground disturbing activity is anticipated, HPHA must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation.* *a. Submit detailed plans, specifications and a detailed scope of work once the plans have been developed.* *b. Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation.* *c. Submit a TMK map showing the full extent of the project area within the affected parcel/s.* *d. Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area.* *e. Summary of land use history, such as previous intensive cultivation, grubbing or grading.* *f. Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.*

	In addition to these mitigation measures, the HPHA would enter into a Programmatic Agreement with the SHPO to address the implementation of future repair and rehabilitation improvements to State housing projects after the current Section 106 review process is completed and prior to the next environmental review process in approximately five years. Furthermore, should subsurface human remains or other traces of human activity greater than 50 years old be encountered during construction, all work in the vicinity of the find would immediately stop and the SHPD would be promptly notified. The treatment of any human remains that are encountered would be conducted in accordance with applicable requirements of Chapter 6E, Hawai'i Revised Statutes (Historic Preservation) and Chapter 13-300, Hawai'i Administrative Rules (Rules of Practice and Procedure Relating to Burial Sites and Human Remains).

Determination:

☐ This categorically excluded activity/project converts to **EXEMPT** per Section 58.34(a)(12), because it does not require any mitigation for compliance with any listed statutes or authorities, nor requires any formal permit or license; **Funds may be committed and drawn down after certification of this part** for this (now) EXEMPT project; OR

☒ This categorically excluded activity/project cannot convert to Exempt status because one or more statutes or authorities listed at Section 58.5 requires formal consultation or mitigation. Complete consultation/mitigation protocol requirements, **publish NOI/RROF and obtain "Authority to Use Grant Funds"** (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR

☐ This project is not categorically excluded OR, if originally categorically excluded, is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

Preparer Signature: Scott Ezer Date: 12-7-15

Name/Title/Organization: Mr. Scott Ezer, Vice President
HHF Planners

Responsible Entity Agency Official Signature:
David Y Ige Date: APR 28 2016

Name/Title: Mr. David Y. Ige, Governor

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

Koʻolau Village (HA # 1030)

TMK: (1) 4-5-023: 008

Hawaiʻi Public Housing Authority (HPHA) Environmental Review

SOURCE DOCUMENTATION (SD) STATUTORY WORKSHEET

Site Visit Date: June 04, 2015
Prepared By: Questor Lau

The Koʻolau Village housing project is located in the Kāneʻohe community on the island of Oʻahu. Kāneʻohe is situated in Windward Oʻahu, to the west of Kailua and the Kāneʻohe Marine Corps Base. The housing site is bordered by Kahekili Highway to the west and Keaʻahala Road to the south with access provided by Kamau Place.

The housing site is situated is bordered to the southwest by Kahekili Highway and to the south east by Keahala Road, with vehicular access to the housing site provided by Kamau Place. A residential subdivision is located immediately east of the housing project site, and Windward Community College is situated to the southwest across Kahekili Highway. An unlined drainageway runs along the project site's northern boundary. This housing project is within HPHA's Asset Management Project (AMP) 45 which includes five other housing projects within the Windward district.

Koʻolau Village was first occupied in 1969 and has a street address of 45-1027 Kamau Place. The property consists of 14.02 acres, and it is identified as Tax Map Key (TMK) No. (1) 4-5-023: 008. The housing project is comprised of 18 two-story townhouses with a range of 1-, 2-, 3-, and 4-bedroom units, and one single-story common area building that serves as a community center. The State's land use designation for the property is the "Urban District." The City's zoning is Medium-density Apartment (A-2).

The project site is not located within a tsunami evacuation zone, however, portions of the site are identified as flood hazard areas. A Flood Hazard Zone AE Floodway runs through the property to the north of the townhouses, and two areas to the south of the townhouses are designated as Flood Hazard Zone A. All of these areas are subject to inundation by the 1-percent-annual-chance flood event (Community Panel Number 15003C0270J, Panel Effective Date: November 05, 2014).

The following figures in Exhibit A provide supporting information on this housing project:

Figure 1: Location Map
Figure 2: TMK Map
Figure 3: Site Map
Figure 4: Flood Map

COMPLIANCE FACTORS

I. AIRPORT CLEAR ZONES AND ACCIDENT POTENTIAL ZONES (24 CFR PART 51D)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The housing project does not like within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: 24 CFR 51 (D).

Honolulu International Airport Master Plan - 2010 (August 1994), State Department of Transportation, Airports Division;

*Hawai`i Airports and Flying Safety Guide (2012-13, Fifth Edition, Revision 1)* Hawai`i Department of Transportation, Airports Division; and

http://hidot.hawaii.gov/airports/files/2013/01/Airport-Safety-Guide-2012-2013-5rev1.pdf

II. COASTAL BARRIER RESOURCES (COASTAL BARRIER IMPROVEMENT ACT OF 1990 [16 USC 3501])

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai'i does not have any designated coastal barrier resource units.

SUPPORTING DOCUMENTATION:

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/cbra/maps/mapper.html (Date accessed: 6/30/15).

III. FLOOD INSURANCE (FLOOD DISASTER PROTECTION ACT OF 1973 AND NATIONAL FLOOD INSURANCE REFORM ACT OF 1994 [42 USC 4001-4128 AND 42 USC 5154a])

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program.

As indicated in the Flood Insurance Rate Panel 15003C0270J, Panel Effective Date: November 05, 2014, Flood Hazard Zone AE Floodway and Zone XS run through the property to the north of the townhouses, and two areas to the south of the townhouses are designated as Flood Hazard Zone A. All existing townhouse structures are located within Flood Hazard Zone X (areas determined to be outside the 0.2% annual chance floodplain).

Based on its description, this project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal signs of previous flooding problems. An interview with the Maintenance Supervisor also determined that major ponding or flooding issues are currently not an issue for the project site.

Printed: Flood Insurance Rate Map, Community Panel Number 15003C0270J, Panel Effective Date: November 05, 2014.

Hawai`i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 7/27/15)

IV. CLEAN AIR ACT (40 CFR PARTS 6, 51, 93)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawaiʻi is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. Environmental Protection Agency's Green Book for currently designated "nonattainment areas" as of June 2015. Planned rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.

SUPPORTING DOCUMENTATION:

Printed: *State of Hawaiʻi Annual Summary 2013 Air Quality Data*. State of Hawai'i, Department of Health, July 2014.

U.S. Environmental Protection Agency website at: http://epa.gov/airquality/greenbk/

V. COASTAL ZONE MANAGEMENT ACT (16 USC 1451, SECTIONS 307 (C), (D)

CONTACT:

Mr. John Nakagawa
Office of Planning
Department of Business, Economic Development & Tourism
State of Hawaiʻi
P.O. Box 2359
Honolulu, Hawai'i, 96804-2359

SUPPORTING DOCUMENTS

	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawaiʻi's Coastal Zone Management (CZM) program.

SUPPORTING DOCUMENTATION:

Contact: In an email to the Office of Planning (OP) dated July 27, 2015, the HPHA determined that the use of HUD funds for the implementation of repair and rehabilitation improvements does not require review for consistency with Hawaiʻi's CZM program. The OP confirmed this determination in an email dated July 28, 2015 and it is included in the Appendices.

Experience: Previous reviews conducted by OP in 2003, 2005, and 2010 determined that projects receiving federal funds from HUD do not require CZM federal consistency review. OP's current determination confirms this condition is still applicable. Copies of these prior documentations are included in the Appendices.

VI. CONTAMINATION AND TOXIC SUBSTANCES (24 CFR PART 50.3 & 58.5(I)(2))

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Project Not Affected.

There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.

SUPPORTING DOCUMENTATION:

Field: A site inspection and interview with the Asset Management Project (AMP) Manager revealed no presence of any toxic or radioactive materials on the project site that warrant concern. There is an unmarked, secured storage building at the south-east portion of the property.

Study: Environmental Data Resources, Inc. (EDR), conducted a search of available environmental records and prepared a Radius Map Report (Inquiry Number 4237094.210s, March 17, 2015). EDR reviewed more than 25 federal and statewide regulatory databases for information regarding the treatment, storage, disposal and release of toxic chemicals at the project site and within specific radii (generally 1 mile) of the site. A Detail Map within the EDR report documents those sites identified within a 0.25 mile radius of the project site. The EDR report in Exhibit B includes the results of their research findings.

The EDR report notes the following activities within a 0.125 mile radius of the project site: Windward Nissan on Kahuhipa St reported Nature of Contamination: Found: TPH-Oil, benzo (a) pyrene; Nature of Residual Contamination: None – all contaminated soil was removed. That site also reported a Hydraulic Oil spill. Kūlana Nani Apartments on Kahuhipa St is a Conditionally Exempt Small Quantity Generator (Handler); no violations found. The Glidden Co DBA ICI Paints is a Small Small Quantity Generator (Handler) of latex waste; no violations found.

This project site was not identified as a Formerly Used Defense Site (FUDS) by the U.S. Army Corps of Engineers and is not subject to any cleanup actions for Department of Defense-generated contamination.

VII. ENDANGERED SPECIES (50 CFR PART 402)

CONTACT:
Mr. Loyal Mehrhoff, Field Supervisor
Pacific Islands Administrator
Fish and Wildlife Services
U.S. Department of the Interior
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawaiʻi 96813
Tel. #: 792-9400

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Adverse Effect Subject to Mitigation

The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence of this determination was received from the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices.

SUPPORTING DOCUMENTATION:

Contact: A letter from the HPHA dated July 24, 2015 was submitted to the Pacific Island Administrator for the FWS determining that repair and rehabilitation improvements that may be implemented using HUD funds for this housing project would have no likelihood of effect on any listed species or proposed species, or existing or proposed designated critical habitat subject to certain measures. Concurrence with this determination along with proposed minimization and avoidance measures was received from the FWS in a letter dated September 28, 2015 which is included in the Appendices. This housing project is subject to the following minimization and avoidance measures.

Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.

Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.

Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.

Newell's shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If

nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.

Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.

Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro loʻi, impoundments or other vegetated water bodies.

1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols.
2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.
3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.

In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.

Additional Measures: The following additional measures would be implemented:

1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.

Experience: The FWS was previously consulted as part of environmental reviews that were completed in 2005 (39 housing projects) and 2010 (70 housing projects) which supported the determination that repair and rehabilitation improvements would either: 1) have no likelihood of effect for certain housing projects; or 2) not likely adversely affect federally listed species or critical habitat for certain housing projects subject to mitigative measures. A summary of these consultation efforts follows.

2005 Consultation: In a letter dated July 15, 2005, the Housing and Community Development Corporation of Hawaiʻi (predecessor to the HPHA), determined that the implementation of minor repair and rehabilitation improvements for 39 housing projects

would not have an adverse effect on federally-listed species or critical habitat. In a letter dated August 11, 2005, the FWS concurred with the HCDCH determination.

2010 Consultation: In a letter dated May 17, 2010, the HPHA informed the FWS that HUD funds would be used to immediately implement repair and rehabilitation improvements for six housing projects on O'ahu and the island of Hawai`i. In a subsequent letter dated May 21, 2010, the FWS was informed that HPHA would be using HUD funds to implement minor repair and rehabilitation improvements for 64 projects throughout the State. In both letters, the HPHA determined that the repair and rehabilitation improvements were not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat. Based on further consultation and a meeting with FWS staff on June 24, 2010, the HPHA determined that repair and rehabilitation improvements for most of their housing projects would not likely adversely affect any listed or proposed species, or existing or proposed designated habitat, subject to various mitigative measures for certain housing projects.

VIII. EXPLOSIVE AND FLAMMABLE OPERATIONS (24 CFR PART 51C)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact Subject to Conditions and Mitigation, if Applicable.

A field inspection identified an existing above-ground explosive or flammable material storage container in excess of 100 gallons. The liquid gas tank is surrounded by an approx. 5-foot-high CMU wall with a chain link gate, located approximately 20 feet south of Building 4, and was installed and owned by the gas company. Repair and rehabilitation improvements for this project should not impact this fuel storage tank. Should rehabilitation improvements increase the density of the project (e.g. increase the number of units and associated persons exposed to the hazard within the acceptable separation distance), mitigative measures would need to be implemented for the fuel tank in compliance with HUD requirements.

Under CFR Title 24, Part 51, Subpart C, increasing the residential density and number of people under a rehabilitation project using HUD funding would be considered a "HUD-assisted project." Consequently, the existing fuel storage tank would be subject to standards under this regulation for establishing acceptable separation distances, or the application of the standards can be eliminated or modified if other conditions apply or mitigative measures are provided as identified below. HPHA would need to evaluate site conditions, comply with regulatory requirements, and determine the appropriate measure to implement.

1. The nature of the topography shields the proposed project form the hazard.
2. An existing permanent fire resistant structure of adequate size and strength will shield the proposed project from the hazard.

3. A barrier is constructed surrounding the hazard, at the site of the project, or in between the potential hazard and the proposed project.
4. The structure and outdoor areas used by people are designed to withstand blast overpressure and thermal radiation anticipated from the potential hazard (e.g., the project is of masonry and steel or reinforced concrete and steel construction).

SUPPORTING DOCUMENTATION:

Field: There is an approximately 1,000 gallon above-ground fuel storage tank located approximately 20 feet south of Building 4. The tank was installed and owned by the gas company.

Printed: 24 CFR, Part 51, Subpart C.

Per CFR Title 24 Part 51.201 (Definitions), rehabilitation and modernization improvements that do not increase the density and number of people being exposed to hazardous operations do not meet the definition of a "HUD-assisted project," and are not subject to acceptable separation distance requirements under this regulation. Increasing the density (e.g. increase the number of units and associated persons exposed to the hazard within the acceptable separation distance) under a rehabilitation project using HUD funding would be considered a "HUD-assisted project." Consequently, the existing fuel storage tank would be subject to standards under this regulation for establishing acceptable separation distances, or the application of the standards can be eliminated or modified if other conditions apply or mitigative measures are provided as identified below. HPHA would need to evaluate site conditions, comply with regulatory requirements, and determine the appropriate measure to implement.

1. The nature of the topography shields the proposed project form the hazard.
2. An existing permanent fire resistant structure of adequate size and strength will shield the proposed project from the hazard.
3. A barrier is constructed surrounding the hazard, at the site of the project, or in between the potential hazard and the proposed project.
4. The structure and outdoor areas used by people are designed to withstand blast overpressure and thermal radiation anticipated from the potential hazard (e.g., the project is of masonry and steel or reinforced concrete and steel construction).

IX. FARMLANDS PROTECTION (7 CFR PART 658)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. Since the property consists of an existing housing development within an urbanized area, no farmlands would be impacted by the implementation of repair and rehabilitation improvements.

Printed: The property is designated for "Urban" use by the State Land Use Commission and the County's zoning for the parcel is RD-3.75 Double-Family Residential District.

Hawai`i Office of Planning website at: http://planning.hawaii.gov/gis/
(Date accessed: 6/30/2015)

X. FLOODPLAIN MANAGEMENT (EXECUTIVE ORDER 11988, 24 CFR PART 55)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program

All existing townhouse structures are located within Flood Hazard Zone X (areas determined to be outside the 0.2% annual chance floodplain). Flood Hazard Zone: AE Floodway and Zone XS run through the property to the north of the townhouses, and two areas to the south of the townhouses are designated as Flood Hazard Zone A. Field inspection and information obtained from the property manager confirmed no major flooding issues within the project site. Therefore, rehabilitation improvements implemented for this housing project should not have significant impact on existing floodplain conditions or pose a significant threat to human life, health, safety, and property as defined by Federal and State guidelines that would require mitigation.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal signs of previous flooding problems. An interview with the AMP Manager also determined that no major ponding or flooding issues occur on the project site. During heavy rain, minor ponding occurs at the rear of Building 4 and 13.

Printed: Flood Insurance Rate Map, Community Panel Number 15003C0270J, Panel Effective Date: November 05, 2014.

Hawai`i Department of Land and Natural Resources website at:
http://gis.hawaiinfip.org/FHAT/ (Date accessed7/21/15)

XI. HISTORIC PRESERVATION (NATIONAL HISTORIC PRESERVATION ACT OF 1966; SECTIONS 106 AND 110; 36 CFR, PART 800)

CONTACT:

Ms. Suzanne Case, Chairperson
Department of Land and Natural Resources (DLNR)
State of Hawaiʻi
1151 Punchbowl Street
Honolulu, Hawaiʻi 96813
Tel. #: 587-0400

SUPPORTING DOCUMENTS

X	Field
X	Contact
X	Printed
X	Experience
X	Study

DETERMINATION:

Status Category: No Adverse Effect on Historic Properties with Mitigation

The Koʻolau Village housing project was initially occupied in 1969 (with major renovations in 1999) and is 46 years old. An Architectural Inventory Survey (AIS) conducted in 2015 determined that as a result of the 1999 renovation, this housing project no longer retains its historic integrity and therefore does not meet National Register of Historic Places (NRHP) eligibility criteria. In a letter dated November 16, 2015, the State Historic Preservation Officer (SHPO) provided a determination and set forth conditions for ground-disturbing activities. In responding to this letter, the HPHA concurred with the conditions set forth by the SHPO.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not locate any existing or potential archaeological sites (e.g., heiau) or cultural features on the property. An interview with the AMP Manager indicates that no known sites or features are present on the property.

Contact: Based on the findings and recommendations of the 2015 AIS, the HPHA submitted a letter to the SHPO dated August 20, 2015 regarding 28 housing projects, which is included in the Appendix. Of this total, 15 housing projects (including Koʻolau Village) did not meet National Register eligibility criteria, therefore, a "no historic properties affected" determination was proposed for these repair and rehabilitation improvements. Repair and rehabilitation improvements for the other 13 housing projects were determined to meet National Register eligibility criteria and were proposed to have "no adverse effect" on historic properties subject to certain mitigative measures.

In a letter dated November 16, 2015, the SHPO determined that repair and rehabilitation improvements for this housing project would have "no adverse effect" on historic properties instead of "no historic properties" pursuant to NHPA Section 106 and subject to the following mitigative measures. In responding to this letter, the HPHA concurred with the conditions set forth by the SHPO. A copy of these letters is included in Exhibit C.

1. If ground disturbing activity is anticipated, HPHA must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation.

    a. Submit detailed plans, specifications and a detailed scope of work once the plans have been developed.

b. Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation.

c. Submit a TMK map showing the full extent of the project area within the affected parcel/s.

d. Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area.

e. Summary of land use history, such as previous intensive cultivation, grubbing or grading.

f. Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

In addition to these mitigation measures, the HPHA would enter into a Programmatic Agreement with the SHPO to address the implementation of future repair and rehabilitation improvements to State housing projects after the current Section 106 review process is completed and prior to the next environmental review process in approximately five years. Furthermore, should subsurface human remains or other traces of human activity greater than 50 years old be encountered during construction, all work in the vicinity of the find would immediately stop and the SHPD would be promptly notified. The treatment of any human remains that are encountered would be conducted in accordance with applicable requirements of Chapter 6E, Hawaiʻi Revised Statutes (Historic Preservation) and Chapter 13-300, Hawaiʻi Administrative Rules (Rules of Practice and Procedure Relating to Burial Sites and Human Remains).

Printed: A review of the U.S. National Parks Service website for the National Register of Historic Places did not identify any historic properties within the limits of this housing project. A similar review of the State DLNR website for the State Register of Historic Places revealed that there are no historic properties within the project site.

National Register: U.S. National Park Service website at:
http://www.nps.gov/nr/research/ (Date accessed: 7/2/15).

State Register: Hawai`i Department of Land and Natural Resources website at:
http://dlnr.hawaii.gov/shpd/state-register/ (Date accessed: 7/2/15).

Experience: In letter to the State Historic Preservation Officer (SHPO) dated April 19, 2011, the HPHA determined that minor repair and rehabilitation improvement at 57 public housing projects throughout Hawaiʻi (including this housing site) would have “no effect” on historic properties. The SHPO had no comments or objections on the “no effect” determination.

Study: In 2015, an Architectural Inventory Survey (AIS) was conducted for this subject housing site and determined that as a result of a 1999 renovation of the property it no longer retains its historic integrity and therefore does not meet National Register of Historic Places (NRHP) eligibility criteria. The historic, plain, unadorned facades of the buildings have been supplanted by a post-modern appearance with the addition of an asphalt shingle, shed roof coping between the first and second stories, and the construction of a single-story gabled roofed portico at the front entries. On the interior, the kitchens and bathrooms

were remodeled and a new utility room was added to the one-bedroom units, while the other units' utility rooms were enclosed. The windows also appear to have been replaced.

XII. NOISE ABATEMENT CONTROL (24 CFR PART 51B)

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Within HUD Noise Standards

The project site is situated along a highway that has a high volume of vehicular traffic. The HUD noise calculator estimated noise levels at the project site to be 60.4 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

SUPPORTING DOCUMENTATION:

Field: Notable noise sources are predominantly associated with vehicular traffic along the abutting Kahikili Highway, which has a posted speed limit of 35 miles per hour. There were no significant noise generating sources identified within the project site during the site inspection. The subject housing site is located at the end of a cul-de-sac (Kamau Place) that exclusively serves this housing project and is therefore expected to have low volumes of traffic. Furthermore, an interview with the AMP Manager and Maintenance Supervisor did not identify any loud noise producing sources in the area.

Study: The HUD day/night noise level calculator was used to estimate approximate traffic noise levels at the project site. Kahikili Highway is a primary State roadway abutting the project site and was observed to be the primary noise source for this housing site. Kahikili Highway serves vehicular traffic entering and exiting Kāneʻohe along with providing access to other surrounding urban areas. Traffic counts were based on 2013 Hawaiʻi State Department of Transportation data taken at the Likelike Highway-Kahikili Highway Interchange Loop and applied to a distance of 90 feet from the project site. Using this HUD calculator, the estimated noise levels at the project site is 60.4 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

XIII. SOLE SOURCE AQUIFER (40 CFR PART 149)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact on Sole Source Aquifer

The housing project is located within the Oʻahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation. However, if exceptional circumstances require compliance steps with any of these authorities, such compliance must be established and documented prior to approving the site-specific loan or grant.

SUPPORTING DOCUMENTATION:

Printed: This determination was based upon review of the Sole Source Aquifer Memorandum of 4/30/90 (Sections II.B.1 and II.B.2) and consideration of the type of rehabilitation related improvements that would be conducted for this project.

XIV. WETLANDS PROTECTION (EXECUTIVE ORDER 11990)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the property did not identify the presence of any wetlands.

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/wetlands/data/mapper.html (Date accessed 7/23/2015).

XV. WILD AND SCENIC RIVERS ACT (16 USC 1271, SECTION 7 (B), (C))

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no Wild and Scenic Rivers in Hawaiʻi, which excludes this project from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: National Wild and Scenic Rivers System website at: http://www.rivers.gov/index.php (Date accessed: 6/30/2015).

XVI. ENVIRONMENTAL JUSTICE (EXECUTIVE ORDER NO. 12898)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Conflict with Requirements

Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, repair and rehabilitation improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations. Repair and rehabilitation improvements should benefit low-income and minority populations living within this housing project.

SUPPORTING DOCUMENTATION:

Printed: Executive Order 12898.

U.S. Department of Housing and Urban Development website at: https://www.hudexchange.info/environmental-review/environmental-justice/

EXHIBIT A

Location Map, TMK Map, Site Map, Flood Map, and Site Photos

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

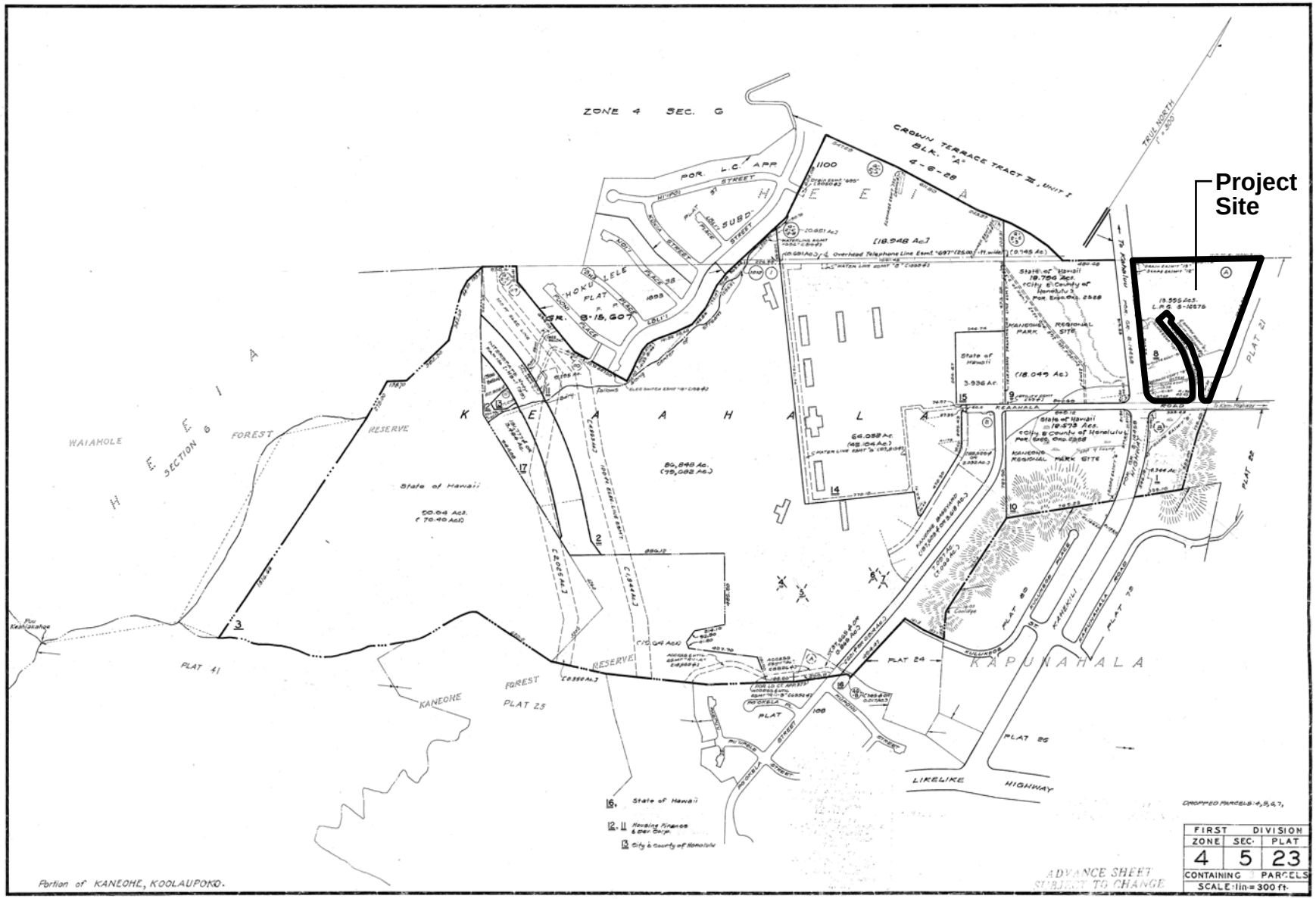
HPHA No. 1030 - Ko'olau Village (AMP 45)

Figure 1 - Project Location Map

Kāne'ohe, O'ahu

1,500 FT

HHF PLANNERS
places for people



HPHA No. 1030 - Koʻolau Village (AMP 45)

Figure 2 - TMK Map

Kāneʻohe, Oʻahu

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

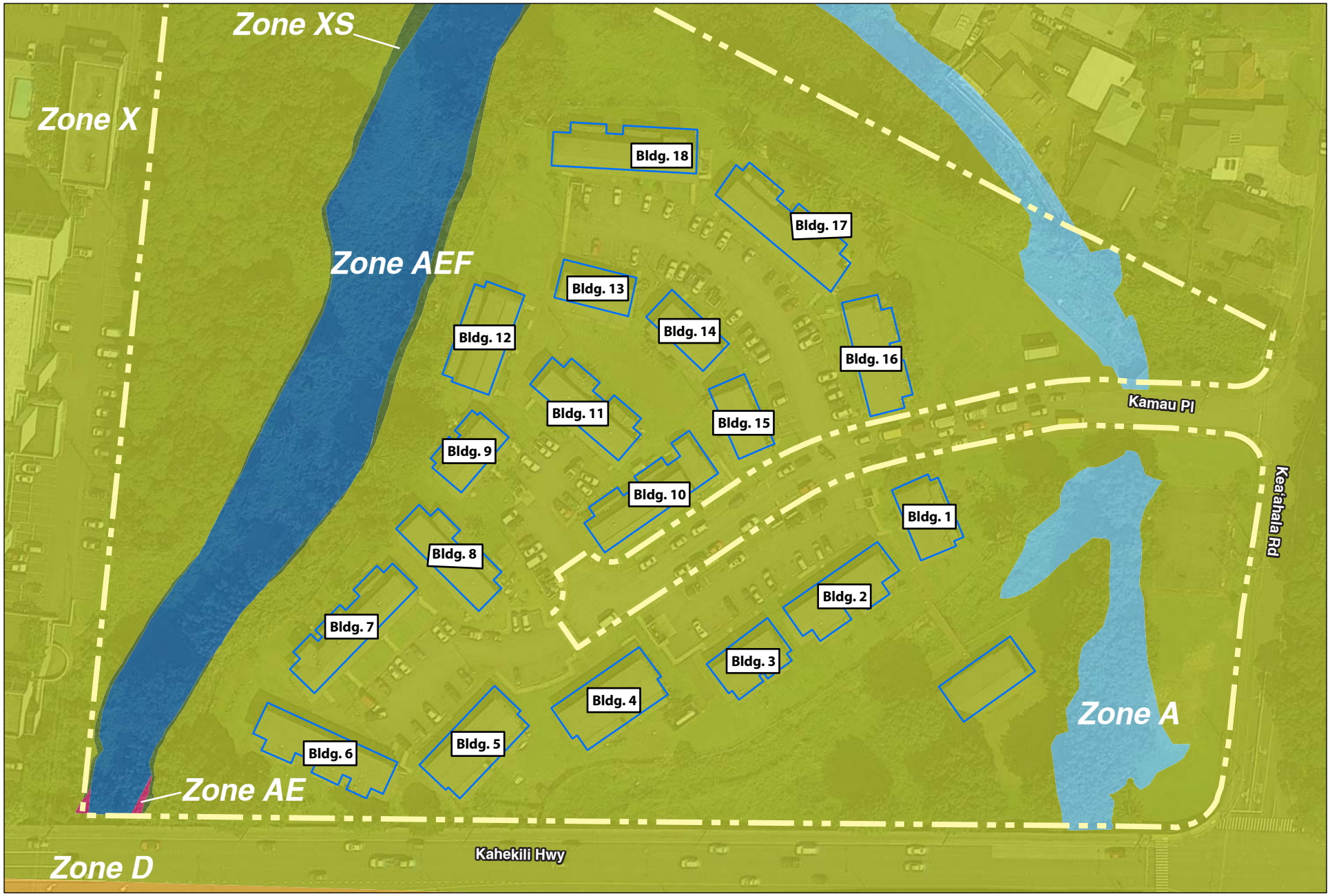
HPHA No. 1030 - Ko'olau Village (AMP 45)

Figure 3 - Site Map

Kāne'ohe, O'ahu

80 FEET

HHF PLANNERS
places for people



Source: State of Hawaiʻi GIS Data and Google Earth Pro - 1/12/2013

LEGEND

- Zone A -
- Zone AE - 1% Annual Chance of Flood
- Zone AEF - Floodway in Zone AE
- Zone D - Unstudied Area
- Zone XS - 0.2% Annual Chance of Flood
- Zone X - Outside the 0.2% Annual Chance of Flood

HPHA No. 1030 - Koʻolau Village (AMP 45)

Figure 4 - Flood Map

Kāneʻohe, Oʻahu

80 FEET

HHF PLANNERS
places for people

KO‘OLAU VILLAGE
SITE PHOTOS

Kahekili Highway, facing south-east

Kahikili Highway, north-west. Project site is behind the wall, to the right.

Intersection of Keaahala Road and Kamau Place, which leads directly into the project site

Entry to Kamau Place

Driveway into one of the housing pods within the project site

Unnamed tributary along project boundary. Buildings 2 & 3 visible

KO‘OLAU VILLAGE
SITE PHOTOS

Secured storage area

Building 4 open space

Community cetner and storage (no toxic or hazardous material)

Yard at rear of Building 13

One of several trash pickup areas on site

1,000 gallon tank located between Building 3 and 4

EXHIBIT B

EDR Radius Map Report

Koolua Village
45-1027 Kamau Pl.
Kaneohe, HI 96744

Inquiry Number: 4237094.210s
March 17, 2015

EDR Summary Radius Map Report

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

FORM-NULL-PVC

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

45-1027 KAMAU PL.
HONOLULU County, HI 96744

COORDINATES

Latitude (North):	21.4124000 - 21˚ 24' 44.64''
Longitude (West):	157.8083000 - 157˚ 48' 29.88''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	623517.1
UTM Y (Meters):	2368119.8
Elevation:	131 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	USGS 7.5 min quad index

MAPPED SITES SUMMARY

Target Property Address:
45-1027 KAMAU PL.
, HI 96744

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
Reg	HAIKU NAVAL RESERVAT		DOD	Same	5060, WSW
1		451023 ANOI RD	EDR US Hist Auto Stat	Lower	652, East
2	WINDWARD NISSAN	46-275 KAHUHIPA ST	HI SHWS, HI SPILLS	Higher	797, NNW
3	KULANA NANI APARTMEN	46-229 KAHUHIPA ST	RCRA-CESQG	Higher	908, North
4	THE GLIDDEN CO DBA I	46212 KAHUHIPA ST	RCRA-SQG, CA HAZNET	Lower	1119, NNE
5		46216 KAHUHIPA ST	EDR US Hist Auto Stat	Lower	1231, NNE
A6	HAWAII STATE HOSPITA	45-710 KEAAHALA RD	HI LUST, HI UST	Higher	1421, SSW
A7	HAWAII STATE HOSPITA	45-710 KEAAHALA RD	RCRA-CESQG, FINDS, HI SHWS, CA CHMIRS, HI ENG...	Higher	1421, SSW
8	WINDWARD AUTO SALES,	46-177 KAHUHIPA ST	HI LUST, HI UST	Lower	1699, NNE
9	FORMER KANEOHE DISTR	46-201 KAHUHIPA STRE	HI LUST, HI UST	Lower	1757, NE
10	HABILITAT CONSTRUCTI	46-026 ALALOA ST	HI LUST, HI UST	Lower	1963, NNE
11	WINDWARD NISSAN	46 151 KAHUHIPA STRE	RCRA-CESQG, HI LUST, HI UST, HI Financial...	Lower	2243, NE
12	WILLIAM H. PETERSON	46-145 MALINA PL	HI LUST, HI UST	Lower	2332, NE
13	KANEOHE CHEVRON SERV	45-1002 KAMEHAMEHA H	HI SHWS, HI LUST, HI UST, HI Financial Assurance	Lower	2756, ENE
14	CAESAR'S CLEANERS	45-564 KAMEHAMEHA HW	HI SHWS, HI SPILLS, HI ENG CONTROLS	Lower	3234, NE
15	KAMEHAMEHA SCHOOLS -	46-430 KAHUHIPA ST	HI SHWS	Higher	3254, West
16	SAFEWAY STORE #207	46-065 KAMEHAMEHA HW	HI SHWS, HI SPILLS, HI INST CONTROL	Lower	3857, NNE
17	HAIKU VALLEY REHABIL	46-500 HAIKU RD	HI SHWS, HI BROWNFIELDS	Higher	4736, WSW

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA generators list

RCRA-SQG: A review of the RCRA-SQG list, as provided by EDR, and dated 12/09/2014 has revealed that there is 1 RCRA-SQG site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
THE GLIDDEN CO DBA I	***46212 KAHUHIPA ST***	***NNE 1/8 - 1/4 (0.212 mi.)***	***4***	***7***

RCRA-CESQG: A review of the RCRA-CESQG list, as provided by EDR, and dated 12/09/2014 has revealed that there is 1 RCRA-CESQG site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
KULANA NANI APARTMEN	46-229 KAHUHIPA ST	N 1/8 - 1/4 (0.172 mi.)	3	7

State- and tribal - equivalent CERCLIS

HI SHWS: A review of the HI SHWS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 7 HI SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WINDWARD NISSAN	***46-275 KAHUHIPA ST***	***NNW 1/8 - 1/4 (0.151 mi.)***	***2***	***7***
HAWAII STATE HOSPITA	***45-710 KEAAHALA RD***	***SSW 1/4 - 1/2 (0.269 mi.)***	***A7***	***8***
KAMEHAMEHA SCHOOLS -	46-430 KAHUHIPA ST	W 1/2 - 1 (0.616 mi.)	15	10
HAIKU VALLEY REHABIL	***46-500 HAIKU RD***	***WSW 1/2 - 1 (0.897 mi.)***	***17***	***11***

Lower Elevation	Address	Direction / Distance	Map ID	Page
KANEOHE CHEVRON SERV	***45-1002 KAMEHAMEHA H***	***ENE 1/2 - 1 (0.522 mi.)***	***13***	***10***

Lower Elevation	Address	Direction / Distance	Map ID	Page
CAESAR'S CLEANERS	***45-564 KAMEHAMEHA HW***	***NE 1/2 - 1 (0.613 mi.)***	***14***	***10***
SAFEWAY STORE #207	***46-065 KAMEHAMEHA HW***	***NNE 1/2 - 1 (0.730 mi.)***	***16***	***11***

State and tribal leaking storage tank lists

HI LUST: A review of the HI LUST list, as provided by EDR, and dated 12/16/2014 has revealed that there are 6 HI LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HAWAII STATE HOSPITA	***45-710 KEAAHALA RD***	***SSW 1/4 - 1/2 (0.269 mi.)***	***A6***	***8***
Facility Status: Site Cleanup Completed (NFA)				

Lower Elevation	Address	Direction / Distance	Map ID	Page
WINDWARD AUTO SALES,	***46-177 KAHUHIPA ST***	***NNE 1/4 - 1/2 (0.322 mi.)***	***8***	***8***
Facility Status: Site Cleanup Completed (NFA)				
FORMER KANEOHE DISTR	***46-201 KAHUHIPA STRE***	***NE 1/4 - 1/2 (0.333 mi.)***	***9***	***9***
Facility Status: Site Cleanup Completed (NFA)				
HABILITAT CONSTRUCTI	***46-026 ALALOA ST***	***NNE 1/4 - 1/2 (0.372 mi.)***	***10***	***9***
Facility Status: Site Cleanup Completed (NFA)				
WINDWARD NISSAN	***46 151 KAHUHIPA STRE***	***NE 1/4 - 1/2 (0.425 mi.)***	***11***	***9***
Facility Status: Site Cleanup Completed (NFA)				
WILLIAM H. PETERSON	***46-145 MALINA PL***	***NE 1/4 - 1/2 (0.442 mi.)***	***12***	***10***
Facility Status: Site Cleanup Completed (NFA)				

State and tribal institutional control / engineering control registries

HI ENG CONTROLS: A review of the HI ENG CONTROLS list, as provided by EDR, and dated 12/02/2014 has revealed that there is 1 HI ENG CONTROLS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HAWAII STATE HOSPITA	***45-710 KEAAHALA RD***	***SSW 1/4 - 1/2 (0.269 mi.)***	***A7***	***8***

HI INST CONTROL: A review of the HI INST CONTROL list, as provided by EDR, and dated 12/02/2014 has revealed that there is 1 HI INST CONTROL site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HAWAII STATE HOSPITA	***45-710 KEAAHALA RD***	***SSW 1/4 - 1/2 (0.269 mi.)***	***A7***	***8***

EXECUTIVE SUMMARY

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

DOD: A review of the DOD list, as provided by EDR, and dated 12/31/2005 has revealed that there is 1 DOD site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HAIKU NAVAL RESERVAT		WSW 1/2 - 1 (0.958 mi.)	0	7

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Auto Stat: A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there are 2 EDR US Hist Auto Stat sites within approximately 0.25 miles of the target property.

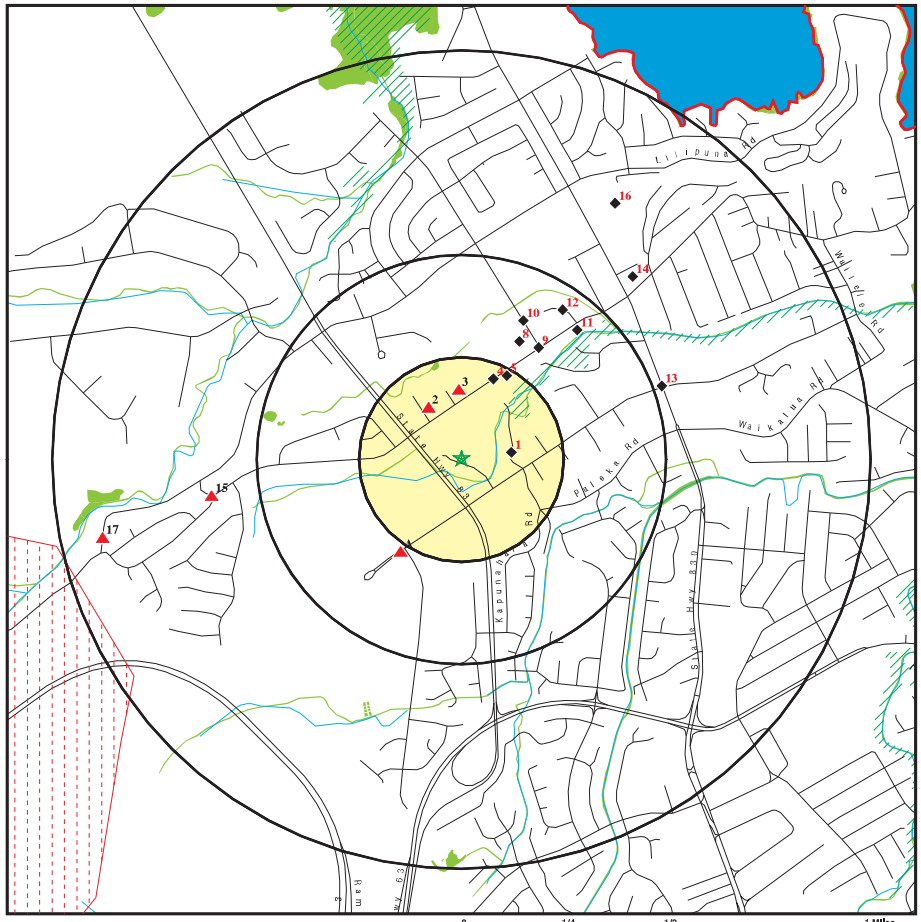
Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	451023 ANOI RD	E 0 - 1/8 (0.123 mi.)	1	7
Not reported	46216 KAHUHIPA ST	NNE 1/8 - 1/4 (0.233 mi.)	5	8

ORPHAN SUMMARY

Count: 2 records.

City	EDR ID	Site Name	Site Address	Zip	Database(s)
KAHALUU	S110169200	HECO TRANSFORMER 56846	47-195 KAMEHAMEHA HWY	96744	HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST CONTROL
KUALOA	S111704786	KUALOA PLANTATION MILL	49-586 KAMEHAMEHA HWY	96744	HI SHWS

OVERVIEW MAP - 4237094.210S



0 1/4 1/2 1 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Koolua Village ADDRESS: 45-1027 Kamau Pl. Kaneohe HI 96744 LAT/LONG: 21.4124 / 157.8083	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.210s DATE: March 17, 2015 5:42 pm

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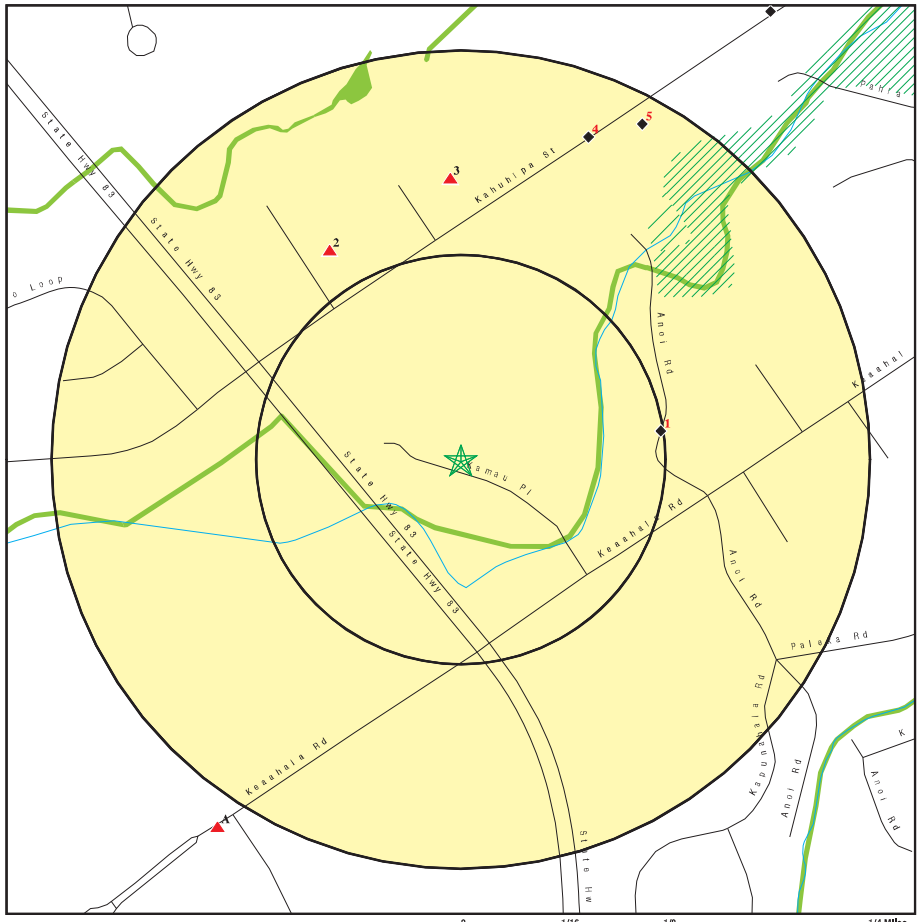
DETAIL MAP - 4237094.210S



0 1/16 1/8 1/4 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Koolua Village ADDRESS: 45-1027 Kamau Pl. Kaneohe HI 96744 LAT/LONG: 21.4124 / 157.8083	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.210s DATE: March 17, 2015 5:43 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	1	NR	NR	NR	1
RCRA-CESQG	0.250		0	1	NR	NR	NR	1
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
HI SHWS	1.000		0	1	1	5	NR	7
State and tribal landfill and/or solid waste disposal site lists								
HI SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
HI LUST	0.500		0	0	6	NR	NR	6
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
HI UST	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
HI ENG CONTROLS	0.500		0	0	1	NR	NR	1
HI INST CONTROL	0.500		0	0	1	NR	NR	1
State and tribal voluntary cleanup sites								
HI VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
HI BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
HI CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
HI SPILLS	TP		NR	NR	NR	NR	NR	0
HI SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	1	NR	1
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
HI UIC	TP		NR	NR	NR	NR	NR	0
HI DRYCLEANERS	0.250		0	0	NR	NR	NR	0
CA HAZNET	TP		NR	NR	NR	NR	NR	0
HI AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
HI Financial Assurance	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		1	1	NR	NR	NR	2
EDR US Hist Cleaners	0.250		0	0	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
HI RGA LF	TP		NR	NR	NR	NR	NR	0
HI RGA LUST	TP		NR	NR	NR	NR	NR	0
HI RGA HWS	TP		NR	NR	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
DOD Region WSW 1/2-1 5060 ft.	**HAIKU NAVAL RESERVATION** **HAIKU NAVAL RESERVATION (County), HI** Click here for full text details	**DOD**	**CUSA147742 N/A**
1 East < 1/8 0.123 mi. 652 ft. Relative: Lower	**451023 ANOI RD** **KANEOHE, HI 96744** Click here for full text details	**EDR US Hist Auto Stat**	**1015502820 N/A**
2 NNW 1/8-1/4 0.151 mi. 797 ft. Relative: Higher	**WINDWARD NISSAN** **46-275 KAHUHIPA ST** **KANEOHE, HI 96744** Click here for full text details	**HI SHWS** **HI SPILLS**	**1006819663 N/A**
3 North 1/8-1/4 0.172 mi. 908 ft. Relative: Higher	**KULANA NANI APARTMENTS** **46-229 KAHUHIPA ST** **KANEOHE, HI 96744** Click here for full text details **RCRA-CESQG** EPA Id: HIR000139030	**RCRA-CESQG**	**1012178248 HIR000139030**
4 NNE 1/8-1/4 0.212 mi. 1119 ft. Relative: Lower	**THE GLIDDEN CO DBA ICI PAINTS** **46212 KAHUHIPA ST** **KANEOHE, HI 96744** Click here for full text details **RCRA-SQG** EPA Id: HIR000135871	**RCRA-SQG** **CA HAZNET**	**1007370458** **HIR000135871**

5
NNE
1/8-1/4
0.233 mi.
1231 ft.

Relative: Lower

46216 KAHUHIPA ST
KANEOHE, HI 96744

EDR US Hist Auto Stat — **1015507628**, **N/A**

Click here for full text details

A6
SSW
1/4-1/2
0.269 mi.
1421 ft.

Relative: Higher

HAWAII STATE HOSPITAL
45-710 KEAAHALA RD
KANEOHE, HI 96744

HI LUST — **1000146677**
HI UST — **N/A**

Click here for full text details

HI LUST
Facility Id: 9-202645
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-202645
Tank Status: Permanently Out of Use

A7
SSW
1/4-1/2
0.269 mi.
1421 ft.

Relative: Higher

HAWAII STATE HOSPITAL
45-710 KEAAHALA RD
KANEOHE, HI 96744

RCRA-CESQG — **1004464899**
FINDS — **HID982013476**
HI SHWS
HI SPILLS
HI ENG CONTROLS
HI INST CONTROL
CA HAZNET

Click here for full text details

RCRA-CESQG
EPA Id: HID982013476

8
NNE
1/4-1/2
0.322 mi.
1699 ft.

Relative: Lower

WINDWARD AUTO SALES, INC.
46-177 KAHUHIPA ST
KANEOHE, HI 96744

HI LUST — **U001236139**
HI UST — **N/A**

Click here for full text details

HI LUST
Facility Id: 9-200364
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-200364
Tank Status: Permanently Out of Use

9
NE
1/4-1/2
0.333 mi.
1757 ft.

Relative: Lower

FORMER KANEOHE DISTRICT COURTHOUSE
46-201 KAHUHIPA STREET
KANEOHE, HI 96744

HI LUST — **U003967141**
HI UST — **N/A**

Click here for full text details

HI LUST
Facility Id: 9-203778
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-203778
Tank Status: Permanently Out of Use

10
NNE
1/4-1/2
0.372 mi.
1963 ft.

Relative: Lower

HABILITAT CONSTRUCTION
46-026 ALALOA ST
KANEOHE, HI 96744

HI LUST — **U001236174**
HI UST — **N/A**

Click here for full text details

HI LUST
Facility Id: 9-200739
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-200739
Tank Status: Permanently Out of Use

11
NE
1/4-1/2
0.425 mi.
2243 ft.

Relative: Lower

WINDWARD NISSAN
46 151 KAHUHIPA STREET
KANEOHE, HI 96744

RCRA-CESQG — **1000193229**
HI LUST — **HID982466062**
HI UST
HI Financial Assurance

Click here for full text details

RCRA-CESQG
EPA Id: HID982466062

HI LUST
Facility Id: 9-201374
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-201374
Tank Status: Permanently Out of Use

12 NE 1/4-1/2 0.442 mi. 2332 ft. Relative: Lower

WILLIAM H. PETERSON — HI LUST, HI UST — U003541872, N/A
46-145 MALINA PL
KANEOHE, HI 96744

Click here for full text details

HI LUST
Facility Id: 9-207013
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-207013
Tank Status: Permanently Out of Use

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13 ENE 1/2-1 0.522 mi. 2756 ft. Relative: Lower

KANEOHE CHEVRON SERVICE — HI SHWS, HI LUST, HI UST, HI Financial Assurance — U001236266, N/A
45-1002 KAMEHAMEHA HWY
KANEOHE, HI 96744

Click here for full text details

HI LUST
Facility Id: 9-201109
Facility Status: Site Cleanup Completed (NFA)

HI UST
Facility Id: 9-201109
Tank Status: Permanently Out of Use

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14 NE 1/2-1 0.613 mi. 3234 ft. Relative: Lower

CAESAR'S CLEANERS — HI SHWS, HI SPILLS, HI ENG CONTROLS — S108859653, N/A
45-564 KAMEHAMEHA HWY
KANEOHE, HI

Click here for full text details

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15 West 1/2-1 0.616 mi. 3254 ft. Relative: Higher

KAMEHAMEHA SCHOOLS - HEEIA PRESCHOOL DEVELOPMENT — HI SHWS — S110061576, N/A
46-430 KAHUHIPA ST
KANEOHE, HI 96744

Click here for full text details

16 NNE 1/2-1 0.730 mi. 3857 ft. Relative: Lower

SAFEWAY STORE #207 — HI SHWS, HI SPILLS, HI INST CONTROL — 1006819979, N/A
46-065 KAMEHAMEHA HWY
KANEOHE, HI 96744

Click here for full text details

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17 WSW 1/2-1 0.897 mi. 4736 ft. Relative: Higher

HAIKU VALLEY REHABILITATION SITE — HI SHWS, HI BROWNFIELDS — S108859938, N/A
46-500 HAIKU RD
KANEOHE, HI 96744

Click here for full text details

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
HI	AIRS	List of Permitted Facilities	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	BROWNFIELDS	Brownfields Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	CDL	Clandestine Drug Lab Listing	Department of Health	08/04/2010	09/10/2010	10/22/2010
HI	DRYCLEANERS	Permitted Drycleaner Facility Listing	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	ENG CONTROLS	Engineering Control Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	Financial Assurance	Financial Assurance Information Listing	Department of Health	12/01/2014	12/19/2014	01/28/2015
HI	INST CONTROL	Sites with Institutional Controls	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	LUST	Leaking Underground Storage Tank Database	Department of Health	12/16/2014	12/19/2014	01/28/2015
HI	RGA HWS	Recovered Government Archive State Hazardous Waste Facilitie	Department of Health		07/01/2013	01/08/2014
HI	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Health		07/01/2013	01/17/2014
HI	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	Department of Health		07/01/2013	01/03/2014
HI	SHWS	Sites List	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	SPILLS	Release Notifications	Department of Health	12/02/2014	12/22/2014	01/28/2015
HI	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	03/10/2012	01/03/2013	02/11/2013
HI	SWF/LF	Permitted Landfills in the State of Hawaii	Department of Health	09/17/2012	04/03/2013	05/10/2013
HI	UIC	Underground Injection Wells Listing	Department of Health	02/07/2013	02/12/2013	04/09/2013
HI	UST	Underground Storage Tank Database	Department of Health	12/18/2014	12/19/2014	01/28/2015
HI	VCP	Voluntary Response Program Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	04/22/2013	03/03/2015	03/09/2015
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2011	02/26/2013	04/19/2013
US	CERCLIS	Comprehensive Environmental Response, Compensation, and Liab	EPA	10/25/2013	11/11/2013	02/13/2014
US	CERCLIS-NFRAP	CERCLIS No Further Remedial Action Planned	EPA	10/25/2013	11/11/2013	02/13/2014
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	07/01/2014	09/10/2014	10/20/2014
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	01/23/2015	02/13/2015	03/09/2015
US	CORRACTS	Corrective Action Report	EPA	12/09/2014	12/29/2014	01/29/2015
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DELISTED NPL	National Priority List Deletions	EPA	12/16/2014	01/08/2015	02/09/2015
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	07/31/2012	08/07/2012	09/18/2012
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EDR US Hist Auto Stat	EDR Exclusive Historic Gas Stations	EDR, Inc.			
US	EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	09/29/2014	09/30/2014	11/06/2014
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	07/21/2014	10/07/2014	10/20/2014
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
US	FEMA UST	Underground Storage Tank Listing	FEMA	01/01/2010	02/16/2010	04/12/2010
US	FINDS	Facility Index System/Facility Registry System	EPA	08/16/2014	09/10/2014	10/20/2014
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	06/06/2014	09/10/2014	09/18/2014
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	12/29/2014	12/30/2014	03/09/2015
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	01/23/2015	02/06/2015	03/09/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	02/01/2013	05/01/2013	11/01/2013

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	01/30/2015	02/05/2015	03/09/2015
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/10/2015	03/13/2015
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	01/28/2015	01/30/2015	03/13/2015
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	01/08/2015	01/08/2015	02/09/2015
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2005	12/08/2006	01/11/2007
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	02/01/2013	05/01/2013	01/27/2014
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	01/30/2015	02/05/2015	03/13/2015
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/13/2015	03/13/2015
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	01/29/2015	01/30/2015	03/13/2015
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	12/14/2014	02/13/2015	03/13/2015
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	09/29/2014	10/01/2014	11/06/2014
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	11/25/2014	11/26/2014	01/29/2015
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	02/18/2014	03/18/2014	04/24/2014
US	LUCIS	Land Use Control Information System	Department of the Navy	12/03/2014	12/12/2014	01/29/2015
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	12/29/2014	01/08/2015	01/29/2015
US	NPL	National Priority List	EPA	12/16/2014	01/08/2015	02/09/2015
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	07/01/2014	10/15/2014	11/17/2014
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	02/01/2011	10/19/2011	01/10/2012
US	PRP	Potentially Responsible Parties	EPA	10/25/2013	10/17/2014	10/20/2014
US	Proposed NPL	Proposed National Priority List Sites	EPA	12/16/2014	01/08/2015	02/09/2015
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	10/07/2014	10/08/2014	10/20/2014
US	RCRA NonGen / NLR	RCRA - Non Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RMP	Risk Management Plans	Environmental Protection Agency	08/01/2014	08/12/2014	11/06/2014
US	ROD	Records Of Decision	EPA	11/25/2013	12/12/2013	02/24/2014
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	03/07/2011	03/09/2011	05/02/2011
US	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2011	07/31/2013	09/13/2013
US	TSCA	Toxic Substances Control Act	EPA	12/31/2012	01/15/2015	01/29/2015
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	09/14/2010	10/07/2011	03/01/2012
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/16/2014	10/31/2014	11/17/2014
US	US AIRS MINOR	Air Facility System Data	EPA	10/16/2014	10/31/2014	11/17/2014

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	12/22/2014	12/22/2014	01/29/2015
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	11/19/2014	11/21/2014	01/29/2015
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	12/30/2014	12/31/2014	01/29/2015
US	Oil/Gas Pipelines	GeoData Digital Line Graphs from 1:100,000-Scale Maps	USGS			
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
US	USGS 7.5' Topographic Map	Scanned Digital USGS 7.5' Topographic Map (DRG)	USGS			

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

KOOLUA VILLAGE
45-1027 KAMAU PL.
KANEOHE, HI 96744

TARGET PROPERTY COORDINATES

Latitude (North):	21.4124 - 21˚ 24' 44.64''
Longitude (West):	157.8083 - 157˚ 48' 29.88''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	623517.1
UTM Y (Meters):	2368119.8
Elevation:	131 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	21157-D7 KANEOHE, HI
Most Recent Revision:	Not reported

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

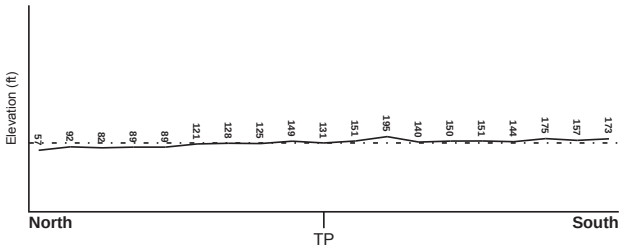
TOPOGRAPHIC INFORMATION

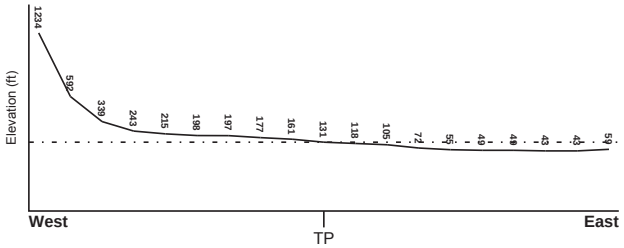
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General ENE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 131 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
HONOLULU, HI	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 15003C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
KANEOHE	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

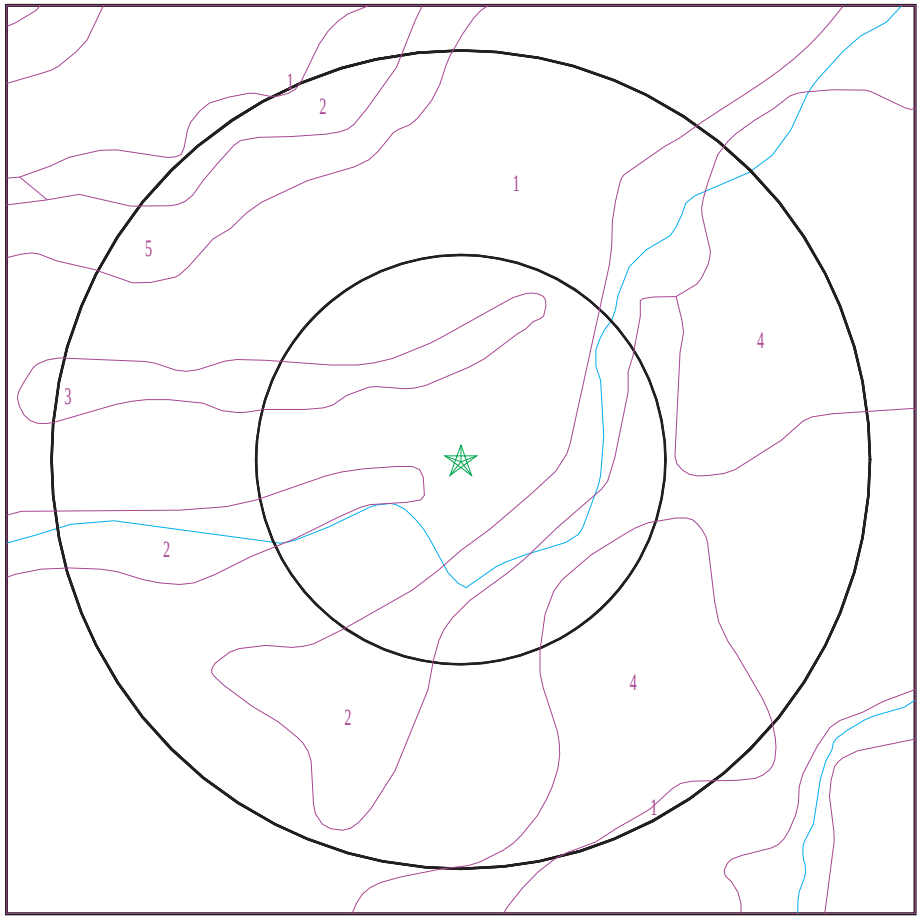
Era: -
System: -
Series: -
Code: N/A *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: -

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4237094.210s



★ Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME: Koolua Village ADDRESS: 45-1027 Kamau Pl. Kaneohe HI 96744 LAT/LONG: 21.4124 / 157.8083	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.210s DATE: March 17, 2015 5:43 pm

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DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Lolekaa

Soil Surface Texture: silty clay

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	MH-K (proposed)	Max: 42 Min: 4.23	Max: 5.5 Min: 4.5
2	9 inches	42 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	MH-K (proposed)	Max: 4.23 Min: 0.42	Max: 5.5 Min: 3.5
3	42 inches	64 inches	paragravelly loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	MH-K (proposed)	Max: 4.23 Min: 1.41	Max: 5 Min: 3.5

Soil Map ID: 2

Soil Component Name: Hanalei

Soil Surface Texture: silty clay

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 30 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	12 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 14 Min: 1.41	Max: 6.5 Min: 4.5
2	12 inches	25 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.1
3	25 inches	35 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.1

Soil Map ID: 3

Soil Component Name: Lolekaa

Soil Surface Texture: silty clay

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 42 Min: 4.23	Max: 5.5 Min: 4.5
2	9 inches	42 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 4.23 Min: 0.42	Max: 5.5 Min: 3.5
3	42 inches	64 inches	paragravelly loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 4.23 Min: 1.41	Max: 5 Min: 3.5

Soil Map ID: 4

Soil Component Name: Alaeloa

Soil Surface Texture: silty clay

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 42 Min: 4.23	Max: 6 Min: 5.1
2	48 inches	57 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 1.41 Min: 0.42	Max: 6 Min: 4.5
3	57 inches	70 inches	stony silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 1.41 Min: 0.42	Max: 6 Min: 4.5
4	9 inches	18 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 4.23 Min: 0.42	Max: 6 Min: 4.5
5	29 inches	48 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 4.23 Min: 1.41	Max: 6 Min: 4.5
6	18 inches	29 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 4.23 Min: 0.42	Max: 6 Min: 4.5

Soil Map ID: 5

Soil Component Name: Lolekaa

Soil Surface Texture: silty clay

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 42 Min: 4.23	Max: 5.5 Min: 4.5
2	9 inches	42 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 4.23 Min: 0.42	Max: 5.5 Min: 3.5
3	42 inches	64 inches	paragravelly loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 4.23 Min: 1.41	Max: 5 Min: 3.5

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	USGS40000270700	1/4 - 1/2 Mile North
B3	USGS40000270707	1/4 - 1/2 Mile NW
C6	USGS40000270681	1/2 - 1 Mile West
D10	USGS40000270611	1/2 - 1 Mile SSW
E11	USGS40000270609	1/2 - 1 Mile SSW

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

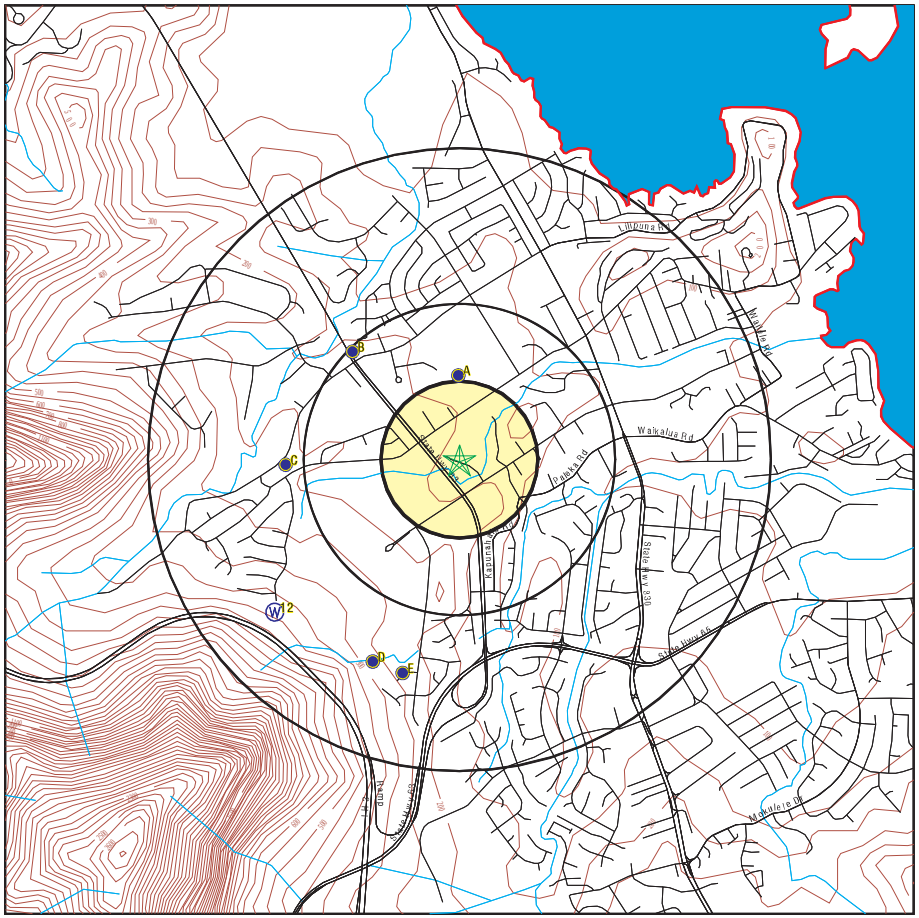
MAP ID	WELL ID	LOCATION FROM TP
D9	HI0000317	1/2 - 1 Mile SSW

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A2	HI8000000003317	1/4 - 1/2 Mile North
B4	HI8000000003323	1/4 - 1/2 Mile NW
C5	HI8000000003290	1/2 - 1 Mile West
D7	HI8000000003216	1/2 - 1 Mile SSW
E8	HI8000000003214	1/2 - 1 Mile SSW
12	HI8000000003233	1/2 - 1 Mile SW

PHYSICAL SETTING SOURCE MAP - 4237094.210s



County Boundary
Major Roads
Contour Lines
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons

Groundwater Flow Direction
Indeterminate Groundwater Flow at Location
Groundwater Flow Varies at Location

SITE NAME: Koolua Village ADDRESS: 45-1027 Kamau Pl. Kaneohe HI 96744 LAT/LONG: 21.4124 / 157.8083	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.210s DATE: March 17, 2015 5:43 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
A1 **North** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270700**
A2 **North** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003317**
B3 **NW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270707**
B4 **NW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003323**
C5 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003290**
C6 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270681**
D7 **SSW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003216**
E8 **SSW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003214**
D9 **SSW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FRDS PWS**	**HI0000317**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
D10 **SSW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270611**
E11 **SSW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270609**
12 **SW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003233**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for HONOLULU County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 96744

Number of sites tested: 22

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.091 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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EXHIBIT C

Section 106 Consultation &

Architectural Inventory Survey Information

DAVID Y. IGE
GOVERNOR OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555
KAPOLEI, HAWAII 96707

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

KEKOA KALUHIWA
FIRST DEPUTY

JEFFREY T. PEARSON
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

November 16, 2015

IN REPLY REFER TO:
LOG: 2015.02939, 2015.03569
DOC: 1509JLP40
Architecture, Archaeology,
History and Culture

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
P.O. Box 17907
Honolulu, HI 96817

Dear Mr. Ouansafi,

SUBJECT: **Chapter 6E-8 and National Historic Preservation Act (NHPA) Section 106 Consultation – Department of Housing and Urban Development (HUD)**
Department of Human Services, Hawaii Public Housing Authority
Koʻolau Village Rehabilitation Project - 45-1027 Kamau Place
Kāneʻohe Ahupuaʻa, Koʻolaupoko District, Island of Oʻahu
TMK: (1) 4-5-023:008

Thank you for your submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services (DHS), Hawaii Public Housing Authority (HPHA) consultation with SHPD in accordance with 36 CFR 800.3, and pursuant to Hawaii Revised Statutes (HRS), Chapter 6E. SHPD received another submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience.

Your submittal indicates that DHS/HPHA is requesting the State Historic Preservation Officer's (SHPO) concurrence with a determination of "no effect" for the proposed HUD repair and rehabilitation improvement projects. HUD funding will be expended under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants and other grants. The repair and rehabilitation project will involve 43 existing public housing projects located throughout the State of Hawaii over the next five (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 on their behalf. This letter addresses the rehabilitation of Koʻolau Village at 45-1027 Kamau Place, Kāneʻohe, Oʻahu.

DHS/HPHA has identified one of the 43 project site and it's area of potential effect as the 14.02 acre parcel owned by the State of Hawaii, Hawaii Housing Authority identified as TMK: (1) 4-5-023:008. In addition DHS/HPHA has indicated at this stage of the planning process, they are unclear whether this project area identified as TMK: (1) 4-5-023:008, will require any ground disturbances.

Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA Section 106), and Hawaii Revised Statutes §6E-8 we have reviewed the undertaking at 45-1027 Kamau Place, Kaneohe, Oahu.

The SHPO's determination, for the purpose of NHPA Section 106, is that the proposed undertaking will have **no adverse effect** and that, for the purposes of HRS §6E-8, **no historic properties affected**, within the area of potential effects (APE) for the above cited undertaking **provided the following conditions are met:**

- There will be no ground disturbing activities within your final scope of work. If ground disturbing activity is anticipated, DHS must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation;
- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;
- Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;
- Submit a TMK map showing the full extent of the project area within the affected parcel(s);
- Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Summary of land use history, such as previous intensive cultivation, grubbing or grading;
- Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions regarding archaeological resources or concerns please contact Susan Lebo at (808) 692-8019 or at Susan.A.Lebo@hawaii.gov. For any history and cultural concerns please contact Ka‘āhiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov. Please contact Jessica Puff at Jessica.L.Puff@hawaii.gov or at (808) 692-8023 for any questions regarding architectural concerns or this letter.

Sincerely,

Alan A. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

ARCHITECTURAL INVENTORY SURVEY
HAWAII PUBLIC HOUSING AUTHORITY
(FEDERAL PROJECTS)

Prepared by
Fung Associates, Inc.
1833 Kalakaua Avenue, Suite 1008
Honolulu, HI 96815

For

Hawaii Public Housing Authority
and
HHF Planners

July, 2015

KOOLAU VILLAGE

Project	Koolau Village
Architect	Edwin Miyamasu
Built	1969, Major renovation in 1999
National Register Eligibility	Not Eligible

Description

Located in a quiet enclave off Keaahala Road in Kaneohe, Koolau Village is accessed by Kamau Place, which serves as a spine for the housing project, with buildings on both sides of the road and also bordering a long parking lot off the street. The property is comprised of 18 buildings situated on a 13.99 acre lot. It features two-story buildings with lateral running, composition shingled gable roofs with open, overhanging eaves and exposed rafter tails. The townhouses sit on poured-in-place concrete slab foundations, and have tongue-and-groove walls on the front and rear elevations, and cmu block end walls and partition walls between each unit. The smooth, scored, cmu blocks impart the impression of brick laid in soldier courses. The garbage enclosures also utilize this same block.

The buildings vary in size and house one-, two-, three-, and four-bedroom units, with a total of 80 apartments. Those buildings with four-bedroom units, also contain one-bedroom units at the second story at the ends of the building. These are accessed by exterior concrete stairs with wrought iron railings. The buildings were renovated in 1999, and as a result now have a more elaborate façade with a non-historic coping between the first and second stories, and a new gabled entry for each unit. In addition, the once open utility areas to the rear have been enclosed with decorative concrete block featuring a curved V pattern, and the one-bedroom units had utility rooms with tongue-and-groove walls constructed above the lower floor's four-bedroom unit's utility room. Metal clothes line poles are located in the grassy yards behind the buildings.

Typical Building Exterior

CMU Blocks

Exterior Concrete Stairs

Building Rear

Interior Wood Stairs

Left: Renovated Kitchen

Other than the one-bedroom units, all other units have two floors, with wood stairs running between the first and second floors. The stairs have three steps running between the ground floor and a landing, and then take a quarter turn to the right before continuing another eleven steps to the second floor. The original jalousie windows for each unit appear to have been replaced by more recent jalousie windows, and the bathrooms and kitchens have been remodeled. Bedroom closets have no doors, a common feature in most HHA housing.

No original landscaping appears to remain.

History and Significance

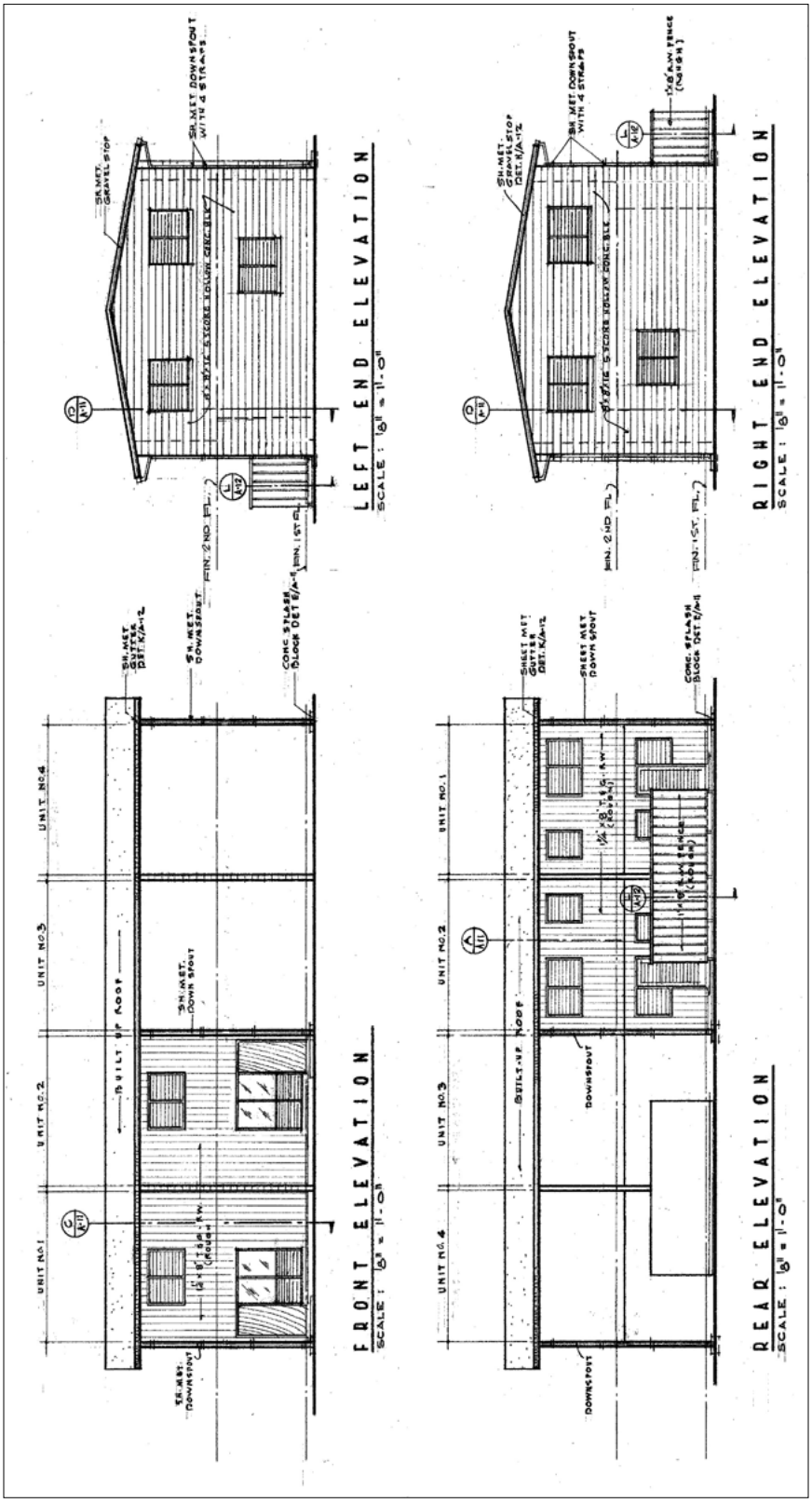
A federally supported project, planning for the Koolau Village Housing project commenced in 1964. However, difficulty in finding an appropriate site with proper zoning delayed the project for several years. Various objections were raised to the project by members of the Kaneohe community, including the project's possible negative impact on its neighborhood, and the placing of more children in already crowded schools. The HHA responded that the latter should not be a concern, as most all the families which would eventually occupy the new project most likely already resided in Kaneohe, and as for project impacts, the agency asserted the project was too small to result in any negative affects.

The HHA was finally able to procure a remnant parcel of the Hawaii State Hospital's grounds which was cut off from the rest of the hospital by the construction of Kahekili Highway. They broke ground on the project at this site in July 1968, the earliest known HHA project on the windward side of Oahu. Designed to be "in keeping with the character of the neighborhood"[31], the project design strove to avoid the "institutional appearance" of previous projects following Bauhaus precepts. David Malo Circle, Hui o Hanamaulu, Kapaa, Eleele Homes, Kalaheo Homes, Punahele Homes, and Koolau Village represent a new design direction for HHA projects which incorporated a more romantic approach typical of suburban developments of the late nineteenth and early twentieth century, with buildings sited along curving roadways, and set back from the street by green lawns.

Although the layout of Koolau Village remains intact, the buildings comprising the project no longer retain their historic integrity, as a result of the 1999 renovation of the property. The historic, plain, unadorned facades of the buildings have been supplanted by a post-modern appearance with the addition of an asphalt shingle, shed roof coping between the first and second stories, and the construction of a single-story, gable roofed portico at the front entries. In addition, on the interiors the kitchens and bathrooms were remodeled and a new utility room was added to the one-bedroom units, while the other units' utility rooms were enclosed. The windows also appear to have been replaced. The individual buildings in both Lokahi and Hauiki retain much more of their design integrity than Koolau Village, and should be viewed as better examples of the HHA's move away from the German Bauhaus inspired, Zeilenbau plan and its associations with institutional architecture.

This property does not appear to meet the criteria for listing in the National Register of Historic Places due to its lack of integrity.

31 Star Bulletin, December 13, 1967.



Original Two-Bedroom Unit Exterior Plan
Ed Miyamasu and Assoc., *Two Bedroom Unit Exterior Elevation, Section & Stair Detail* Sheet A-5, 1968, Hawaii Housing Authority.

HAWAII PUBLIC HOUSING AUTHORITY

ENVIRONMENTAL REVIEW

KĀNE`OHE APARTMENTS

Kāne`ohe, O`ahu

AMP 45
HPHA No. 1069

Prepared for:

State of Hawaii
Hawaii Public Housing Authority

Prepared by:

HHF PLANNERS
places for people

U.S. Department of Housing and Urban Development
451 Seventh Street, SW
Washington, DC 20410
www.hud.gov

espanol.hud.gov

Environmental Review for Activity/Project that is Categorically Excluded Subject to Section 58.5

Pursuant to 24 CFR 58.35(a)

Project Information

Project Name: Kāneʻohe Apartments (AMP 45)

Responsible Entity: Hawaii Public Housing Authority
1002 North School Street
Honolulu, HI 96817

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

State/Local Identifier: State of Hawaiʻi

Preparer: Mr. Scott Ezer, Vice President
HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaiʻi 96813

Certifying Officer Name and Title: Mr. David Y. Ige
Governor, State of Hawaiʻi

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

Consultant (if applicable): HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaiʻi 96813

Direct Comments to: Mr. Hakim Ouansafi, Executive Director
Hawaii Public Housing Authority
1002 North School Street
Honolulu, Hawaiʻi 96817

Project Location: 45-507 and 45-513 Pahia Road
Kāneʻohe, Hawaiʻi 96744

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]**:**

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a "major construction activity" and would involve one or a combination of several HUD designated categories of actions.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent;
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons;
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland;
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation;
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls);
7. Interior and exterior renovations and rehabilitation;
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site;
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Level of Environmental Review Determination:

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.5. Compliance with and completion of conformance determinations for other statute, executive order, or regulation has been completed and support the Categorical Exclusion.

Funding Information

Grant Number	HUD Program	Funding Amount
To be determined	Capital Fund	To be determined
To be determined	Economic Development Initiative Special Project Grant	To be determined
To be determined	Other Grants	To be determined

Estimated Total HUD Funded Amount:

To be determined by HUD using a formula and based upon federal budget.

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]**:**

Depends upon funds available.

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	*The project is not within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.*
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☒	*The State of Hawai'i does not have any designated coastal barrier resource units. (http://www.fws.gov/CBRA/Maps/Mapper.html)*
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes ☐ No ☒	*As indicated in the Flood Insurance Rate Map Panel 15003C0270J, Panel Effective Date November 5, 2014, a portion of the northern boundary of the property is within Flood Hazard areas while the large majority of the property is within Flood Zone X (outside the 0.2% annual chance floodplain). Flood Hazard areas include Zone AEF (floodway areas in Zone AE), Zone AE (1% annual chance flood, base flood elevation determined) and Zone XS (areas of 0.2% annual chance flood). These flood areas cover grassed landscape and parking areas within the housing project. Residential buildings are not located within the flood area. This is a flood hazard consisting of the concrete-lined stream plus any adjacent floodplain areas that must be kept free of encroachment so the 1-percent-annual-chance flood can be carried.* *No significant impacts to existing housing units or floodplain conditions are expected as a result of repair and rehabilitation improvements. The open*

		grassed areas and parking lot portions within Flood Zone would need "no-rise" certifications for any proposed fill or grading to ensure flood heights for nearby areas are not adversely affected. Design plans would be submitted to pertinent State and County agencies for review and approval as part of the design review process. Any required site modifications would comply with applicable flood regulations and design standards. Because the housing project is on State-owned property, it would typically be exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). Therefore, the project will comply with applicable flood insurance standards as warranted.
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5		
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes ☐ No ☒	*The State of Hawai'i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. EPA's Green Book for currently designated "nonattainment areas" as of June 2015. Planned repair and rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.*
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes ☐ No ☒	*Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai'i's Coastal Zone Management (CZM) program.*
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☐ No ☒	*There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.*
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes ☒ No ☐	*The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or*

		proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (USFWS) in their letter dated September 28, 2015 which is included in the Appendices, while project-specific mitigation measures are identified in the following section.
Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes ☐ No ☒	*A field inspection identified three existing above-ground explosive or flammable material storage container with a combined capacity that exceeds 100 gallons. The liquid gas tank enclosure is located against the wall of Building B. The tanks are enclosed on three sides by a CMU wall with a concrete roof and a chain link fence across the front. The AMP Manager said the tanks are owned by the gas company. Repair and rehabilitation improvements for this project should not impact this fuel storage tank. Should rehabilitation improvements increase the density of the project (e.g. increase the number of units and associated persons exposed to the hazard within the acceptable separation distance), mitigative measures would need to be implemented for the fuel tank in compliance with HUD requirements.*
Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes ☐ No ☒	*The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.*
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes ☒ No ☐	*As indicated under the updated November 5, 2014 Flood Insurance Rate Map (FIRM), a portion of the northern boundary of the property is within Flood Hazard areas while the large majority of the property is within Flood Zone X (outside the 0.2% annual chance floodplain). Flood Hazard areas include Zone AEF (floodway areas in Zone AE), Zone AE (1% annual chance flood, base flood elevation determined) and Zone XS (areas of 0.2% annual chance flood). These flood areas cover grassed landscape and parking areas within the housing project. Residential buildings are not located within the flood area. These flood areas are associated with Kea‘ahala Stream that*

		runs behind (north) the property, and this section of the stream along the property is a concrete lined channel. *A flood compliance report prepared as part of the prior 2011 Environmental Review document for this housing project included an updated floodplain management engineering report and determined that rehabilitation improvement should not have significant impact on housing units or existing floodplain conditions or pose a significant threat to human life, health, safety, and property as defined by current Federal and State guidelines that would require mitigation. The compliance report utilized a June 2005 FIRM for the project site that showed the property affected by a larger Zone AEF (Special Flood Hazard Area) than that designated under the current November 2014 updated FIRM. Therefore, the project site is less affected by flood hazards under the current FIRM.* *Areas located within Flood Zone AEF and AE would need "no-rise" certifications for any proposed fill or grading to ensure flood heights for nearby areas are not adversely affected. Design plans would be submitted to pertinent State and County agencies for review and approval as part of the design review process. Any required site modifications would comply with applicable flood regulations and design standards. The implementation of the design review process and compliance with pertinent flood regulations should minimize any impacts on public health, safety, and welfare. The project is in compliance with Executive Order 11988.*
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes ☐ No ☒	*Building A was constructed in 1965. Building B was constructed in 1972. Both buildings underwent a rehabilitation project completed in 1984, and thus 1984 is the current year of initial occupancy used by HPHA. From the Year Completed and Occupied, both buildings are approx. 31 years old. To be eligible for listing in the National Register of Historic Places (NRHP), a property must meet the National Register criteria for evaluation which involves examining its integrity, significance, and age (generally at least 50 years old). Due to its age, this housing project does not meet the eligibility criteria to be evaluated for the NRHP. In a letter to the State Historic Preservation Officer dated July 23,*

		2015, the HPHA determined that no historic properties would be affected by repair and rehabilitation improvements for this housing project. No comments or objections about this no effect determination were received.
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes ☐ No ☒	*The project site is not situated along a highway or major arterial roadway that has a high volume of vehicular traffic that may generate significant noise. The HUD noise calculator estimated noise levels at the project site to be 50.8 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.*
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes ☐ No ☒	*The housing project is located within the O'ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation.*
Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☐ No ☒	*There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.* *(http://www.fws.gov/wetlands/data/mapper.HTML)*
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes ☐ No ☒	*There are no Wild and Scenic Rivers in Hawai'i, which excludes this project from mitigation or formal consultation requirements.* *(http://www.rivers.gov/map.php)*
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes ☐ No ☒	*Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, these improvements would not result in disproportionately high or adverse human health and environmental effects, including social and*

		economic effects on minority populations and low-income populations. Improvements should benefit low-income and minority populations living within this housing project.

Field Inspection (Date and completed by)**:** June 04, 2015
Questor Lau, Planner
HHF Planners

Summary of Findings and Conclusions:

Repair and rehabilitation improvements implemented for this existing housing project by HPHA should not result in significant environmental impacts based upon research data collected, a field inspection, consultation with the site manager and maintenance staff, consultation with pertinent resource agencies, and prior HPHA experience implementing repair and rehabilitation improvements. Therefore, repair and rehabilitation improvements would comply and be consistent with the statutes, executive orders, and regulations addressed. Furthermore, HPHA would evaluate improvements planned to ensure the work is consistent with the designated categories of actions described under the project description section. Compliance with these factors evaluated are further addressed in the attached Source Documentation Statutory Worksheet along with relevant technical reports/assessments.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Law, Authority, or Factor	Mitigation Measure
Executive Order 11988, particularly section 2(a); 24 CFR Part 55	*The portion of the property located within Flood Zone (AEF and AE) would need "no-rise" certifications for any proposed fill or grading to ensure flood heights for nearby areas are not adversely affected. Design plans would be submitted to pertinent State and County agencies for review and approval as part of the design review process. Any required site modifications would comply with applicable flood regulations and design standards.*
Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	*Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.* *Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.* *Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.* *Newell's shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.* *Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No*

	potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season. *<u>Hawaiian Waterbirds</u>: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo'i, impoundments or other vegetated water bodies.* *1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols.* *2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.* *3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.* *In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.* *<u>Additional Measures:</u> The following additional measures would be implemented:* *1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.*

Determination:

☐ This categorically excluded activity/project converts to **EXEMPT** per Section 58.34(a)(12), because it does not require any mitigation for compliance with any listed statutes or authorities, nor requires any formal permit or license; **Funds may be committed and drawn down after certification of this part** for this (now) EXEMPT project; OR

☒ This categorically excluded activity/project cannot convert to Exempt status because one or more statutes or authorities listed at Section 58.5 requires formal consultation or mitigation. Complete consultation/mitigation protocol requirements, **publish NOI/RROF and obtain "Authority to Use Grant Funds"** (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR

☐ This project is not categorically excluded OR, if originally categorically excluded, is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

Preparer Signature: Scott Ezer Date: 11-10-15

Name/Title/Organization: Mr. Scott Ezer, Vice President
HHF Planners

Responsible Entity Agency Official Signature:

David Y Ige Date: APR 28 2016

Name/Title: Mr. David Y. Ige, Governor

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

Kāneʻohe Apartments (HA # 1069)

TMK: (1) 4-5-019:026

Hawaiʻi Public Housing Authority (HPHA) Environmental Review

SOURCE DOCUMENTATION (SD) STATUTORY WORKSHEET

Site Visit Date: June 04, 2015
Prepared By: Questor Lau

The Kāneʻohe Apartments housing project is located in the Kāneʻohe community on the island of Oʻahu. Kāneʻohe is situated in Windward Oʻahu, to the west of Kailua and the Kāneʻohe Marine Corps Base.

The housing site is positioned just west of Kamehameha Highway and along a drainage canal. Access is provided by Pahia Road. This housing project is within HPHA's Asset Management Project (AMP) 45 which includes five other housing projects within the Windward district.

The property consists of 0.43 acres, and is identified as Tax Map Key (TMK) No. (1) 4-5-019:026. The housing project is comprised of two low-rise apartment buildings with one- and two-bedroom units. Building A was first occupied in 1965 and has a street address of 45-513 Pahia Road. Building B was originally occupied in 1972 and has a street address of 45-507 Pahia Road. Both buildings underwent a rehabilitation project that was completed in 1984, and thus 1984 is the current year of initial occupancy used by HPHA[1]. Building A is comprised of both one- and two-bedroom units, and Building B only has two-bedroom units. The State's land use designation for the property is the "Urban District." The City's zoning for the parcel is A-2 Medium-Density Apartment.

The project site is not located within a tsunami evacuation zone and the majority of the site is within Zone X, which is determined to be areas outside the 500-year floodplain. However, a portion of the northern boundary of the property is within a Flood Hazard Zone AE Floodway area associated with Keaʻahala Stream. This floodway is associated with the concrete lined drainage channel for the stream. Any adjacent floodplain areas must be kept free of encroachment so the 1-percent-annual-chance flood can be carried (Community Panel Number 15003C0270J, Panel Effective Date November 5, 2014).

The following figures in Exhibit A provide supporting information on this housing project:

Figure 1: Location Map
Figure 2: TMK Map
Figure 3: Site Map
Figure 4: Flood Map

COMPLIANCE FACTORS

[1] Based upon HPHA's AMP Directory file

I. AIRPORT CLEAR ZONES AND ACCIDENT POTENTIAL ZONES (24 CFR PART 51D)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The housing project does not like within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: 24 CFR 51 (D).

Honolulu International Airport Master Plan - 2010 (August 1994), State Department of Transportation, Airports Division;

*Hawai`i Airports and Flying Safety Guide (2012-13, Fifth Edition, Revision 1)* Hawai`i Department of Transportation, Airports Division; and

http://hidot.hawaii.gov/airports/files/2013/01/Airport-Safety-Guide-2012-2013-5rev1.pdf

II. COASTAL BARRIER RESOURCES (COASTAL BARRIER IMPROVEMENT ACT OF 1990 [16 USC 3501])

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawaiʻi does not have any designated coastal barrier resource units.

SUPPORTING DOCUMENTATION:

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/cbra/maps/mapper.html (Date accessed: 6/30/15).

III. FLOOD INSURANCE (FLOOD DISASTER PROTECTION ACT OF 1973 AND NATIONAL FLOOD INSURANCE REFORM ACT OF 1994 [42 USC 4001-4128 AND 42 USC 5154a])

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program.

As indicated in the Flood Insurance Rate Map Panel 15003C0270J, Panel Effective Date November 5, 2014, a portion of the northern boundary of the property is within Flood Hazard areas while the large majority of the property is within Flood Zone X (outside the 0.2% annual chance floodplain). Flood Hazard areas include Zone AEF (floodway areas in Zone AE), Zone AE (1% annual chance flood, base flood elevation determined) and Zone XS (areas of 0.2% annual chance flood). These flood areas cover grassed landscape and parking areas within the housing project. Residential buildings are not located within the flood area. These flood areas are associated with Keaʻahala Stream that runs behind (north) the property, and this section of the stream along the property is a concrete lined channel. This is a flood hazard consisting of the channel of the stream plus any adjacent floodplain areas that must be kept free of encroachment so the 1-percent-annual-chance flood can be carried. Based on its description, this project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal signs of previous flooding problems. An interview with the Asset Management Plan (AMP) Manager also determined that major ponding or flooding issues are currently not an issue for the project site.

Printed: Flood Insurance Rate Map, Panel Number 15003C0270J, Panel Effective Date: November 5, 2014.

Hawaiʻi Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 7/27/15)

IV. CLEAN AIR ACT (40 CFR PARTS 6, 51, 93)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawaiʻi is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. Environmental Protection Agency's Green Book for currently designated "nonattainment areas" as of June 2015. Planned rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.

SUPPORTING DOCUMENTATION:

Printed: *State of Hawaiʻi Annual Summary 2013 Air Quality Data*. State of Hawai'i, Department of Health, July 2014.

U.S. Environmental Protection Agency website at: http://epa.gov/airquality/greenbk/

V. COASTAL ZONE MANAGEMENT ACT (16 USC 1451, SECTIONS 307 (C), (D)

CONTACT:

Mr. John Nakagawa
Office of Planning
Department of Business, Economic Development & Tourism
State of Hawaiʻi
P.O. Box 2359
Honolulu, Hawai'i, 96804-2359

SUPPORTING DOCUMENTS

	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawaiʻi's Coastal Zone Management (CZM) program.

SUPPORTING DOCUMENTATION:

Contact: In an email to the Office of Planning (OP) dated July 27, 2015, the HPHA determined that the use of HUD funds for the implementation of repair and rehabilitation improvements does not require review for consistency with Hawaiʻi's CZM program. The OP confirmed this determination in an email dated July 28, 2015 and it is included in the Appendices.

Experience: Previous reviews conducted by OP in 2003, 2005, and 2010 determined that projects receiving federal funds from HUD do not require CZM federal consistency review. OP's current determination confirms this condition is still applicable. Copies of these prior documentations are included in the Appendices.

VI. CONTAMINATION AND TOXIC SUBSTANCES (24 CFR PART 50.3 & 58.5(I)(2))

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Project Not Affected.

There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.

SUPPORTING DOCUMENTATION:

Field: A site inspection and interview with the Asset Management Project (AMP) Manager and Maintenance Supervisor revealed no presence of any toxic or radioactive materials on the project site that warrant concern. There is a storage room in Building B, however per the AMP Manager, toxic or hazardous materials are not stored onsite and none were seen stored during the site visit.

Study: Environmental Data Resources, Inc. (EDR), conducted a search of available environmental records and prepared a Radius Map Report (Inquiry Number 4237094.202s, March 18, 2015). EDR reviewed more than 25 federal and statewide regulatory databases for information regarding the treatment, storage, disposal and release of toxic chemicals at the project site and within specific radii (generally 1 mile) of the site. A Detail Map within the EDR report documents those sites identified within a 0.25 mile radius of the project site. The EDR report in Exhibit B includes the results of their research findings.

The EDR report notes the following activities within a 0.125 mile radius of the project site. At the project site, a hydrogen sulfide spill was previously reported in 1993 and a response is listed as the activity type. Hydrogen sulfide often results from the bacterial breakdown of organic matter in the absence of oxygen gas, such as in swamps and sewers. Although no other information is provided on this, the spill could have been associated with a sewer leak or something associated with the adjacent stream.

There are several industrial related businesses along Kahuhipa Street situated northwest of the project site and across Keaʻahala Stream. This includes Aloha Island Mart (AIM) Windward Mall (service station), auto repair shops, automotive dealer, and other service stations over 500 feet away from the project site. Leaky underground storage tanks (LUST) were identified for Windward Nissan, but cleaned up.

This project site was not identified as a Formerly Used Defense Site (FUDS) by the U.S. Army Corps of Engineers and is not subject to any cleanup actions for Department of Defense-generated contamination.

VII. ENDANGERED SPECIES (50 CFR PART 402)

CONTACT:
Mr. Loyal Mehrhoff, Field Supervisor
Pacific Islands Administrator
Fish and Wildlife Services
U.S. Department of the Interior
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawaiʻi 96813
Tel. #: 792-9400

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Adverse Effect Subject to Mitigation

The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices.

SUPPORTING DOCUMENTATION:

Contact: A letter from the HPHA dated July 24, 2015 was submitted to the Pacific Island Administrator for the FWS determining that repair and rehabilitation improvements that may be implemented using HUD funds for this housing project would have no likelihood of effect on any listed species or proposed species, or existing or proposed designated critical habitat subject to certain measures. Concurrence with this determination along with proposed minimization and avoidance measures was received from the FWS in a letter dated September 28, 2015 which is included in the Appendices. This housing project is subject to the following minimization and avoidance measures.

Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.

Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.

Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.

Newell's shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the

proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.

Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.

Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro loʻi, impoundments or other vegetated water bodies.

1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols.
2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.
3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.

In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.

Additional Measures: The following additional measures would be implemented:

1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.

Experience: The FWS was previously consulted as part of environmental reviews that were completed in 2005 (39 housing projects) and 2010 (70 housing projects) which supported the determination that repair and rehabilitation improvements would either: 1) have no likelihood of effect for certain housing projects; or 2) not likely adversely affect federally listed species or critical habitat for certain housing projects subject to mitigative measures. A summary of these consultation efforts follows.

2005 Consultation: In a letter dated July 15, 2005, the Housing and Community Development Corporation of Hawaiʻi (predecessor to the HPHA), determined that the implementation of minor repair and rehabilitation improvements for 39 housing projects would not have an adverse effect on federally-listed species or critical habitat. In a letter dated August 11, 2005, the FWS concurred with the HCDCH determination.

2010 Consultation: In a letter dated May 17, 2010, the HPHA informed the FWS that HUD funds would be used to immediately implement repair and rehabilitation improvements for six housing projects on Oʻahu and the island of Hawai`i. In a subsequent letter dated May 21, 2010, the FWS was informed that HPHA would be using HUD funds to implement minor repair and rehabilitation improvements for 64 projects throughout the State. In both letters, the HPHA determined that the repair and rehabilitation improvements were not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat. Based on further consultation and a meeting with FWS staff on June 24, 2010, the HPHA determined that repair and rehabilitation improvements for most of their housing projects would not likely adversely affect any listed or proposed species, or existing or proposed designated habitat, subject to various mitigative measures for certain housing projects.

VIII. EXPLOSIVE AND FLAMMABLE OPERATIONS (24 CFR PART 51C)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact Subject to Conditions and Mitigation, if Applicable.

A field inspection identified three existing above-ground explosive or flammable material storage container with a combined capacity that exceeds 100 gallons. The liquid gas tank enclosure is located against the wall of Building B. The tanks are enclosed on three sides by a CMU wall with a concrete roof and a chain link fence across the front. The AMP Manager said the tanks are owned by the gas company.

Repair and rehabilitation improvements for this project should not impact this fuel storage tank. Should rehabilitation improvements increase the density of the project (e.g. increase the number of units and associated persons exposed to the hazard within the acceptable separation distance), mitigative measures would need to be implemented for the fuel tank in compliance with HUD requirements.

Under CFR Title 24, Part 51, Subpart C, increasing the residential density and number of people under a rehabilitation project using HUD funding would be considered a “HUD-assisted project.” Consequently, the existing fuel storage tank would be subject to standards under this regulation for establishing acceptable separation distances, or the application of the standards can be eliminated or modified if other conditions apply or mitigative measures are provided as identified below. HPHA would need to evaluate site conditions, comply with regulatory requirements, and determine the appropriate measure to implement.

1. The nature of the topography shields the proposed project form the hazard.
2. An existing permanent fire resistant structure of adequate size and strength will shield the proposed project from the hazard.
3. A barrier is constructed surrounding the hazard, at the site of the project, or in between the potential hazard and the proposed project.
4. The structure and outdoor areas used by people are designed to withstand blast overpressure and thermal radiation anticipated from the potential hazard (e.g., the project is of masonry and steel or reinforced concrete and steel construction).

SUPPORTING DOCUMENTATION:

Field: Three above-ground fuel storage tanks, with a combined capacity in excess of 100 gallons, are located against the wall of Building B. The tank are reportedly installed and owned by the gas company.

Printed: 24 CFR, Part 51, Subpart C.

Per CFR Title 24 Part 51.201 (Definitions), rehabilitation and modernization improvements that do not increase the density and number of people being exposed to hazardous operations do not meet the definition of a "HUD-assisted project," and are not subject to acceptable separation distance requirements under this regulation. Increasing the density (e.g. increase the number of units and associated persons exposed to the hazard within the acceptable separation distance) under a rehabilitation project using HUD funding would be considered a "HUD-assisted project." Consequently, the existing fuel storage tank would be subject to standards under this regulation for establishing acceptable separation distances, or the application of the standards can be eliminated or modified if other conditions apply or mitigative measures are provided as identified below. HPHA would need to evaluate site conditions, comply with regulatory requirements, and determine the appropriate measure to implement.

1. The nature of the topography shields the proposed project form the hazard.
2. An existing permanent fire resistant structure of adequate size and strength will shield the proposed project from the hazard.
3. A barrier is constructed surrounding the hazard, at the site of the project, or in between the potential hazard and the proposed project.
4. The structure and outdoor areas used by people are designed to withstand blast overpressure and thermal radiation anticipated from the potential hazard (e.g., the project is of masonry and steel or reinforced concrete and steel construction).

IX. FARMLANDS PROTECTION (7 CFR PART 658)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. Since the property consists of an existing housing development within an urbanized area, no farmlands would be impacted by the implementation of repair and rehabilitation improvements.

Printed: The property is designated for "Urban" use by the State Land Use Commission and the County's zoning for the parcel is RD-3.75 Double-Family Residential District.

Hawai`i Office of Planning website at: http://planning.hawaii.gov/gis/
(Date accessed: 6/30/2015)

X. FLOODPLAIN MANAGEMENT (EXECUTIVE ORDER 11988, 24 CFR PART 55)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
X	Experience
	Study

DETERMINATION:

Status Category: Does Not Adversely Affect Floodplain

As indicated under the updated November 5, 2014 Flood Insurance Rate Map (FIRM), a portion of the northern boundary of the property is within Flood Hazard areas while the large majority of the property is within Flood Zone X (outside the 0.2% annual chance floodplain). Flood Hazard areas include Zone AEF (floodway areas in Zone AE), Zone AE (1% annual chance flood, base flood elevation determined) and Zone XS (areas of 0.2% annual chance flood). These flood areas cover grassed landscape and parking areas within the housing project. Residential buildings are not located within the flood area. These flood areas are associated with Keaʻahala Stream that runs behind (north) the property, and this section of the stream along the property is a concrete lined channel.

A flood compliance report prepared as part of the prior 2011 Environmental Review document for this housing project included an updated floodplain management engineering report and determined that rehabilitation improvement should not have significant impact on housing units or existing floodplain conditions or pose a significant threat to human life, health, safety, and property as defined by current Federal and State guidelines that would require mitigation. The compliance report utilized a June 2005 FIRM for the project site that showed the property affected by a larger Zone AEF (Special Flood Hazard Area) than that designated under the current November 2014 updated FIRM. Therefore, the project site is less affected by flood hazards under the current FIRM.

Areas located within Flood Zone AEF and AE would need "no-rise" certifications for any proposed fill or grading to ensure flood heights for nearby areas are not adversely affected. Design plans would be submitted to pertinent State and County agencies for review and approval as part of the design review process. Any required site modifications would comply with applicable flood regulations and design standards. The implementation of the design review process and compliance with pertinent flood regulations should minimize any impacts on public health, safety, and welfare. The project is in compliance with Executive Order 11988.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal signs of previous flooding problems. An interview with the AMP Manager also determined that no major ponding or flooding issues occur on the project site.

Printed: Flood Insurance Rate Map, Panel 15003C0270J, Panel Effective Date November 5, 2014.

Hawai`i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/ (Date accessed7/21/15)

Experience: A flood compliance report, which included an updated floodplain management engineering report prepared by Sam O Hirota, Inc. in October 2010, was prepared as part of the prior 2011 Environmental Review document for this housing project (Exhibit C). This report determined that rehabilitation improvement should not have significant impact on housing units or existing floodplain conditions or pose a significant threat to human life, health, safety, and property as defined by current Federal and State guidelines that would require mitigation. The compliance report utilized a June 2005 Flood Insurance Rate Map (FIRM) for the project site (Panel 15003C0270J) that showed the property affected by a larger Zone AEF (Special Flood Hazard Area) than that designated under the November 2014 updated FIRM. Therefore, the project site is less affected by flood hazards under the current FIRM.

As indicated under the November 5, 2014 FIRM, a portion of the northern boundary of the property is within Flood Hazard areas while the large majority of the property is within Flood Zone X (outside the 0.2% annual chance floodplain). Flood Hazard areas include Zone AEF (floodway areas in Zone AE), Zone AE (1% annual chance flood, base flood elevation determined) and Zone XS (areas of 0.2% annual chance flood). These flood areas cover grassed landscape and parking areas within the housing project. Residential buildings are not located within the flood area. These flood areas are associated with Keaʻahala Stream that runs behind (north) the property, and this section of the stream along the property is a concrete lined channel. This is a flood hazard consisting of the channel of the stream plus any adjacent floodplain areas that must be kept free of encroachment so the 1-percent-annual-chance flood can be carried.

Apartment residences surveyed in the 2010 engineering report were higher than the adjacent roads with driveways sloping downwards away from Pahia Road and towards the concrete drainage channel. Finished floor elevations for Buildings A and B were above the base flood elevation and ranged from 87 to 95 feet above mean sea level. Runoff on-site appears to sheet flow downwards through the parking lot, and enters the drainage channel through curb breaks at the boundary of the property. Furthermore, the report noted that during the month of December 2008, Kāneʻohe experienced one of the heaviest rainfalls in recent years. The 5-inch rain event was measured by a National Weather Service's rain gauge in the area. Interviews with various witnesses living in units on the property and in the immediate vicinity indicated that flooding had not occurred during the 2008 event. The 2008 event brought rainfall levels were equal to a 100-year storm.

XI. HISTORIC PRESERVATION (NATIONAL HISTORIC PRESERVATION ACT OF 1966; SECTIONS 106 AND 110; 36 CFR, PART 800)

CONTACT:

Ms. Suzanne Case, Chairperson
Department of Land and Natural Resources (DLNR)
State of Hawaiʻi
1151 Punchbowl Street
Honolulu, Hawaiʻi 96813
Tel. #: 587-0400

SUPPORTING DOCUMENTS

X	Field
X	Contact
X	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Effect on Historic Properties

Building A was initially occupied in 1965. Building B was originally occupied in 1972. Both buildings underwent a rehabilitation project that was completed in 1984, and thus 1984 is the current year of initial occupancy used by HPHA[2]. From the Year Completed and Occupied, both buildings are approximately 31 years old. To be eligible for listing in the National Register of Historic Places (NRHP), a property must meet the National Register criteria for evaluation which involves examining its integrity, significance, and age (generally at least 50 years old). Due to its age, this housing project does not meet the eligibility criteria to be evaluated for the NRHP. In a letter to the State Historic Preservation Officer (SHPO) dated July 23, 2015, the HPHA determined that no historic properties would be affected (no effect) by repair and rehabilitation improvements for this housing project. No comments or objections about this no effect determination were received.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not locate any existing or potential archaeological sites (e.g., heiau) or cultural features on the property. An interview with the AMP Manager indicates that no known sites or features are present on the property.

Contact: A letter from the HPHA dated July 17, 2015, which is included in the Appendix, was submitted to the State Historic Preservation Officer [SHPO] (Chair of State Board of Land and Natural Resources) as part of Section 106 consultation determining that no historic properties would be affected (no effect) by repair and rehabilitation improvements that may be implemented using HUD funds for this housing project. The SHPO did not submit any comments or objections on the "no effect" determination for this housing project, which included follow-up e-mails with the State Historic Preservation Division regarding a response. On September 28, 2015, notice of HPHA's determination was also distributed to several native Hawaiian organizations and the various County Planning Departments. No concerns or opposition to this determination was received.

Printed: A review of the U.S. National Parks Service website for the National Register of Historic Places did not identify any historic properties within the limits of this housing project. A similar review of the State DLNR website for the State Register of Historic Places revealed that there are no historic properties within the project site.

[2] Based upon HPHA's AMP Directory file

National Register: U.S. National Park Service website at: http://www.nps.gov/nr/research/ (Date accessed: 7/2/15).

State Register: Hawai`i Department of Land and Natural Resources website at: http://dlnr.hawaii.gov/shpd/state-register/ (Date accessed: 7/2/15).

Experience: In letter to the State Historic Preservation Officer (SHPO) dated April 19, 2011, the HPHA determined that minor repair and rehabilitation improvement at 57 public housing projects throughout Hawaiʻi (including this housing site) would have "no effect" on historic properties. The SHPO had no comments or objections on the "no effect" determination.

XII. NOISE ABATEMENT CONTROL (24 CFR PART 51B)

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Within HUD Noise Standards

The project site is not situated along a highway or major arterial roadway that has a high volume of vehicular traffic that may generate significant noise. The HUD noise calculator estimated noise levels at the project site to be 50.8 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

SUPPORTING DOCUMENTATION:

Field: There were no significant noise generating sources identified within the project site during the site inspection. The subject housing site is located along Pahia Road, and is expected to have low volumes of traffic because traffic in this area would only be to existing residences. Furthermore, an interview with the AMP Manager did not identify any loud noise producing sources in the area. As a result, notable noise sources are predominantly associated with vehicular traffic along adjacent roadways. Traffic noise did not appear significant during the site visit.

Study: The HUD day/night noise level calculator was used to estimate approximate traffic noise levels at the project site. Kamehameha Highway is a primary County roadway located approximately 190 feet east of the project site. Kamehameha Highway serves vehicular traffic entering and exiting Kaneohe along with providing access to other surrounding urban areas. The project site is accessed through a Pahia Road that connects to Kamehameha Highway and would have considerably less average daily traffic because it only serves a few properties in the area and terminates near the project site. Given the distance of the center line of Kamehameha Highway to the project site (about 190 feet), the estimated noise levels at the project site using this HUD calculator was 50.8 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to

significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

XIII. SOLE SOURCE AQUIFER (40 CFR PART 149)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact on Sole Source Aquifer

The housing project is located within the Oʻahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation. However, if exceptional circumstances require compliance steps with any of these authorities, such compliance must be established and documented prior to approving the site-specific loan or grant.

SUPPORTING DOCUMENTATION:

Printed: This determination was based upon review of the Sole Source Aquifer Memorandum of 4/30/90 (Sections II.B.1 and II.B.2) and consideration of the type of rehabilitation related improvements that would be conducted for this project.

XIV. WETLANDS PROTECTION (EXECUTIVE ORDER 11990)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the property did not identify the presence of any wetlands.

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/wetlands/data/mapper.html (Date accessed 7/23/2015).

XV. WILD AND SCENIC RIVERS ACT (16 USC 1271, SECTION 7 (B), (C))

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no Wild and Scenic Rivers in Hawaiʻi, which excludes this project from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: National Wild and Scenic Rivers System website at: http://www.rivers.gov/index.php (Date accessed: 6/30/2015).

XVI. ENVIRONMENTAL JUSTICE (EXECUTIVE ORDER NO. 12898)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Conflict with Requirements

Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, repair and rehabilitation improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations. Repair and rehabilitation improvements should benefit low-income and minority populations living within this housing project.

SUPPORTING DOCUMENTATION:

Printed: Executive Order 12898.

U.S. Department of Housing and Urban Development website at: https://www.hudexchange.info/environmental-review/environmental-justice/

EXHIBIT A

Location Map, TMK Map, Site Map, Flood Map, and Site Photos

Source: State of Hawai‘i GIS Data and Google Earth Pro - 1/12/13

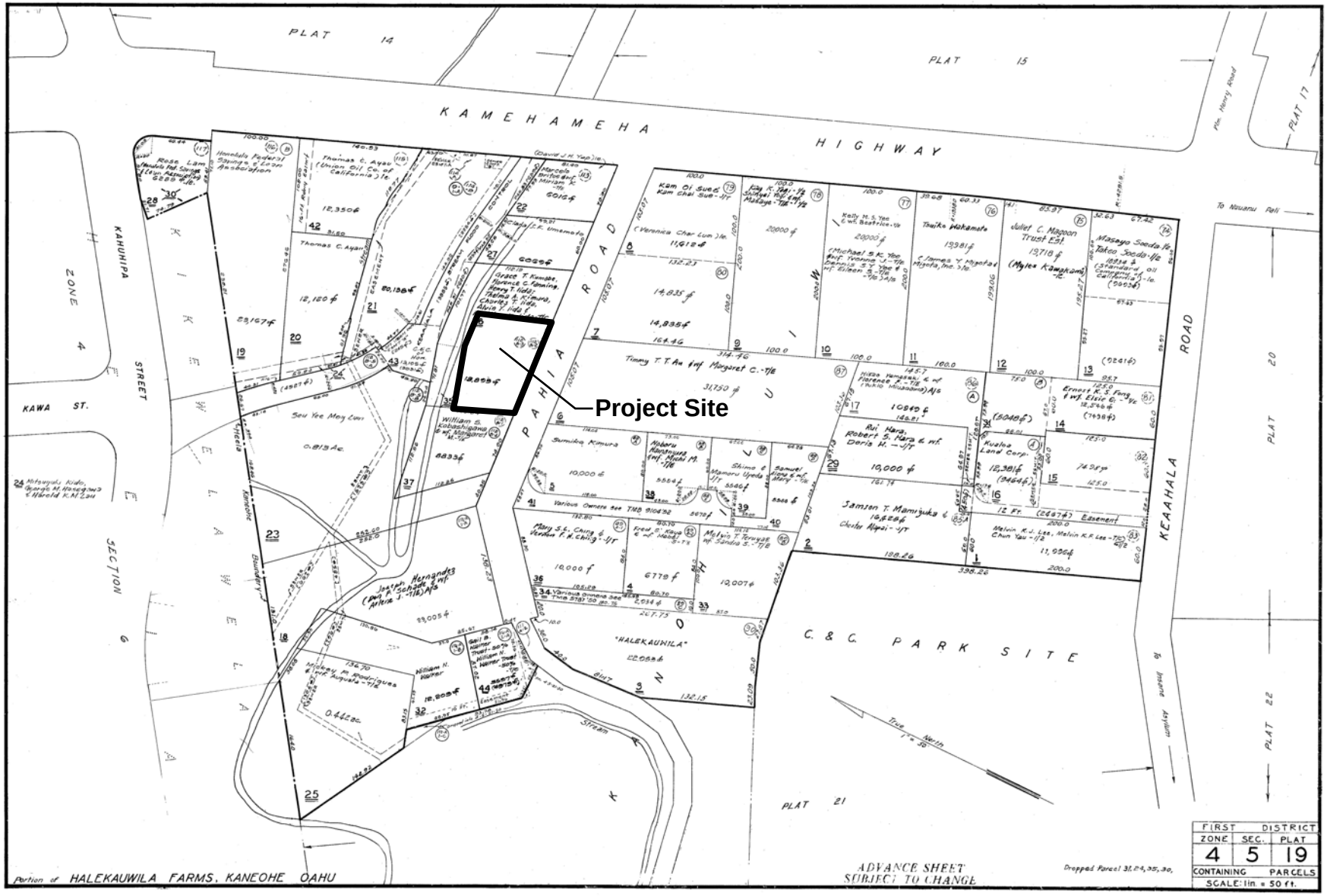
HPHA No. 1069 - Kāne‘ohe Apartments (AMP 45)

Figure 1 - Project Location Map

Kāne‘ohe, O‘ahu

1,500 FT

HHF PLANNERS
places for people



HPHA No. 1069 - Kāne'ohe Apartments (AMP 45)

Figure 2 - TMK Map

Kāne'ohe, O'ahu

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

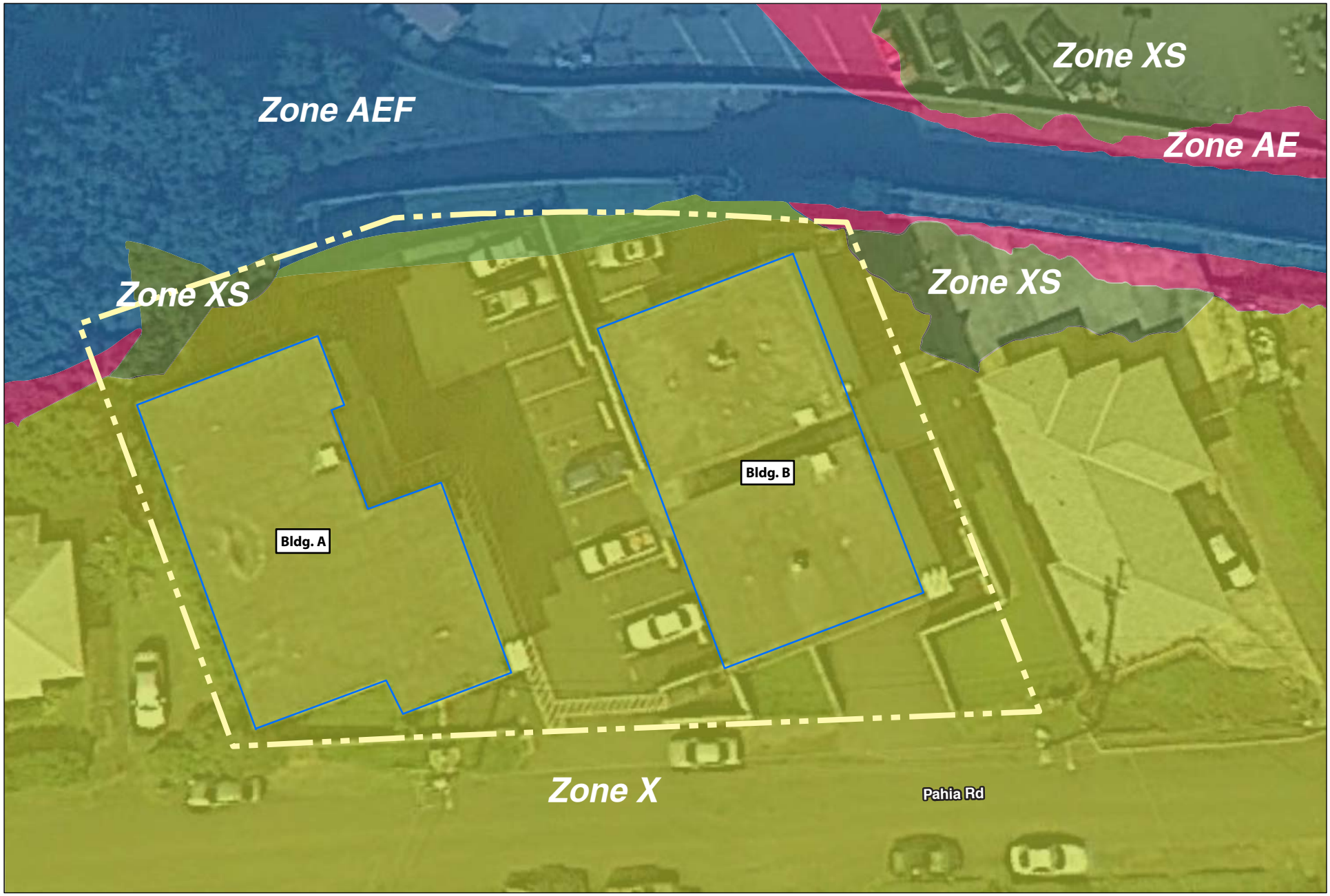
HPHA No. 1069 - Kāne'ohe Apartments (AMP 45)

Figure 3 - Site Map

Kāne'ohe, O'ahu

20 FEET

HHF PLANNERS
places for people



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1069 - Kāne'ohe Apartments (AMP 45)

Figure 4 - Flood Map

Kāne'ohe, O'ahu

20 FEET

HHF PLANNERS
places for people

LEGEND

- Zone AE - 1% Annual Chance of Flood
- Zone AEF - Floodway in Zone AE
- Zone XS - 0.2% Annual Chance of Flood
- Zone X - Outside the 0.2% Annual Chance of Flood

KĀNEʻOHE APARTMENTS
SITE PHOTOS

Pahia Road and Kamehameha Highway intersection

Pahia Road fronting projecy site (project's buildings on right, behind truck)

West property line (facing south) adjacent to the rail transport right-of-way, along Kamehameha Highway

Illegal dumping by outsiders next to Building A

Keaahala Stream (channelized) along the project's north boundary, as seen from Kamehameha Highway

Tanks stored at Building B

KĀNEʻOHE APARTMENTS
SITE PHOTOS

Drainage outlets in the project's parking lot, overlooking Keaahala Stream

Secure storage in Building B

EXHIBIT B

EDR Radius Map Report

Kaneohe Apartments
45-507 Pahia Rd.
Kaneohe, HI 96744

Inquiry Number: 4237094.202s
March 18, 2015

EDR Summary Radius Map Report

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
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FORM-NULL-PVC

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

45-507 PAHIA RD.
HONOLULU County, HI 96744

COORDINATES

Latitude (North):	21.4168000 - 21˚ 25' 0.48''
Longitude (West):	157.8022000 - 157˚ 48' 7.92''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	624145.7
UTM Y (Meters):	2368611.8
Elevation:	79 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	USGS 7.5 min quad index

MAPPED SITES SUMMARY

Target Property Address:
45-507 PAHIA RD.
, HI 96744

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
1	KANEOHE REHAB HOUSIN	45-507 PAHIA RD	HI SPILLS		TP
2		451151 KAMEHAMEHA H	EDR US Hist Auto Stat	Higher	271, NE
A3		46132 KAHUHIPA ST	EDR US Hist Auto Stat	Higher	450, WNW
B4	ALOHA ISLAND MART WI	46-004 KAM HWY	RCRA-CESQG	Higher	510, North
A5		46138 KAHUHIPA ST	EDR US Hist Auto Stat	Higher	525, West
B6	AIM WINDWARD MALL	46-004 KAMEHAMEHA HW	HI LUST, HI UST, HI Financial Assurance	Higher	546, North
B7		46004 KAMEHAMEHA HW	EDR US Hist Auto Stat	Higher	560, North
A8	WINDWARD NISSAN	46 151 KAHUHIPA STRE	RCRA-CESQG, HI LUST, HI UST, HI Financial...	Higher	583, West
A9	KANEOHE RENTALS & RE	46 148 KAHUHIPA ST	RCRA NonGen / NLR, FINDS	Higher	583, West
C10	KANEOHE SHELL	45 -1039 KAMEHAMEHA	RCRA-CESQG	Higher	621, SE
C11	KANEOHE SHELL FOOD M	45-1039 KAMEHAMEHA H	HI LUST, HI UST, HI Financial Assurance	Higher	621, SE
12		46148 KAHUHIPA ST	EDR US Hist Auto Stat	Higher	675, West
C13	KANEOHE CENTRAL OFFI	45-1029 KAMEHAMEHA H	HI UST, HI Financial Assurance	Higher	676, SE
C14	PUBLIC STORAGE (ALOH	45-1021 KAMEHAMEHA H	HI LUST, HI UST	Higher	722, SE
D15	CASTLE PROFESSIONAL	46-001 KAM HWY	HI LUST	Higher	730, North
D16	CAESAR'S CLEANERS	45-564 KAMEHAMEHA HW	HI SHWS, HI SPILLS, HI ENG CONTROLS	Higher	775, North
E17		46151 KAHUHIPA ST	EDR US Hist Auto Stat	Higher	820, West
F18	KANEOHE CHEVRON SERV	45-1002 KAMEHAMEHA H	HI SHWS, HI LUST, HI UST, HI Financial Assurance	Lower	827, SE
F19		451002 KAMEHAMEHA H	EDR US Hist Auto Stat	Lower	827, SE
G20	WILLIAM H. PETERSON	46-145 MALINA PL	HI LUST, HI UST	Higher	839, WNW
21		46158 KAHUHIPA ST	EDR US Hist Auto Stat	Higher	840, West
G22	MAKO AND SONS	46 167 MALINA PL	RCRA NonGen / NLR, FINDS	Higher	896, WNW
E23		46158 MALINA PL	EDR US Hist Auto Stat	Higher	904, WNW
24		46168 MALINA PL	EDR US Hist Auto Stat	Higher	1017, WNW
25		46159 MALINA PL	EDR US Hist Auto Stat	Higher	1018, WNW
H26		45934 KAMEHAMEHA HW	EDR US Hist Auto Stat	Lower	1076, SSE
H27		45934 KAMEHAMEHA HW	EDR US Hist Cleaners	Lower	1076, SSE
28	FORMER KANEOHE DISTR	46-201 KAHUHIPA STRE	HI LUST, HI UST	Higher	1086, West
H29		45946 KAMEHAMEHA HW	EDR US Hist Cleaners	Lower	1131, SSE
30		46167 MALINA PL	EDR US Hist Auto Stat	Higher	1161, WNW
31	WILLYS TRANSMISSION	46 148 HAHUHIPA	RCRA NonGen / NLR, FINDS	Lower	1170, South
32	U.S. POSTAL SERVICE	46-036 KAMEHAMEHA HW	HI UST	Higher	1219, NNW
33	C&CH KANEOHE FIRE ST	45-910 KAMEHAMEHA HW	HI UST, HI Financial Assurance	Lower	1266, SSE
I34	BRITISH AUTO INC	46-026 ALALOA ST	RCRA-CESQG, FINDS	Higher	1290, West
I35	HABILITAT CONSTRUCTI	46-026 ALALOA ST	HI LUST, HI UST	Higher	1290, West
J36	KAMEHAMEHA SCHOOLS C	46 201 KAHUHIPA ST	RCRA-CESQG	Higher	1313, West
J37	WINDWARD AUTO SALES,	46-177 KAHUHIPA ST	HI LUST, HI UST	Higher	1329, West
38	GOODYEAR AUTO SERVIC	46-047 KAMEHAMEHA HW	HI LUST, HI UST, HI Financial Assurance	Higher	1614, NNW
39	KANEOHE POLICE STATI	45-270 WAIKALUA RD	HI LUST, HI UST, HI Financial Assurance	Lower	1671, SE

MAPPED SITES SUMMARY

Target Property Address:
45-507 PAHIA RD.
, HI 96744

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
40	SAFEWAY STORE #207	46-065 KAMEHAMEHA HW	HI SHWS, HI SPILLS, HI INST CONTROL	Higher	1712, North
41	WINDWARD NISSAN	46-275 KAHUHIPA ST	HI SHWS, HI SPILLS	Higher	2662, WSW
42	HAWAII STATE HOSPITA	45-710 KEAAHALA RD	RCRA-CESQG, FINDS, HI SHWS, CA CHMIRS, HI ENG...	Higher	3989, SW
43	HEEIA AGRICULTURAL C	46-225 KAMEHAMEHA HW	HI SHWS	Lower	5013, NNW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 7 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
KANEOHE REHAB HOUSIN 45-507 PAHIA RD KANEOHE, HI 96744	HI SPILLS	N/A

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA generators list

RCRA-CESQG: A review of the RCRA-CESQG list, as provided by EDR, and dated 12/09/2014 has revealed that there are 5 RCRA-CESQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ALOHA ISLAND MART WI	46-004 KAM HWY	N 0 - 1/8 (0.097 mi.)	B4	7
WINDWARD NISSAN	***46 151 KAHUHIPA STRE***	***W 0 - 1/8 (0.110 mi.)***	***A8***	***8***
KANEOHE SHELL	45 -1039 KAMEHAMEHA	SE 0 - 1/8 (0.118 mi.)	C10	9
BRITISH AUTO INC	***46-026 ALALOA ST***	***W 1/8 - 1/4 (0.244 mi.)***	***I34***	***14***
KAMEHAMEHA SCHOOLS C	46 201 KAHUHIPA ST	W 1/8 - 1/4 (0.249 mi.)	J36	14

State- and tribal - equivalent CERCLIS

HI SHWS: A review of the HI SHWS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 6 HI SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CAESAR'S CLEANERS	***45-564 KAMEHAMEHA HW***	***N 1/8 - 1/4 (0.147 mi.)***	***D16***	***10***
SAFEWAY STORE #207	***46-065 KAMEHAMEHA HW***	***N 1/4 - 1/2 (0.324 mi.)***	***40***	***16***
WINDWARD NISSAN	***46-275 KAHUHIPA ST***	***WSW 1/2 - 1 (0.504 mi.)***	***41***	***16***
HAWAII STATE HOSPITA	***45-710 KEAAHALA RD***	***SW 1/2 - 1 (0.755 mi.)***	***42***	***16***

Lower Elevation	Address	Direction / Distance	Map ID	Page
KANEOHE CHEVRON SERV	***45-1002 KAMEHAMEHA H***	***SE 1/8 - 1/4 (0.157 mi.)***	***F18***	***10***
HEEIA AGRICULTURAL C	46-225 KAMEHAMEHA HW	NNW 1/2 - 1 (0.949 mi.)	43	16

State and tribal leaking storage tank lists

HI LUST: A review of the HI LUST list, as provided by EDR, and dated 03/02/2015 has revealed that there are 12 HI LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AIM WINDWARD MALL	***46-004 KAMEHAMEHA HW***	***N 0 - 1/8 (0.103 mi.)***	***B6***	***7***
Facility Status: Active Remediation				
Facility Status: LUST Cleanup Initiated				
Facility Status: Site Cleanup Completed (NFA)				
WINDWARD NISSAN	***46 151 KAHUHIPA STRE***	***W 0 - 1/8 (0.110 mi.)***	***A8***	***8***
Facility Status: Site Cleanup Completed (NFA)				
KANEOHE SHELL FOOD M	***45-1039 KAMEHAMEHA H***	***SE 0 - 1/8 (0.118 mi.)***	***C11***	***9***
Facility Status: Site Cleanup Completed (NFA)				
PUBLIC STORAGE (ALOH	***45-1021 KAMEHAMEHA H***	***SE 1/8 - 1/4 (0.137 mi.)***	***C14***	***10***
Facility Status: Site Cleanup Completed (NFA)				
CASTLE PROFESSIONAL	46-001 KAM HWY	N 1/8 - 1/4 (0.138 mi.)	D15	10
Facility Status: Site Cleanup Completed (NFA)				
WILLIAM H. PETERSON	***46-145 MALINA PL***	***WNW 1/8 - 1/4 (0.159 mi.)***	***G20***	***11***
Facility Status: Site Cleanup Completed (NFA)				
FORMER KANEOHE DISTR	***46-201 KAHUHIPA STRE***	***W 1/8 - 1/4 (0.206 mi.)***	***28***	***12***
Facility Status: Site Cleanup Completed (NFA)				
HABILITAT CONSTRUCTI	***46-026 ALALOA ST***	***W 1/8 - 1/4 (0.244 mi.)***	***I35***	***14***
Facility Status: Site Cleanup Completed (NFA)				
WINDWARD AUTO SALES,	***46-177 KAHUHIPA ST***	***W 1/4 - 1/2 (0.252 mi.)***	***J37***	***15***
Facility Status: Site Cleanup Completed (NFA)				
GOODYEAR AUTO SERVIC	***46-047 KAMEHAMEHA HW***	***NNW 1/4 - 1/2 (0.306 mi.)***	***38***	***15***
Facility Status: Site Cleanup Completed (NFA)				
Facility Status: Site Cleanup Completed with EHMP				

Lower Elevation	Address	Direction / Distance	Map ID	Page
KANEOHE CHEVRON SERV	***45-1002 KAMEHAMEHA H***	***SE 1/8 - 1/4 (0.157 mi.)***	***F18***	***10***
Facility Status: Site Cleanup Completed (NFA)				
KANEOHE POLICE STATI	***45-270 WAIKALUA RD***	***SE 1/4 - 1/2 (0.316 mi.)***	***39***	***15***
Facility Status: Site Cleanup Completed (NFA)				

State and tribal registered storage tank lists

HI UST: A review of the HI UST list, as provided by EDR, and dated 03/02/2015 has revealed that there are 11 HI UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AIM WINDWARD MALL	***46-004 KAMEHAMEHA HW***	***N 0 - 1/8 (0.103 mi.)***	***B6***	***7***
WINDWARD NISSAN	***46 151 KAHUHIPA STRE***	***W 0 - 1/8 (0.110 mi.)***	***A8***	***8***
KANEOHE SHELL FOOD M	***45-1039 KAMEHAMEHA H***	***SE 0 - 1/8 (0.118 mi.)***	***C11***	***9***
KANEOHE CENTRAL OFFI	***45-1029 KAMEHAMEHA H***	***SE 1/8 - 1/4 (0.128 mi.)***	***C13***	***9***
PUBLIC STORAGE (ALOH	***45-1021 KAMEHAMEHA H***	***SE 1/8 - 1/4 (0.137 mi.)***	***C14***	***10***
WILLIAM H. PETERSON	***46-145 MALINA PL***	***WNW 1/8 - 1/4 (0.159 mi.)***	***G20***	***11***
FORMER KANEOHE DISTR	***46-201 KAHUHIPA STRE***	***W 1/8 - 1/4 (0.206 mi.)***	***28***	***12***
U.S. POSTAL SERVICE	46-036 KAMEHAMEHA HW	NNW 1/8 - 1/4 (0.231 mi.)	32	13
HABILITAT CONSTRUCTI	***46-026 ALALOA ST***	***W 1/8 - 1/4 (0.244 mi.)***	***I35***	***14***

Lower Elevation	Address	Direction / Distance	Map ID	Page
KANEOHE CHEVRON SERV	***45-1002 KAMEHAMEHA H***	***SE 1/8 - 1/4 (0.157 mi.)***	***F18***	***10***
C&CH KANEOHE FIRE ST	***45-910 KAMEHAMEHA HW***	***SSE 1/8 - 1/4 (0.240 mi.)***	***33***	***14***

State and tribal institutional control / engineering control registries

HI ENG CONTROLS: A review of the HI ENG CONTROLS list, as provided by EDR, and dated 12/02/2014 has revealed that there is 1 HI ENG CONTROLS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CAESAR'S CLEANERS	***45-564 KAMEHAMEHA HW***	***N 1/8 - 1/4 (0.147 mi.)***	***D16***	***10***

HI INST CONTROL: A review of the HI INST CONTROL list, as provided by EDR, and dated 12/02/2014 has revealed that there is 1 HI INST CONTROL site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAFEWAY STORE #207	***46-065 KAMEHAMEHA HW***	***N 1/4 - 1/2 (0.324 mi.)***	***40***	***16***

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

RCRA NonGen / NLR: A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 12/09/2014

has revealed that there are 3 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
KANEOHE RENTALS & RE	*46 148 KAHUHIPA ST*	*W 0 - 1/8 (0.110 mi.)*	*A9*	*8*
MAKO AND SONS	*46 167 MALINA PL*	*WNW 1/8 - 1/4 (0.170 mi.)*	*G22*	*11*

Lower Elevation	Address	Direction / Distance	Map ID	Page
WILLYS TRANSMISSION	*46 148 HAHUHIPA*	*S 1/8 - 1/4 (0.222 mi.)*	*31*	*13*

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Auto Stat: A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there are 13 EDR US Hist Auto Stat sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	451151 KAMEHAMEHA H	NE 0 - 1/8 (0.051 mi.)	2	7
Not reported	46132 KAHUHIPA ST	WNW 0 - 1/8 (0.085 mi.)	A3	7
Not reported	46138 KAHUHIPA ST	W 0 - 1/8 (0.099 mi.)	A5	7
Not reported	46004 KAMEHAMEHA HW	N 0 - 1/8 (0.106 mi.)	B7	8
Not reported	46148 KAHUHIPA ST	W 1/8 - 1/4 (0.128 mi.)	12	9
Not reported	46151 KAHUHIPA ST	W 1/8 - 1/4 (0.155 mi.)	E17	10
Not reported	46158 KAHUHIPA ST	W 1/8 - 1/4 (0.159 mi.)	21	11
Not reported	46158 MALINA PL	WNW 1/8 - 1/4 (0.171 mi.)	E23	12
Not reported	46168 MALINA PL	WNW 1/8 - 1/4 (0.193 mi.)	24	12
Not reported	46159 MALINA PL	WNW 1/8 - 1/4 (0.193 mi.)	25	12
Not reported	46167 MALINA PL	WNW 1/8 - 1/4 (0.220 mi.)	30	13

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	451002 KAMEHAMEHA H	SE 1/8 - 1/4 (0.157 mi.)	F19	11
Not reported	45934 KAMEHAMEHA HW	SSE 1/8 - 1/4 (0.204 mi.)	H26	12

EDR US Hist Cleaners: A review of the EDR US Hist Cleaners list, as provided by EDR, has revealed that there are 2 EDR US Hist Cleaners sites within approximately 0.25 miles of the target property.

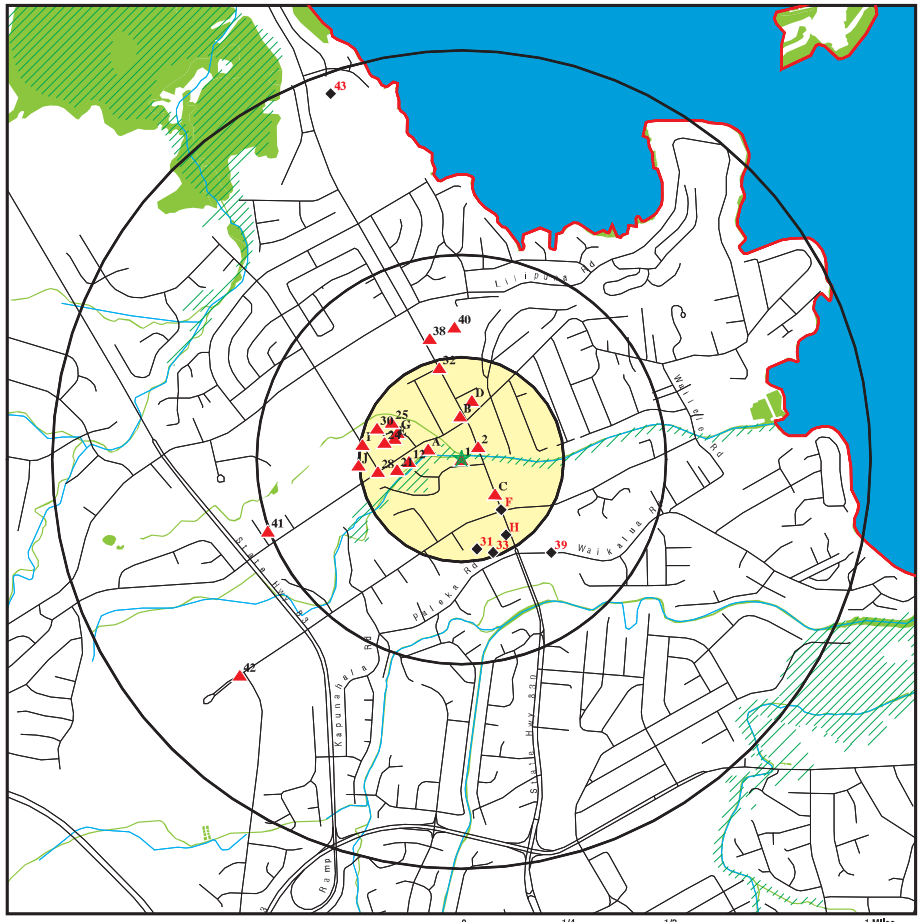
Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	45934 KAMEHAMEHA HW	SSE 1/8 - 1/4 (0.204 mi.)	H27	12
Not reported	45946 KAMEHAMEHA HW	SSE 1/8 - 1/4 (0.214 mi.)	H29	13

ORPHAN SUMMARY

Count: 2 records.

City	EDR ID	Site Name	Site Address	Zip	Database(s)
KAHALUU	S110169200	HECO TRANSFORMER 56846	47-195 KAMEHAMEHA HWY	96744	HI SHWS, HI SPILLS, HI ENG CONTROLS, HI INST CONTROL
KUALOA	S111704786	KUALOA PLANTATION MILL	49-586 KAMEHAMEHA HWY	96744	HI SHWS

OVERVIEW MAP - 4237094.202S



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

0 1/4 1/2 1 Miles

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Kaneohe Apartments ADDRESS: 45-507 Pahia Rd. Kaneohe HI 96744 LAT/LONG: 21.4168 / 157.8022	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.202s DATE: March 18, 2015 7:57 am

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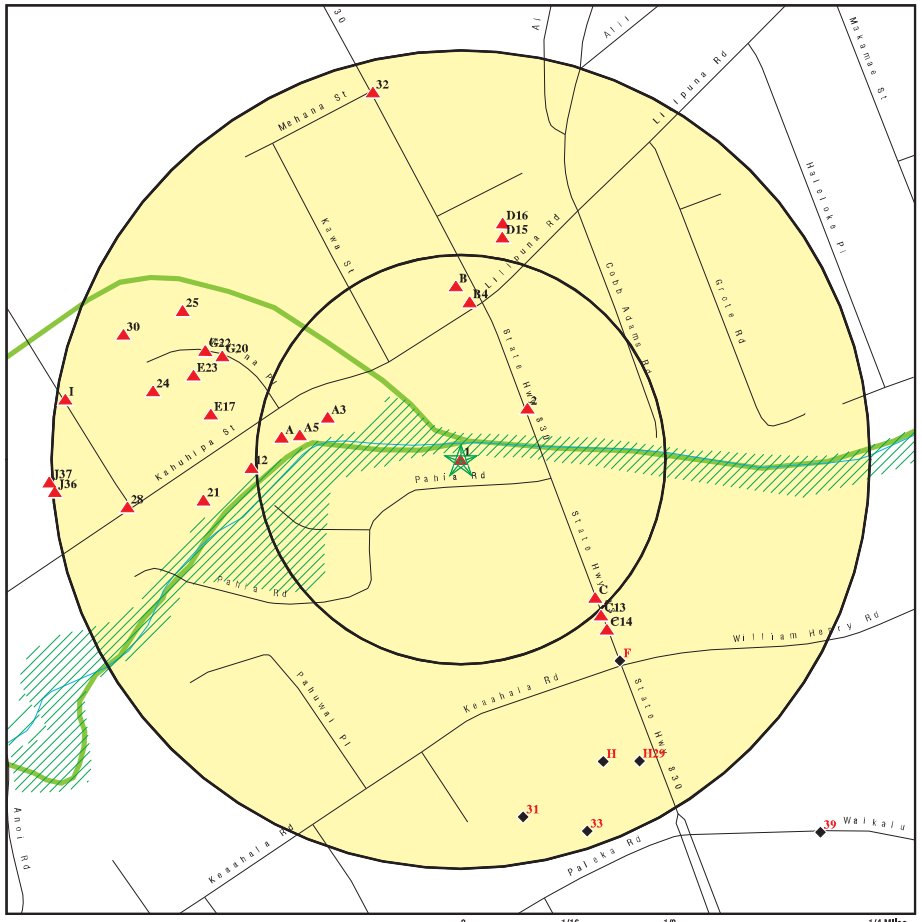
DETAIL MAP - 4237094.202S



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

0 1/16 1/8 1/4 Miles

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Kaneohe Apartments ADDRESS: 45-507 Pahia Rd. Kaneohe HI 96744 LAT/LONG: 21.4168 / 157.8022	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.202s DATE: March 18, 2015 7:57 am

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		3	2	NR	NR	NR	5
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
HI SHWS	1.000		0	2	1	3	NR	6
State and tribal landfill and/or solid waste disposal site lists								
HI SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
HI LUST	0.500		3	6	3	NR	NR	12
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
HI UST	0.250		3	8	NR	NR	NR	11

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
HI ENG CONTROLS	0.500		0	1	0	NR	NR	1
HI INST CONTROL	0.500		0	0	1	NR	NR	1
State and tribal voluntary cleanup sites								
HI VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
HI BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
HI CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
HI SPILLS	TP	1	NR	NR	NR	NR	NR	1
HI SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		1	2	NR	NR	NR	3
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
HI UIC	TP		NR	NR	NR	NR	NR	0
HI DRYCLEANERS	0.250		0	0	NR	NR	NR	0
CA HAZNET	TP		NR	NR	NR	NR	NR	0
HI AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
HI Financial Assurance	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		4	9	NR	NR	NR	13
EDR US Hist Cleaners	0.250		0	2	NR	NR	NR	2
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
HI RGA LF	TP		NR	NR	NR	NR	NR	0
HI RGA LUST	TP		NR	NR	NR	NR	NR	0
HI RGA HWS	TP		NR	NR	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
1 **Target Property** **Actual: 79 ft.**	**KANEOHE REHAB HOUSING** **45-507 PAHIA RD** **KANEOHE, HI 96744** Click here for full text details	**HI SPILLS**	**S105262698** **N/A**
2 **NE** **< 1/8** **0.051 mi.** **271 ft.** **Relative: Higher**	**451151 KAMEHAMEHA HWY** **KANEOHE, HI 96744** Click here for full text details	**EDR US Hist Auto Stat**	**1015502864** **N/A**
A3 **WNW** **< 1/8** **0.085 mi.** **450 ft.** **Relative: Higher**	**46132 KAHUHIPA ST** **KANEOHE, HI 96744** Click here for full text details	**EDR US Hist Auto Stat**	**1015507212** **N/A**
B4 **North** **< 1/8** **0.097 mi.** **510 ft.** **Relative: Higher**	**ALOHA ISLAND MART WINDWARD MALL** **46-004 KAM HWY** **KANEOHE, HI 96744** Click here for full text details **RCRA-CESQG** EPA Id: HIR000107490	**RCRA-CESQG**	**1004689063** **HIR000107490**
A5 **West** **< 1/8** **0.099 mi.** **525 ft.** **Relative: Higher**	**46138 KAHUHIPA ST** **KANEOHE, HI 96744** Click here for full text details	**EDR US Hist Auto Stat**	**1015507213** **N/A**
B6 **North** **< 1/8** **0.103 mi.** **546 ft.** **Relative: Higher**	**AIM WINDWARD MALL** **46-004 KAMEHAMEHA HWY** **KANEOHE, HI 96744** Click here for full text details **HI LUST** Facility Status: Active Remediation Facility Status: LUST Cleanup Initiated Facility Status: Site Cleanup Completed (NFA)	**HI LUST** **HI UST** **HI Financial Assurance**	**U001236130** **N/A**

AIM WINDWARD MALL (Continued) — **U001236130**

Facility Id: 9-200330

HI UST
Tank Status: Currently In Use
Tank Status: Permanently out of Use
Facility Id: 9-200330

B7
North
< 1/8
0.106 mi.
560 ft.
Relative: Higher

46004 KAMEHAMEHA HWY
KANEOHE, HI 96744

EDR US Hist Auto Stat — **1015506479**, **N/A**

Click here for full text details

A8
West
< 1/8
0.110 mi.
583 ft.
Relative: Higher

WINDWARD NISSAN
46 151 KAHUHIPA STREET
KANEOHE, HI 96744

RCRA-CESQG, **HI LUST**, **HI UST**, **HI Financial Assurance** — **1000193229**, **HID982466062**

Click here for full text details

RCRA-CESQG
EPA Id: HID982466062

HI LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-201374

HI UST
Tank Status: Permanently Out of Use
Facility Id: 9-201374

A9
West
< 1/8
0.110 mi.
583 ft.
Relative: Higher

KANEOHE RENTALS & REPAIRS
46 148 KAHUHIPA ST
KANEOHE, HI 96744

RCRA NonGen / NLR, **FINDS** — **1000209175**, **HID981965403**

Click here for full text details

RCRA NonGen / NLR
EPA Id: HID981965403

C10
SE
< 1/8
0.118 mi.
621 ft.
Relative: Higher

KANEOHE SHELL
45 -1039 KAMEHAMEHA HWY
KANEOHE, HI 96744

RCRA-CESQG — **1009398535**, **HIR000137422**

Click here for full text details

RCRA-CESQG
EPA Id: HIR000137422

C11
SE
< 1/8
0.118 mi.
621 ft.
Relative: Higher

KANEOHE SHELL FOOD MART
45-1039 KAMEHAMEHA HWY
KANEOHE, HI 96744

HI LUST, **HI UST**, **HI Financial Assurance** — **U003154913**, **N/A**

Click here for full text details

HI LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-201016

HI UST
Tank Status: Currently in Use
Tank Status: Permanently Out of Use
Facility Id: 9-201016

12
West
1/8-1/4
0.128 mi.
675 ft.
Relative: Higher

46148 KAHUHIPA ST
KANEOHE, HI 96744

EDR US Hist Auto Stat — **1015507245**, **N/A**

Click here for full text details

C13
SE
1/8-1/4
0.128 mi.
676 ft.
Relative: Higher

KANEOHE CENTRAL OFFICE
45-1029 KAMEHAMEHA HWY
KANEOHE, HI 96744

HI UST, **HI Financial Assurance** — **U003541820**, **N/A**

Click here for full text details

HI UST
Tank Status: Permanently Out of Use
Tank Status: Currently In Use
Facility Id: 9-200509

C14
SE
1/8-1/4
0.137 mi.
722 ft.

Relative: Higher

PUBLIC STORAGE (ALOHA KANEOHE)
45-1021 KAMEHAMEHA HWY
KANEOHE, HI 96744

HI LUST **U001236282**
HI UST **N/A**

Click here for full text details

HI LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-201171

HI UST
Tank Status: Permanently Out of Use
Facility Id: 9-201171

D15
North
1/8-1/4
0.138 mi.
730 ft.

Relative: Higher

CASTLE PROFESSIONAL CENTER
46-001 KAM HWY
KANEOHE, HI 96744

HI LUST **S111026693**
N/A

Click here for full text details

HI LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-203910

D16
North
1/8-1/4
0.147 mi.
775 ft.

Relative: Higher

CAESAR'S CLEANERS
45-564 KAMEHAMEHA HWY
KANEOHE, HI

HI SHWS **S108859653**
HI SPILLS **N/A**
HI ENG CONTROLS

Click here for full text details

E17
West
1/8-1/4
0.155 mi.
820 ft.

Relative: Higher

46151 KAHUHIPA ST
KANEOHE, HI 96744

EDR US Hist Auto Stat **1015507294**
N/A

Click here for full text details

F18
SE
1/8-1/4
0.157 mi.
827 ft.

Relative: Lower

KANEOHE CHEVRON SERVICE
45-1002 KAMEHAMEHA HWY
KANEOHE, HI 96744

HI SHWS **U001236266**
HI LUST **N/A**
HI UST
HI Financial Assurance

Click here for full text details

HI LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-201109

HI UST

KANEOHE CHEVRON SERVICE (Continued) **U001236266**

Tank Status: Permanently Out of Use
Facility Id: 9-201109

F19
SE
1/8-1/4
0.157 mi.
827 ft.

Relative: Lower

451002 KAMEHAMEHA HWY
KANEOHE, HI 96744

EDR US Hist Auto Stat **1015502819**
N/A

Click here for full text details

G20
WNW
1/8-1/4
0.159 mi.
839 ft.

Relative: Higher

WILLIAM H. PETERSON
46-145 MALINA PL
KANEOHE, HI 96744

HI LUST **U003541872**
HI UST **N/A**

Click here for full text details

HI LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-207013

HI UST
Tank Status: Permanently Out of Use
Facility Id: 9-207013

21
West
1/8-1/4
0.159 mi.
840 ft.

Relative: Higher

46158 KAHUHIPA ST
KANEOHE, HI 96744

EDR US Hist Auto Stat **1015507295**
N/A

Click here for full text details

G22
WNW
1/8-1/4
0.170 mi.
896 ft.

Relative: Higher

MAKO AND SONS
46 167 MALINA PL
KANEOHE, HI 96744

RCRA NonGen / NLR **1000324068**
FINDS **HID981618978**

Click here for full text details

RCRA NonGen / NLR
EPA Id: HID981618978

E23
WNW
1/8-1/4
0.171 mi.
904 ft.
Relative: Higher

46158 MALINA PL
KANEOHE, HI 96744

Click here for full text details

EDR US Hist Auto Stat — **1015507297** / **N/A**

24
WNW
1/8-1/4
0.193 mi.
1017 ft.
Relative: Higher

46168 MALINA PL
KANEOHE, HI 96744

Click here for full text details

EDR US Hist Auto Stat — **1015507341** / **N/A**

25
WNW
1/8-1/4
0.193 mi.
1018 ft.
Relative: Higher

46159 MALINA PL
KANEOHE, HI 96744

Click here for full text details

EDR US Hist Auto Stat — **1015507298** / **N/A**

H26
SSE
1/8-1/4
0.204 mi.
1076 ft.
Relative: Lower

45934 KAMEHAMEHA HWY
KANEOHE, HI 96744

Click here for full text details

EDR US Hist Auto Stat — **1015505734** / **N/A**

H27
SSE
1/8-1/4
0.204 mi.
1076 ft.
Relative: Lower

45934 KAMEHAMEHA HWY
KANEOHE, HI 96744

Click here for full text details

EDR US Hist Cleaners — **1015063783** / **N/A**

28
West
1/8-1/4
0.206 mi.
1086 ft.
Relative: Higher

FORMER KANEOHE DISTRICT COURTHOUSE
46-201 KAHUHIPA STREET
KANEOHE, HI 96744

Click here for full text details

HI LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-203778

HI LUST — **U003967141** / **N/A**
HI UST

FORMER KANEOHE DISTRICT COURTHOUSE (Continued) — **U003967141**

HI UST
Tank Status: Permanently Out of Use
Facility Id: 9-203778

H29
SSE
1/8-1/4
0.214 mi.
1131 ft.
Relative: Lower

45946 KAMEHAMEHA HWY
KANEOHE, HI 96744

Click here for full text details

EDR US Hist Cleaners — **1015063785** / **N/A**

30
WNW
1/8-1/4
0.220 mi.
1161 ft.
Relative: Higher

46167 MALINA PL
KANEOHE, HI 96744

Click here for full text details

EDR US Hist Auto Stat — **1015507339** / **N/A**

31
South
1/8-1/4
0.222 mi.
1170 ft.
Relative: Lower

WILLYS TRANSMISSION SERV INC
46 148 HAHUHIPA
KANEOHE, HI 96744

Click here for full text details

RCRA NonGen / NLR
EPA Id: HID981639735

RCRA NonGen / NLR FINDS — **1000293742** / **HID981639735**

32
NNW
1/8-1/4
0.231 mi.
1219 ft.
Relative: Higher

U.S. POSTAL SERVICE - KANEOHE
46-036 KAMEHAMEHA HWY
KANEOHE, HI 96744

Click here for full text details

HI UST
Tank Status: Permanently Out of Use
Facility Id: 9-201771

HI UST — **U001236401** / **N/A**

33 SSE 1/8-1/4 0.240 mi. 1266 ft.
Relative: Lower

C&CH KANEOHE FIRE STATION
45-910 KAMEHAMEHA HWY
KANEOHE, HI 96744

HI UST — **U004223416**
HI Financial Assurance — **N/A**

Click here for full text details

HI UST
Tank Status: Currently in Use
Tank Status: Permanently Out of Use
Facility Id: 9-200077

I34 West 1/8-1/4 0.244 mi. 1290 ft.
Relative: Higher

BRITISH AUTO INC
46-026 ALALOA ST
KANEOHE, HI 96744

RCRA-CESQG — **1004688807**
FINDS — **HID981658347**

Click here for full text details

RCRA-CESQG
EPA Id: HID981658347

I35 West 1/8-1/4 0.244 mi. 1290 ft.
Relative: Higher

HABILITAT CONSTRUCTION
46-026 ALALOA ST
KANEOHE, HI 96744

HI LUST — **U001236174**
HI UST — **N/A**

Click here for full text details

HI LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-200739

HI UST
Tank Status: Permanently Out of Use
Facility Id: 9-200739

J36 West 1/8-1/4 0.249 mi. 1313 ft.
Relative: Higher

KAMEHAMEHA SCHOOLS COMMERCIAL DIVISION
46 201 KAHUHIPA ST
KANEOHE, HI 96744

RCRA-CESQG — **1007447437**
HIR000136085

Click here for full text details

RCRA-CESQG
EPA Id: HIR000136085

J37 West 1/4-1/2 0.252 mi. 1329 ft.
Relative: Higher

WINDWARD AUTO SALES, INC.
46-177 KAHUHIPA ST
KANEOHE, HI 96744

HI LUST — **U001236139**
HI UST — **N/A**

Click here for full text details

HI LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-200364

HI UST
Tank Status: Permanently Out of Use
Facility Id: 9-200364

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38 NNW 1/4-1/2 0.306 mi. 1614 ft.
Relative: Higher

GOODYEAR AUTO SERVICE CENTER 8022
46-047 KAMEHAMEHA HWY
KANEOHE, HI 96744

HI LUST — **U003154883**
HI UST — **N/A**
HI Financial Assurance

Click here for full text details

HI LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Status: Site Cleanup Completed with EHMP
Facility Id: 9-200027

HI UST
Tank Status: Permanently Out of Use
Tank Status: Currently In Use
Tank Status: Permanently out of Use
Facility Id: 9-200027
Facility Id: 9-101667

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39 SE 1/4-1/2 0.316 mi. 1671 ft.
Relative: Lower

KANEOHE POLICE STATION
45-270 WAIKALUA RD
KANEOHE, HI 96744

HI LUST — **U001236061**
HI UST — **N/A**
HI Financial Assurance

Click here for full text details

HI LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-200112

HI UST
Tank Status: Currently In Use
Tank Status: Permanently Out of Use
Facility Id: 9-200112

MAP FINDINGS

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
40 North 1/4-1/2 0.324 mi. 1712 ft. Relative: Higher	**SAFEWAY STORE #207 46-065 KAMEHAMEHA HWY KANEOHE, HI 96744 Click here for full text details**	**HI SHWS HI SPILLS HI INST CONTROL**	**1006819979 N/A**
41 WSW 1/2-1 0.504 mi. 2662 ft. Relative: Higher	**WINDWARD NISSAN 46-275 KAHUHIPA ST KANEOHE, HI 96744 Click here for full text details**	**HI SHWS HI SPILLS**	**1006819663 N/A**
42 SW 1/2-1 0.755 mi. 3989 ft. Relative: Higher	**HAWAII STATE HOSPITAL 45-710 KEAAHALA RD KANEOHE, HI 96744 Click here for full text details RCRA-CESQG EPA Id: HID982013476**	**RCRA-CESQG FINDS HI SHWS HI SPILLS HI ENG CONTROLS HI INST CONTROL CA HAZNET**	**1004464899 HID982013476**
43 NNW 1/2-1 0.949 mi. 5013 ft. Relative: Lower	**HEEIA AGRICULTURAL COMPANY MILL 46-225 KAMEHAMEHA HWY KANEOHE, HI 96744 Click here for full text details**	**HI SHWS**	**S111704724 N/A**

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
HI	AIRS	List of Permitted Facilities	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	BROWNFIELDS	Brownfields Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	CDL	Clandestine Drug Lab Listing	Department of Health	08/04/2010	09/10/2010	10/22/2010
HI	DRYCLEANERS	Permitted Drycleaner Facility Listing	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	ENG CONTROLS	Engineering Control Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	Financial Assurance	Financial Assurance Information Listing	Department of Health	12/01/2014	12/19/2014	01/28/2015
HI	INST CONTROL	Sites with Institutional Controls	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	LUST	Leaking Underground Storage Tank Database	Department of Health	03/02/2015	03/04/2015	03/17/2015
HI	RGA HWS	Recovered Government Archive State Hazardous Waste Facilitie	Department of Health		07/01/2013	01/08/2014
HI	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Health		07/01/2013	01/17/2014
HI	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	Department of Health		07/01/2013	01/03/2014
HI	SHWS	Sites List	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	SPILLS	Release Notifications	Department of Health	12/02/2014	12/22/2014	01/28/2015
HI	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	03/10/2012	01/03/2013	02/11/2013
HI	SWF/LF	Permitted Landfills in the State of Hawaii	Department of Health	09/17/2012	04/03/2013	05/10/2013
HI	UIC	Underground Injection Wells Listing	Department of Health	02/07/2013	02/12/2013	04/09/2013
HI	UST	Underground Storage Tank Database	Department of Health	03/02/2015	03/04/2015	03/17/2015
HI	VCP	Voluntary Response Program Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	04/22/2013	03/03/2015	03/09/2015
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2011	02/26/2013	04/19/2013
US	CERCLIS	Comprehensive Environmental Response, Compensation, and Liab	EPA	10/25/2013	11/11/2013	02/13/2014
US	CERCLIS-NFRAP	CERCLIS No Further Remedial Action Planned	EPA	10/25/2013	11/11/2013	02/13/2014
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	07/01/2014	09/10/2014	10/20/2014
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	01/23/2015	02/13/2015	03/09/2015
US	CORRACTS	Corrective Action Report	EPA	12/09/2014	12/29/2014	01/29/2015
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DELISTED NPL	National Priority List Deletions	EPA	12/16/2014	01/08/2015	02/09/2015
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	07/31/2012	08/07/2012	09/18/2012
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EDR US Hist Auto Stat	EDR Exclusive Historic Gas Stations	EDR, Inc.			
US	EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	09/29/2014	09/30/2014	11/06/2014
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	07/21/2014	10/07/2014	10/20/2014
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
US	FEMA UST	Underground Storage Tank Listing	FEMA	01/01/2010	02/16/2010	04/12/2010
US	FINDS	Facility Index System/Facility Registry System	EPA	08/16/2014	09/10/2014	10/20/2014
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	06/06/2014	09/10/2014	09/18/2014
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	12/29/2014	12/30/2014	03/09/2015
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	01/23/2015	02/06/2015	03/09/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	02/01/2013	05/01/2013	11/01/2013

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	01/30/2015	02/05/2015	03/09/2015
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/10/2015	03/13/2015
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	01/28/2015	01/30/2015	03/13/2015
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	01/08/2015	01/08/2015	02/09/2015
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2005	12/08/2006	01/11/2007
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	02/01/2013	05/01/2013	01/27/2014
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	01/30/2015	02/05/2015	03/13/2015
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/13/2015	03/13/2015
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	01/29/2015	01/30/2015	03/13/2015
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	12/14/2014	02/13/2015	03/13/2015
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	09/29/2014	10/01/2014	11/06/2014
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	11/25/2014	11/26/2014	01/29/2015
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	02/18/2014	03/18/2014	04/24/2014
US	LUCIS	Land Use Control Information System	Department of the Navy	12/03/2014	12/12/2014	01/29/2015
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	12/29/2014	01/08/2015	01/29/2015
US	NPL	National Priority List	EPA	12/16/2014	01/08/2015	02/09/2015
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	07/01/2014	10/15/2014	11/17/2014
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	02/01/2011	10/19/2011	01/10/2012
US	PRP	Potentially Responsible Parties	EPA	10/25/2013	10/17/2014	10/20/2014
US	Proposed NPL	Proposed National Priority List Sites	EPA	12/16/2014	01/08/2015	02/09/2015
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	10/07/2014	10/08/2014	10/20/2014
US	RCRA NonGen / NLR	RCRA - Non Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RMP	Risk Management Plans	Environmental Protection Agency	08/01/2014	08/12/2014	11/06/2014
US	ROD	Records Of Decision	EPA	11/25/2013	12/12/2013	02/24/2014
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	03/07/2011	03/09/2011	05/02/2011
US	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2011	07/31/2013	09/13/2013
US	TSCA	Toxic Substances Control Act	EPA	12/31/2012	01/15/2015	01/29/2015
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	09/14/2010	10/07/2011	03/01/2012
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/16/2014	10/31/2014	11/17/2014
US	US AIRS MINOR	Air Facility System Data	EPA	10/16/2014	10/31/2014	11/17/2014

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	12/22/2014	12/22/2014	01/29/2015
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	11/19/2014	11/21/2014	01/29/2015
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	12/30/2014	12/31/2014	01/29/2015
US	Oil/Gas Pipelines	GeoData Digital Line Graphs from 1:100,000-Scale Maps	USGS			
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
US	USGS 7.5' Topographic Map	Scanned Digital USGS 7.5' Topographic Map (DRG)	USGS			

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

KANEOHE APARTMENTS
45-507 PAHIA RD.
KANEOHE, HI 96744

TARGET PROPERTY COORDINATES

Latitude (North):	21.4168 - 21˚ 25' 0.48''
Longitude (West):	157.8022 - 157˚ 48' 7.92''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	624145.7
UTM Y (Meters):	2368611.8
Elevation:	79 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	21157-D7 KANEOHE, HI
Most Recent Revision:	Not reported

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

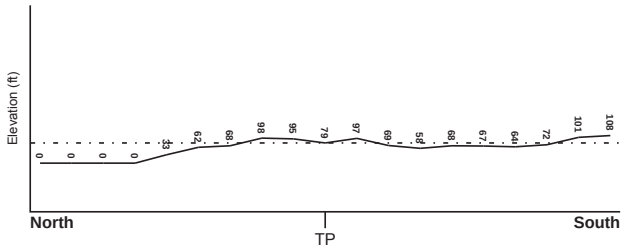
TOPOGRAPHIC INFORMATION

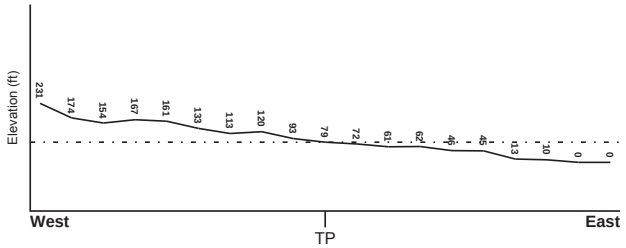
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General ESE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 79 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
HONOLULU, HI	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 15003C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
KANEOHE	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

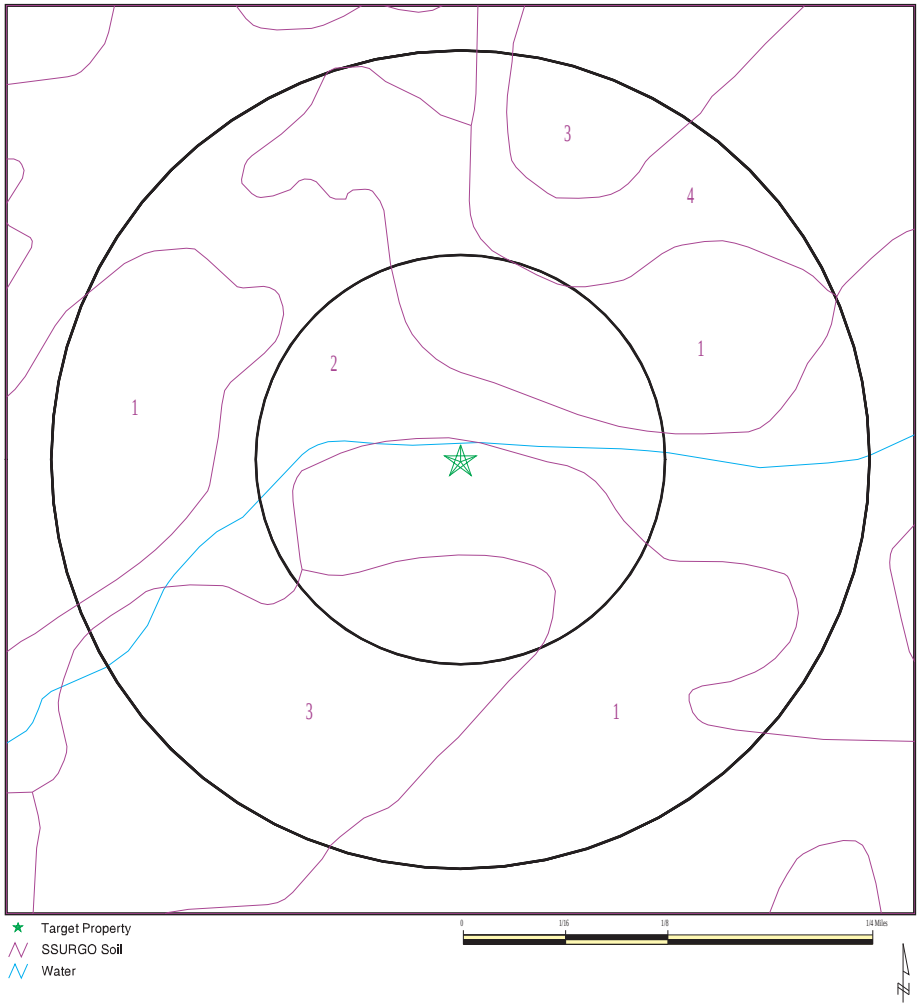
Era: -
System: -
Series: -
Code: N/A *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: -

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4237094.202s



GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Lolekaa

Soil Surface Texture: silty clay

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		Soil Reaction (pH)
1	0 inches	9 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	MH-K (proposed)	Max: 42 Min: 4.23	Max: 5.5 Min: 4.5
2	9 inches	42 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	MH-K (proposed)	Max: 4.23 Min: 0.42	Max: 5.5 Min: 3.5
3	42 inches	64 inches	paragravelly loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	MH-K (proposed)	Max: 4.23 Min: 1.41	Max: 5 Min: 3.5

SITE NAME: Kaneohe Apartments ADDRESS: 45-507 Pahia Rd. Kaneohe HI 96744 LAT/LONG: 21.4168 / 157.8022	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.202s DATE: March 18, 2015 7:58 am

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Soil Map ID: 2

Soil Component Name: Hanalei

Soil Surface Texture: silty clay

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 30 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	12 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 14 Min: 1.41	Max: 6.5 Min: 4.5
2	12 inches	25 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.1
3	25 inches	35 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.1

Soil Map ID: 3

Soil Component Name: Alaeloa

Soil Surface Texture: silty clay

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 42 Min: 4.23	Max: 6 Min: 5.1
2	48 inches	57 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 1.41 Min: 0.42	Max: 6 Min: 4.5
3	57 inches	70 inches	stony silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 1.41 Min: 0.42	Max: 6 Min: 4.5
4	9 inches	18 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 4.23 Min: 0.42	Max: 6 Min: 4.5
5	29 inches	48 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 4.23 Min: 1.41	Max: 6 Min: 4.5
6	18 inches	29 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 4.23 Min: 0.42	Max: 6 Min: 4.5

Soil Map ID: 4

Soil Component Name: Kaneohe

Soil Surface Texture: silty clay

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	14 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 42 Min: 4.23	Max: 6.5 Min: 5.1
2	14 inches	59 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 14.11 Min: 1.41	Max: 5.5 Min: 5.1

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A2	USGS40000270700	1/4 - 1/2 Mile West
B4	USGS40000270707	1/2 - 1 Mile West
C6	USGS40000270680	1/2 - 1 Mile ESE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	HI8000000003317	1/4 - 1/2 Mile West
B3	HI8000000003323	1/2 - 1 Mile West
C5	HI8000000003288	1/2 - 1 Mile ESE
7	HI8000000003348	1/2 - 1 Mile NNW
8	HI8000000003256	1/2 - 1 Mile SE

PHYSICAL SETTING SOURCE MAP - 4237094.202s

County Boundary
Major Roads
Contour Lines
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons

0 1/4 1/2 1 Miles

Groundwater Flow Direction
Indeterminate Groundwater Flow at Location
Groundwater Flow Varies at Location

N

SITE NAME: Kaneohe Apartments ADDRESS: 45-507 Pahia Rd. Kaneohe HI 96744 LAT/LONG: 21.4168 / 157.8022	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.202s DATE: March 18, 2015 7:57 am

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
A1 **West** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003317**
A2 **West** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270700**
B3 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003323**
B4 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270707**
C5 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003288**
C6 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270680**
7 **NNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003348**
8 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003256**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for HONOLULU County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 96744

Number of sites tested: 22

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.091 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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HAWAII PUBLIC HOUSING AUTHORITY

ENVIRONMENTAL REVIEW

HO`OKIPA KAHALU`U

Kāne`ohe, O`ahu

AMP 45
HPHA No. 1072

Prepared for:

State of Hawaii
Hawaii Public Housing Authority

Prepared by:

HHF PLANNERS
places for people

U.S. Department of Housing and Urban Development
451 Seventh Street, SW
Washington, DC 20410
www.hud.gov

espanol.hud.gov

Environmental Review for Activity/Project that is Categorically Excluded Subject to Section 58.5

Pursuant to 24 CFR 58.35(a)

Project Information

Project Name: Hoʻokipa Kahaluʻu (AMP 45)

Responsible Entity: Hawaii Public Housing Authority
1002 North School Street
Honolulu, HI 96817

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

State/Local Identifier: State of Hawaiʻi

Preparer: Mr. Scott Ezer, Vice President
HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaiʻi 96813

Certifying Officer Name and Title: Mr. David Y. Ige
Governor, State of Hawaiʻi

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

Consultant (if applicable): HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaiʻi 96813

Direct Comments to: Mr. Hakim Ouansafi, Executive Director
Hawaii Public Housing Authority
1002 North School Street
Honolulu, Hawaiʻi 96817

Project Location: 47-330 ʻĀhuimanu Road
Kaneohe, Hawaiʻi 96744

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]**:**

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a "major construction activity" and would involve one or a combination of several HUD designated categories of actions.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent;
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons;
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland;
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation;
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls);
7. Interior and exterior renovations and rehabilitation;
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site;
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Level of Environmental Review Determination:

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.5. Compliance with and completion of conformance determinations for other statute, executive order, or regulation has been completed and support the Categorical Exclusion.

Funding Information

Grant Number	HUD Program	Funding Amount
To be determined	Capital Fund	To be determined
To be determined	Economic Development Initiative Special Project Grant	To be determined
To be determined	Other Grants	To be determined

Estimated Total HUD Funded Amount:

To be determined by HUD using a formula and based upon Federal budget.

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]**:**

Depends upon funds available.

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	*The project is not within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.*
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☒	*The State of Hawai'i does not have any designated coastal barrier resource units. (http://www.fws.gov/CBRA/Maps/Mapper.html)*
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes ☒ No ☐	*As indicated in the Flood Insurance Rate Panel 15003C0260F, Revised September 30, 2004, the majority of this project is located within Zone AEF (floodway areas within Zone AE). Small portions of the property are also in Zone AE (Special Flood Hazard Area inundated by a 100-year flood with base flood elevations determined), and Zone XS (areas of 0.2% annual chance flood; 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile). Based on its description, this project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.*

STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5		
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes ☐ No ☒	*The State of Hawai'i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. EPA's Green Book for currently designated "nonattainment areas" as of June 2015. Planned repair and rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.*
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes ☐ No ☒	*Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai'i's Coastal Zone Management (CZM) program.*
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☐ No ☒	*There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.*
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes ☒ No ☐	*The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices, while project-specific mitigation measures are identified in the following section.*

Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes ☐ No ☒	*A field inspection identified an existing above-ground explosive or flammable material storage container in excess of 100 gallons. The liquid propane gas (LPG) tank is not fenced and is located approximately 70 feet west of Building F, and was installed by and is owned by the gas company. Repair and rehabilitation improvements for this project should not impact this fuel storage tank. Should rehabilitation improvements increase the density of the project (e.g. increase the number of units and associated persons exposed to the hazard within the acceptable separation distance), mitigative measures would need to be implemented for the fuel tank in compliance with HUD requirements.*
Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes ☐ No ☒	*The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.*
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes ☒ No ☐	*All existing buildings are located within the floodway of Zone AE. The Flood Insurance Rate Map (FIRM) for the project area is currently being updated to account for the channelization of ʻĀhuimanu Stream and the likely corresponding reduction of the Special Flood Hazard Area limits in the project area. A current field inspection of the site and information obtained from the AMP Manager in June 2015 confirmed no major flooding issues within the project site.*
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes ☐ No ☒	*Subject housing site was first occupied in 1983 and is 32 years old. To be eligible for listing in the National Register of Historic Places (NRHP), a property must meet the National Register criteria for evaluation which involves examining its integrity, significance, and age (generally at least 50 years old). Due to its age, this housing project does not meet the eligibility criteria to be evaluated for the NRHP. In a letter to the State Historic Preservation Officer dated July 23, 2015, the HPHA determined that no historic properties would be affected by repair and rehabilitation improvements for this housing project. No comments or objections about this no effect determination were received.*

Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes ☐ No ☒	*The project site is situated along a highway or major arterial roadway that has a high volume of vehicular traffic that may generate significant noise. The HUD noise calculator estimated noise levels at the project site to be 56.3 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.*
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes ☐ No ☒	*The housing project is located within the O'ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation.*
Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☐ No ☒	*There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.* *(http://www.fws.gov/wetlands/data/mapper.HTML)*
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes ☐ No ☒	*There are no Wild and Scenic Rivers in Hawai'i, which excludes this project from mitigation or formal consultation requirements (http://www.rivers.gov/map.php)*
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes ☐ No ☒	*Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, these improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects on minority populations and low-income populations. Improvements should benefit low-income and minority populations living within this housing project.*

Field Inspection (Date and completed by)**:** June 18, 2015
Questor Lau
HHF Planners

Summary of Findings and Conclusions:

Repair and rehabilitation improvements implemented for this existing housing project by HPHA should not result in significant environmental impacts based upon research data collected, a field inspection, consultation with the site manager and maintenance staff, consultation with pertinent resource agencies, and prior HPHA experience implementing repair and rehabilitation improvements. Therefore, repair and rehabilitation improvements would comply and be consistent with the statutes, executive orders, and regulations addressed. Furthermore, HPHA would evaluate improvements planned to ensure the work is consistent with the designated categories of actions described under the project description section. Compliance with these factors evaluated are further addressed in the attached Source Documentation Statutory Worksheet along with relevant technical reports/assessments.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Law, Authority, or Factor	Mitigation Measure
Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]; Executive Order 11988, particularly section 2(a); 24 CFR Part 55	*Should new housing units be constructed in the future, design plans would be submitted to the applicable government agencies for review and approval. Any required site modifications would comply with applicable flood regulations and design standards. The implementation of this design review process and compliance with pertinent flood regulations should minimize any impacts to public health, safety, and welfare.*
Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	*Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.* *Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.* *Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.* *Newell's shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.* *Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No*

	manipulation or alteration of known Nene nesting habitat will occur during the breeding season. *<u>Hawaiian Waterbirds</u>: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo‘i, impoundments or other vegetated water bodies.* *1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS’s recommended Hawaiian Waterbird Survey Protocols.* *2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.* *3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.* *In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.* *<u>Additional Measures:</u> The following additional measures would be implemented:* *1. No vegetation or soil disturbance shall be conducted outside a project’s previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.*

Determination:

☐ This categorically excluded activity/project converts to **EXEMPT** per Section 58.34(a)(12), because it does not require any mitigation for compliance with any listed statutes or authorities, nor requires any formal permit or license; **Funds may be committed and drawn down after certification of this part** for this (now) EXEMPT project; OR

☒ This categorically excluded activity/project cannot convert to Exempt status because one or more statutes or authorities listed at Section 58.5 requires formal consultation or mitigation. Complete consultation/mitigation protocol requirements, **publish NOI/RROF and obtain "Authority to Use Grant Funds"** (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR

☐ This project is not categorically excluded OR, if originally categorically excluded, is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

Preparer Signature: _____ Date: 11-10-15

Name/Title/Organization: Mr. Scott Ezer, Vice President
HHF Planners

Responsible Entity Agency Official Signature:

_____ Date: APR 28 2016

Name/Title: Mr. David Y. Ige, Governor

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

Hoʻokipa Kahaluʻu (HA # 1072)

TMK: (1) 4-7-037:016

Hawaiʻi Public Housing Authority (HPHA) Environmental Review

SOURCE DOCUMENTATION (SD) STATUTORY WORKSHEET

Site Visit Date: June 4, 2015
Prepared By: Questor Lau

The Hoʻokipa Kahaluʻu housing project is located in the ʻĀhuimanu community of the Kāneʻohe district on the island of Oʻahu. This community is located between the urbanized center of Kāneʻohe and the rural community of Kahaluʻu.

The housing project site is situated along Kahekili Highway at the intersection of ʻĀhuimanu Road. The property is bordered by the highway to the east, ʻĀhuimanu Road to the north, and the channelized ʻĀhuimanu Stream in the rear of the property (west). This housing project is within HPHA's Asset Management Project (AMP) 45, which includes five other projects from Waimanalo to Kahaluʻu.

Hoʻokipa Kahaluʻu was first occupied in 1983 and has a street address of 47-330 ʻĀhuimanu Road. This property consists of 3.603 acres, and it is identified as Tax Map Key (TMK) No. (1) 4-7-037: 016. The housing project is comprised of 7 two-story townhome buildings providing a total of 56 housing units having a range of 1-bedroom up to 3-bedrooms per unit. There is also one community building and one storage building on site. The State's land use designation for the property is the "Urban District", and the City's zoning for the site is R-10, Residential.

The project site is not located within a tsunami evacuation zone; however, the majority of the site is situated within a Special Flood Hazard Area based upon the Flood Insurance Rate Map, Panel 15003C0260F, Revised September 30, 2004. Most of the property is situated in Zone AEF (floodway areas within Zone AE). ʻĀhuimanu Stream is located in the back of the property. Small portions of the property are also in Zone AE (Special Flood Hazard Area inundated by a 100-year flood with base flood elevations determined), and Zone XS (areas of 0.2% annual chance flood; 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile).

The following figures in Exhibit A provide supporting information on this housing project:
Figure 1: Location Map
Figure 2: TMK Map
Figure 3: Site Map
Figure 4: Flood Map

COMPLIANCE FACTORS

I. AIRPORT CLEAR ZONES AND ACCIDENT POTENTIAL ZONES (24 CFR PART 51D)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The housing project does not like within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: 24 CFR 51 (D).

Honolulu International Airport Master Plan - 2010 (August 1994), State Department of Transportation, Airports Division;

*Hawai`i Airports and Flying Safety Guide (2012-13, Fifth Edition, Revision 1)* Hawai`i Department of Transportation, Airports Division; and

http://hidot.hawaii.gov/airports/files/2013/01/Airport-Safety-Guide-2012-2013-5rev1.pdf

II. COASTAL BARRIER RESOURCES (COASTAL BARRIER IMPROVEMENT ACT OF 1990 [16 USC 3501])

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i does not have any designated coastal barrier resource units.

SUPPORTING DOCUMENTATION:

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/cbra/maps/mapper.html (Date accessed: 6/30/15).

III. FLOOD INSURANCE (FLOOD DISASTER PROTECTION ACT OF 1973 AND NATIONAL FLOOD INSURANCE REFORM ACT OF 1994 [42 USC 4001-4128 AND 42 USC 5154a])

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program.

As indicated in the Flood Insurance Rate Panel 15003C0260F, Revised September 30, 2004, the majority of this project is located within Zone AEF (floodway areas within Zone AE). Small portions of the property are also in Zone AE (Special Flood Hazard Area inundated by a 100-year flood with base flood elevations determined), and Zone XS (areas of 0.2% annual chance flood; 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile). Based on its description, this project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal signs of previous flooding problems. An interview with the Maintenance Supervisor identified minor ponding issues at Building F (between Buildings E, F, and H). The Asset Management Project (AMP) Supervisor determined that major ponding or flooding issues are currently not an issue for the project site.

Printed: Flood Insurance Rate Map Panel 15003C0260F, Revised September 30, 2004.

Hawai`i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 7/27/15)

IV. CLEAN AIR ACT (40 CFR PARTS 6, 51, 93)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. Environmental Protection Agency's Green Book for currently designated "nonattainment areas" as of June 2015. Planned rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.

SUPPORTING DOCUMENTATION:

Printed: *State of Hawai‘i Annual Summary 2013 Air Quality Data*. State of Hawai'i, Department of Health, July 2014.

U.S. Environmental Protection Agency website at: http://epa.gov/airquality/greenbk/

V. COASTAL ZONE MANAGEMENT ACT (16 USC 1451, SECTIONS 307 (C), (D)

CONTACT:

Mr. John Nakagawa
Office of Planning
Department of Business, Economic Development & Tourism
State of Hawai‘i
P.O. Box 2359
Honolulu, Hawai'i, 96804-2359

SUPPORTING DOCUMENTS

	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai‘i's Coastal Zone Management (CZM) program.

SUPPORTING DOCUMENTATION:

Contact: In an email to the Office of Planning (OP) dated July 27, 2015, the HPHA determined that the use of HUD funds for the implementation of repair and rehabilitation improvements does not require review for consistency with Hawai‘i's CZM program. The OP confirmed this determination in an email dated July 28, 2015 and it is included in the Appendices.

Experience: Previous reviews conducted by OP in 2003, 2005, and 2010 determined that projects receiving federal funds from HUD do not require CZM federal consistency review. OP's

current determination confirms this condition is still applicable. Copies of these prior documentations are included in the Appendices.

VI. CONTAMINATION AND TOXIC SUBSTANCES (24 CFR PART 50.3 & 58.5(I)(2))

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Project Not Affected.

There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.

SUPPORTING DOCUMENTATION:

Field: A site inspection and interview with the Asset Management Project (AMP) Manager revealed no presence of any toxic or radioactive materials on the project site that warrant concern. The AMP Manager stated that no hazardous or toxic materials are stored on site.

Study: Environmental Data Resources, Inc. (EDR), conducted a search of available environmental records and prepared a Radius Map Report (Inquiry Number 4237094.198s, March 18, 2015). EDR reviewed more than 25 federal and statewide regulatory databases for information regarding the treatment, storage, disposal and release of toxic chemicals at the project site and within specific radii (generally 1 mile) of the site. A Detail Map within the EDR report documents those sites identified within a 0.25 mile radius of the project site. The EDR report in Exhibit B includes the results of their research findings.

The EDR report notes the following activities within a one mile radius of the project site: this housing project site was identified as the site of a broken pipe and sewage spill of 155 gallons. Heʻeia Combat Training Camp was used as agricultural, residential and community support facilities before and after army use (which included ammunition storage, pistol and rifle ranges, and hand grenade ranges). This site is known or suspected to contain military munitions and unexploded ordnance and therefore may present an explosive hazard. A Confirmed Release status was noted for a LUST at 7-Eleven Kahaluʻu. The same site operates stores gasoline in six UST (48,000 gallons), Currently In Use.

The project site is not identified as a Formerly Used Defense Site (FUDS) by the U.S. Army Corps of Engineers that is subject to cleanup actions for DOD generated contamination. The State's Aloha Stadium is situated about 0.25 miles away from the project site to the north, and was identified as having an underground storage tank (diesel) that is permanently out of use and closed on 2002.

VII. ENDANGERED SPECIES (50 CFR PART 402)

CONTACT:
Mr. Loyal Mehrhoff, Field Supervisor
Pacific Islands Administrator
Fish and Wildlife Services
U.S. Department of the Interior
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawaiʻi 96813
Tel. #: 792-9400

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Adverse Effect Subject to Mitigation

The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices.

SUPPORTING DOCUMENTATION:

Contact: A letter from the HPHA dated July 24, 2015 was submitted to the Pacific Island Administrator for the FWS determining that repair and rehabilitation improvements that may be implemented using HUD funds for this housing project would have no likelihood of effect on any listed species or proposed species, or existing or proposed designated critical habitat subject to certain measures. Concurrence with this determination along with proposed minimization and avoidance measures was received from the FWS in a letter dated September 28, 2015 which is included in the Appendices. This housing project is subject to the following minimization and avoidance measures.

Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.

Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.

Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.

Newell's shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If nighttime construction occurs during other times of year, all lighting will be shielded and

directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.

Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.

Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro loʻi, impoundments or other vegetated water bodies.

1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols.
2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.
3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.

In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.

Additional Measures: The following additional measures would be implemented:

1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.

Experience: The FWS was previously consulted as part of environmental reviews that were completed in 2005 (39 housing projects) and 2010 (70 housing projects) which supported the determination that repair and rehabilitation improvements would either: 1) have no likelihood of effect for certain housing projects; or 2) not likely adversely affect federally listed species or critical habitat for certain housing projects subject to mitigative measures. A summary of these consultation efforts follows.

2005 Consultation: In a letter dated July 15, 2005, the Housing and Community Development Corporation of Hawaiʻi (predecessor to the HPHA), determined that the implementation of minor repair and rehabilitation improvements for 39 housing projects would not have an adverse effect on federally-listed species or critical habitat. In a letter dated August 11, 2005, the FWS concurred with the HCDCH determination.

2010 Consultation: In a letter dated May 17, 2010, the HPHA informed the FWS that HUD funds would be used to immediately implement repair and rehabilitation improvements for six housing projects on O‘ahu and the island of Hawai`i. In a subsequent letter dated May 21, 2010, the FWS was informed that HPHA would be using HUD funds to implement minor repair and rehabilitation improvements for 64 projects throughout the State. In both letters, the HPHA determined that the repair and rehabilitation improvements were not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat. Based on further consultation and a meeting with FWS staff on June 24, 2010, the HPHA determined that repair and rehabilitation improvements for most of their housing projects would not likely adversely affect any listed or proposed species, or existing or proposed designated habitat, subject to various mitigative measures for certain housing projects.

VIII. EXPLOSIVE AND FLAMMABLE OPERATIONS (24 CFR PART 51C)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact Subject to Conditions and Mitigation, if Applicable.

A field inspection identified an existing above-ground explosive or flammable material storage container in excess of 100 gallons. The liquid propane gas (LPG) tank is not fenced and is located approximately 70 feet west of Building F, and was installed by and is owned by the gas company. Repair and rehabilitation improvements for this project should not impact this fuel storage tank. Should rehabilitation improvements increase the density of the project (e.g. increase the number of units and associated persons exposed to the hazard within the acceptable separation distance), mitigative measures would need to be implemented for the fuel tank in compliance with HUD requirements.

Under CFR Title 24, Part 51, Subpart C, increasing the residential density and number of people under a rehabilitation project using HUD funding would be considered a “HUD-assisted project.” Consequently, the existing fuel storage tank would be subject to standards under this regulation for establishing acceptable separation distances, or the application of the standards can be eliminated or modified if other conditions apply or mitigative measures are provided as identified below. HPHA would need to evaluate site conditions, comply with regulatory requirements, and determine the appropriate measure to implement.

1. The nature of the topography shields the proposed project form the hazard.
2. An existing permanent fire resistant structure of adequate size and strength will shield the proposed project from the hazard.
3. A barrier is constructed surrounding the hazard, at the site of the project, or in between the potential hazard and the proposed project.
4. The structure and outdoor areas used by people are designed to withstand blast overpressure and thermal radiation anticipated from the potential hazard (e.g., the project is of masonry and steel or reinforced concrete and steel construction).

SUPPORTING DOCUMENTATION:

Field: There is an approx. 1,000 gallon above-ground fuel storage tank located approximately 70 feet west of Building F. The LPG tank was installed by and is owned by the gas company. The tank is partially protected by bollards; there is no fencing or enclosure.

Printed: 24 CFR, Part 51, Subpart C.

Per CFR Title 24 Part 51.201 (Definitions), rehabilitation and modernization improvements that do not increase the density and number of people being exposed to hazardous operations do not meet the definition of a "HUD-assisted project," and are not subject to acceptable separation distance requirements under this regulation. Increasing the density (e.g. increase the number of units and associated persons exposed to the hazard within the acceptable separation distance) under a rehabilitation project using HUD funding would be considered a "HUD-assisted project." Consequently, the existing fuel storage tank would be subject to standards under this regulation for establishing acceptable separation distances, or the application of the standards can be eliminated or modified if other conditions apply or mitigative measures are provided as identified below. HPHA would need to evaluate site conditions, comply with regulatory requirements, and determine the appropriate measure to implement.

1. The nature of the topography shields the proposed project form the hazard.
2. An existing permanent fire resistant structure of adequate size and strength will shield the proposed project from the hazard.
3. A barrier is constructed surrounding the hazard, at the site of the project, or in between the potential hazard and the proposed project.
4. The structure and outdoor areas used by people are designed to withstand blast overpressure and thermal radiation anticipated from the potential hazard (e.g., the project is of masonry and steel or reinforced concrete and steel construction).

IX. FARMLANDS PROTECTION (7 CFR PART 658)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. Since the property consists of an existing housing development within an

DETERMINATION:

Status Category: Not Applicable.

The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. Since the property consists of an existing housing development within an urbanized area, no farmlands would be impacted by the implementation of repair and rehabilitation improvements.

Printed: The property is designated for "Urban" use by the State Land Use Commission and the County's zoning for the parcel is RD-3.75 Double-Family Residential District.

Hawai`i Office of Planning website at: http://planning.hawaii.gov/gis/
(Date accessed: 6/30/2015)

X. FLOODPLAIN MANAGEMENT (EXECUTIVE ORDER 11988, 24 CFR PART 55)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Adversely Affect Floodplain

As indicated by Flood Insurance Rate Map 15003C0260F (Revised September 30, 2004), the majority of the project site lies within Zone AEF (floodway areas within Zone AE) which is associated with the now channelized ʻĀhuimanu Stream at the rear of the property. The small area remaining in the northern corner of the site falls within Zone AE (base flood elevations determined) and Zone XS. Zone AEF and Zone AE are Special Flood Hazard Areas that are subject to flooding by the 1% annual change flood (100-year flood), while Zone XS is subject to the 2% annual chance flood; and areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile. Based on the Flood Insurance Rate Map, the buildings on the project site lie within the limits of Zone AEF.

A flood compliance report and an updated floodplain management engineering report prepared by Sam O. Hirota, Inc. in 2009 (prior 2010 ER update for project) determined that repair and rehabilitation improvements should not have a significant impact on housing units or floodplain conditions nor pose a significant threat to human life, health, safety, and property that would require mitigation as defined by current Federal and State guidelines. A current field inspection of the site and information obtained from the AMP Manager in June 2015 confirmed no major flooding issues within the project site. It appears the Flood Insurance Rate Map was not updated after ʻĀhuimanu Stream was channelized to reduce flood impacts in this project area. Therefore, the Flood Insurance Rate Map for the project area is currently

XI. HISTORIC PRESERVATION (NATIONAL HISTORIC PRESERVATION ACT OF 1966; SECTIONS 106 AND 110; 36 CFR, PART 800)

CONTACT:

Ms. Suzanne Case, Chairperson
Department of Land and Natural Resources (DLNR)
State of Hawaiʻi
1151 Punchbowl Street
Honolulu, Hawaiʻi 96813
Tel. #: 587-0400

SUPPORTING DOCUMENTS

X	Field
X	Contact
X	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Effect on Historic Properties

Subject housing site was first occupied in 1983 and is 32 years old. To be eligible for listing in the National Register of Historic Places (NRHP), a property must meet the National Register criteria for evaluation which involves examining its integrity, significance, and age (generally at least 50 years old). Due to its age, this housing project does not meet the eligibility criteria to be evaluated for the NRHP. In a letter to the State Historic Preservation Officer (SHPO) dated July 23, 2015, the HPHA determined that no historic properties would be affected (no effect) by repair and rehabilitation improvements for this housing project. No comments or objections about this no effect determination were received.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not locate any existing or potential archaeological sites (e.g., heiau) or cultural features on the property. An interview with the property manager and maintenance supervisor indicates that no known sites or features are present on the property.

Contact: A letter from the HPHA dated July 23, 2015, which is included in the Appendix, was submitted to the State Historic Preservation Officer [SHPO] (Chair of State Board of Land and Natural Resources) as part of Section 106 consultation determining that no historic properties would be affected (no effect) by repair and rehabilitation improvements that may be implemented using HUD funds for this housing project. The SHPO did not submit any comments or objections on the "no effect" determination for this housing project, which included follow-up e-mails with the State Historic Preservation Division regarding a response. On September 28, 2015, notice of HPHA's determination was also distributed to several native Hawaiian organizations and the various County Planning Departments. No concerns or opposition to this determination was received.

Printed: A review of the U.S. National Parks Service website for the National Register of Historic Places did not identify any historic properties within the limits of this housing project. A similar review of the State DLNR website for the State Register of Historic Places revealed that there are no historic properties within the project site.

National Register: U.S. National Park Service website at: http://www.nps.gov/nr/research/ (Date accessed: 7/2/15).

State Register: Hawai`i Department of Land and Natural Resources website at: http://dlnr.hawaii.gov/shpd/state-register/ (Date accessed: 7/2/15).

Experience: In letter to the State Historic Preservation Officer (SHPO) dated April 19, 2011, the HPHA determined that minor repair and rehabilitation improvement at 57 public housing projects throughout Hawaiʻi (including this housing site) would have "no effect" on historic properties. The SHPO had no comments or objections on the "no effect" determination.

XII. NOISE ABATEMENT CONTROL (24 CFR PART 51B)

SUPPORTING DOCUMENTS

X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Within HUD Noise Standards

The project site is situated along a highway or major arterial roadway that has a high volume of vehicular traffic that may generate significant noise. The HUD noise calculator estimated noise levels at the project site to be 56.3 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

SUPPORTING DOCUMENTATION:

Field: There were no significant noise generating sources identified within the project site during the site inspection. An interview with the AMP Manager and Maintenance Supervisor did not identify any loud noise producing sources in the area. As a result, notable noise sources are predominantly associated with vehicular traffic along adjacent roadways. Traffic noise did not appear significant during the site visit.

Study: The HUD day/night noise level calculator was used to estimate approximate traffic noise levels at the project site. Given the distance of the center line of Kehekili Highway to the project site (about 140 feet), the estimated noise levels at the project site using this HUD calculator was 56.3 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards.

Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

XIII. SOLE SOURCE AQUIFER (40 CFR PART 149)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact on Sole Source Aquifer

The housing project is located within the Oʻahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation. However, if exceptional circumstances require compliance steps with any of these authorities, such compliance must be established and documented prior to approving the site-specific loan or grant.

SUPPORTING DOCUMENTATION:

Printed: This determination was based upon review of the Sole Source Aquifer Memorandum of 4/30/90 (Sections II.B.1 and II.B.2) and consideration of the type of rehabilitation related improvements that would be conducted for this project.

XIV. WETLANDS PROTECTION (EXECUTIVE ORDER 11990)

	SUPPORTING DOCUMENTS
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the property did not identify the presence of any wetlands.

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/wetlands/data/mapper.html (Date accessed 7/23/2015).

XV. WILD AND SCENIC RIVERS ACT (16 USC 1271, SECTION 7 (B), (C))

	SUPPORTING DOCUMENTS
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no Wild and Scenic Rivers in Hawaiʻi, which excludes this project from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: National Wild and Scenic Rivers System website at: http://www.rivers.gov/index.php (Date accessed: 6/30/2015).

XVI. ENVIRONMENTAL JUSTICE (EXECUTIVE ORDER NO. 12898)

	SUPPORTING DOCUMENTS
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Conflict with Requirements

Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, repair and rehabilitation improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations. Repair and rehabilitation improvements should benefit low-income and minority populations living within this housing project.

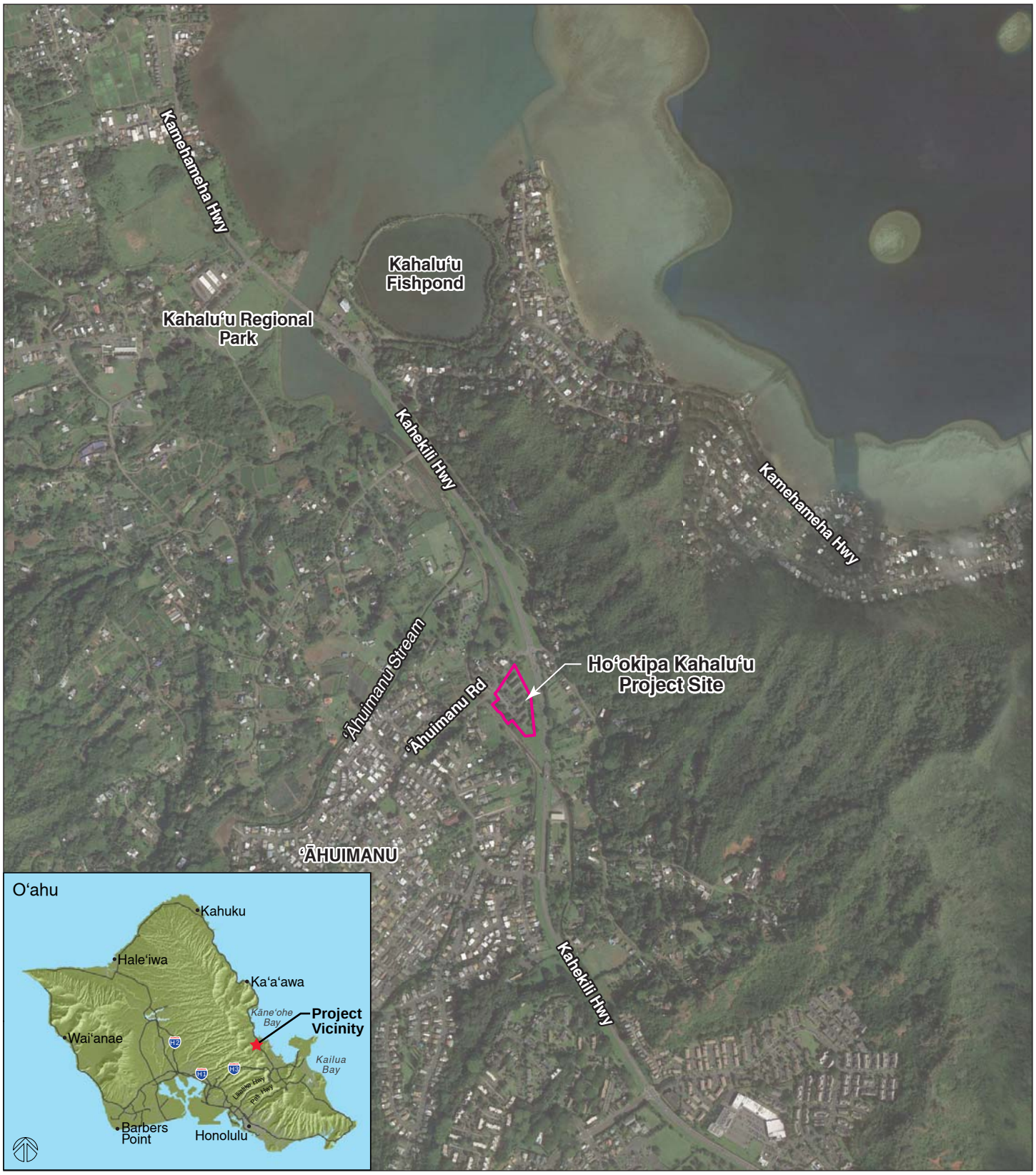
SUPPORTING DOCUMENTATION:

Printed: Executive Order 12898.

U.S. Department of Housing and Urban Development website at: https://www.hudexchange.info/environmental-review/environmental-justice/

EXHIBIT A

Location Map, TMK Map, Site Map, Flood Map, and Site Photos



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

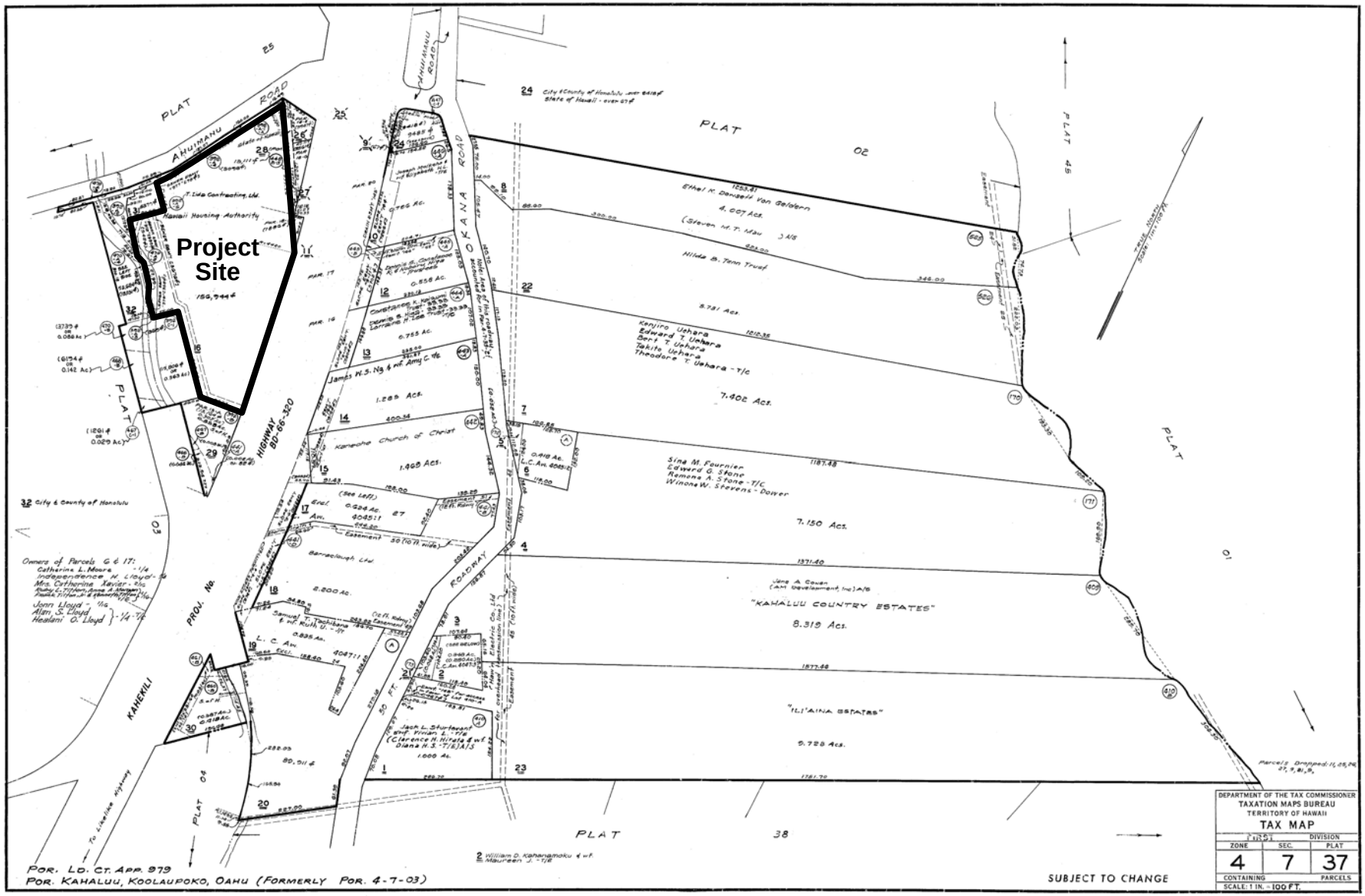
HPHA No. 1072 - Ho'okipa Kahalu'u (AMP 45)

Figure 1 - Project Location Map

Kāne'ohe, O'ahu

1,000 FT

HHF PLANNERS
places for people



HPHA No. 1072 - Hoʻokipa Kahaluʻu (AMP 45)

Figure 3 - Site Map

Kāneʻohe, Oʻahu

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data, Google Earth Pro - 1/12/2014

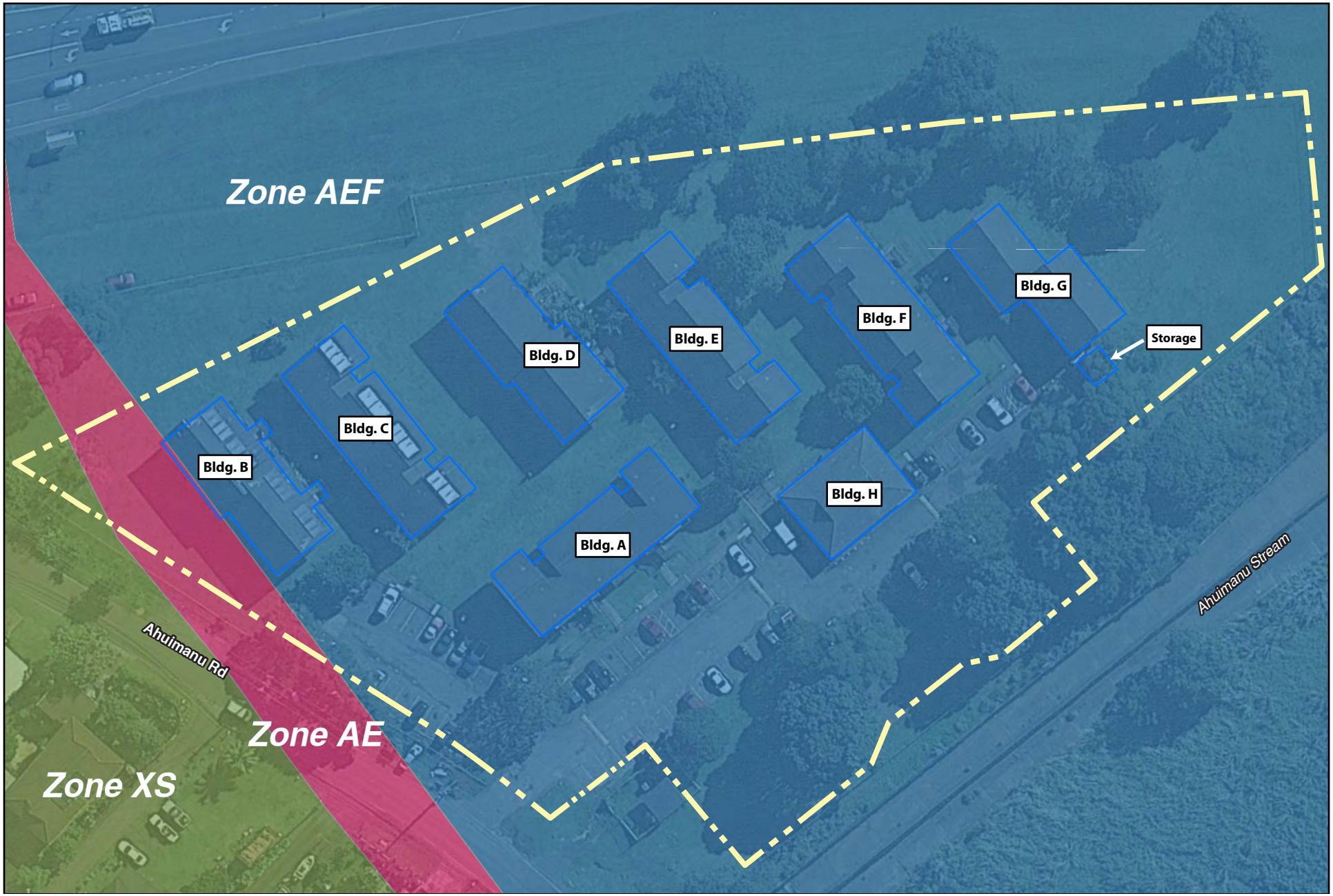
HPHA No. 1072 - Ho'okipa Kahalu'u (AMP 45)

Figure 3 - Site Map

Kāne'ohe, O'ahu

0 25 50
FEET

HHF PLANNERS
places for people



Source: State of Hawai'i GIS Data, Google Earth Pro - 1/12/2014

LEGEND

- Zone AE - 1% Annual Chance of Flood
- Zone AEF - Floodway in Zone AE
- Zone D - Unstudied Area
- Zone XS - 0.2% Annual Chance of Flood
- Zone X - Outside the 0.2% Annual Chance of Flood

HPHA No. 1072 - Ho'okipa Kahalu'u (AMP 45)

Figure 4 - Flood Map

Kāne'ohe, O'ahu

0 25 50 FEET

HHF PLANNERS
places for people

HOʻOKIPA KAHALUʻU
SITE PHOTOS

Kahikili Highway in front of the subject housing site (right)

Large yard separates highway from housing site

Ahuimanu Road, project site to the right

Ahuimanu Road, project site to the left

Channelized drainage area runs along the rear of the housing site

Minor ponding in front of Building F

HOʻOKIPA KAHALUʻU
SITE PHOTOS

Community Building

Storage Area

Trash pickup area

Tank located approximately 70 feet west of Building F.

EXHIBIT B

EDR Radius Map Report

Hookipa Kahaluu
47-330 Ahuimanu Rd.
Kaneohe, HI 96744

Inquiry Number: 4237094.198s
March 18, 2015

EDR Summary Radius Map Report

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

FORM-NULL-PVC

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

47-330 AHUIMANU RD.
HONOLULU County, HI 96744

COORDINATES

Latitude (North):	21.4479000 - 21˚ 26' 52.44''
Longitude (West):	157.8334000 - 157˚ 50' 0.24''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	620886.1
UTM Y (Meters):	2372029.8
Elevation:	33 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	USGS 7.5 min quad index

MAPPED SITES SUMMARY

Target Property Address:
47-330 AHUIMANU RD.
, HI 96744

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
1	47-330 AHUIMANU DRIV	47-330 AHUIMANU DR	SPILLS		TP
A2	HEEIA FIRE CONTROL S		FUDS	Higher	2771, East
A3	HEEIA COMBAT TRAININ		FUDS	Higher	2771, East
4	7-ELEVEN KAHALUU	47-515 KAMEHAMEHA HW	SHWS, LUST, UST, Financial Assurance	Lower	3897, NNW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 7 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
47-330 AHUIMANU DRIV 47-330 AHUIMANU DR KANEOHE, HI 96744	SPILLS	N/A

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

State- and tribal - equivalent CERCLIS

SHWS: A review of the SHWS list, as provided by EDR, and dated 12/02/2014 has revealed that there is 1 SHWS site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
7-ELEVEN KAHALUU	***47-515 KAMEHAMEHA HW***	***NNW 1/2 - 1 (0.738 mi.)***	***4***	***7***

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

FUDS: A review of the FUDS list, as provided by EDR, and dated 06/06/2014 has revealed that there are 2 FUDS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HEEIA FIRE CONTROL S		E 1/2 - 1 (0.525 mi.)	A2	7
HEEIA COMBAT TRAININ		E 1/2 - 1 (0.525 mi.)	A3	7

ORPHAN SUMMARY

Count: 2 records.

City	EDR ID	Site Name	Site Address	Zip	Database(s)
KAHALUU	S110169200	HECO TRANSFORMER 56846	47-195 KAMEHAMEHA HWY	96744	SHWS, SPILLS, ENG CONTROLS, INS CONTROL
KUALOA	S111704786	KUALOA PLANTATION MILL	49-586 KAMEHAMEHA HWY	96744	SHWS

OVERVIEW MAP - 4237094.198S

0 1/4 1/2 1 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Hookipa Kahaluu ADDRESS: 47-330 Ahuimanu Rd. Kaneohe HI 96744 LAT/LONG: 21.4479 / 157.8334	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.198s DATE: March 18, 2015 7:57 am

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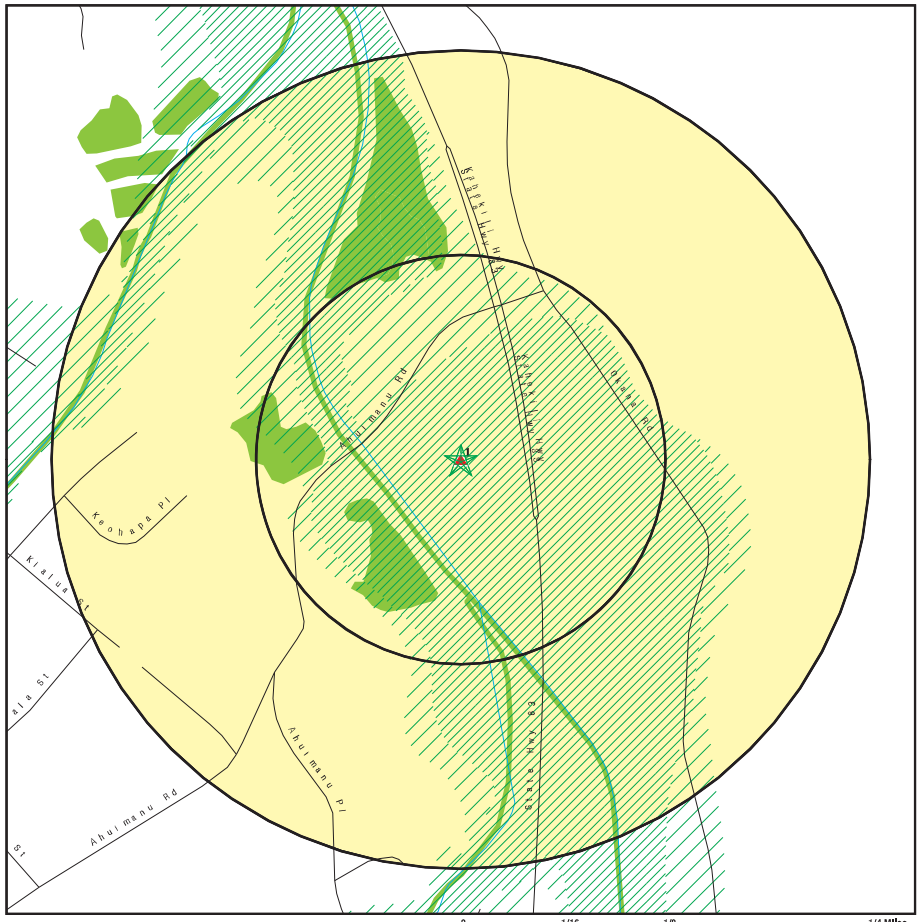
DETAIL MAP - 4237094.198S



0 1/16 1/8 1/4 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Hookipa Kahaluu ADDRESS: 47-330 Ahuimanu Rd. Kaneohe HI 96744 LAT/LONG: 21.4479 / 157.8334	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.198s DATE: March 18, 2015 7:57 am

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
SHWS	1.000		0	0	0	1	NR	1
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		0	0	0	NR	NR	0
INST CONTROL	0.500		0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP	1	NR	NR	NR	NR	NR	1
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	2	NR	2
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		0	0	NR	NR	NR	0
EDR US Hist Cleaners	0.250		0	0	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
RGA HWS	TP		NR	NR	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
1 **Target** **Property** **Actual:** **33 ft.**	**47-330 AHUIMANU DRIVE, BROKEN PIPE** **47-330 AHUIMANU DR** **KANEOHE, HI 96744** Click here for full text details	**SPILLS**	**S106815591** **N/A**
A2 **East** **1/2-1** **0.525 mi.** **2771 ft.** **Relative:** **Higher**	**HEEIA FIRE CONTROL STA** **OTHER, HI** Click here for full text details	**FUDS**	**1007212709** **N/A**
A3 **East** **1/2-1** **0.525 mi.** **2771 ft.** **Relative:** **Higher**	**HEEIA COMBAT TRAINING CAMP** **OTHER, HI** Click here for full text details	**FUDS**	**1007212708** **N/A**
4 **NNW** **1/2-1** **0.738 mi.** **3897 ft.** **Relative:** **Lower**	**7-ELEVEN KAHALUU** **47-515 KAMEHAMEHA HWY** **KAHALUU, HI 96744** Click here for full text details **LUST** Facility Status: Confirmed Release Facility Status: Site Cleanup Completed (NFA) Facility Id: 9-200331 **UST** Tank Status: Currently In Use Tank Status: Permanently Out of Use Facility Id: 9-200331	**SHWS** **LUST** **UST** **Financial Assurance**	**U001236131** **N/A**

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
HI	AIRS	List of Permitted Facilities	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	BROWNFIELDS	Brownfields Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	CDL	Clandestine Drug Lab Listing	Department of Health	08/04/2010	09/10/2010	10/22/2010
HI	DRYCLEANERS	Permitted Drycleaner Facility Listing	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	ENG CONTROLS	Engineering Control Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	Financial Assurance	Financial Assurance Information Listing	Department of Health	12/01/2014	12/19/2014	01/28/2015
HI	INST CONTROL	Sites with Institutional Controls	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	LUST	Leaking Underground Storage Tank Database	Department of Health	03/02/2015	03/04/2015	03/17/2015
HI	RGA HWS	Recovered Government Archive State Hazardous Waste Facilitie	Department of Health		07/01/2013	01/08/2014
HI	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Health		07/01/2013	01/17/2014
HI	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	Department of Health		07/01/2013	01/03/2014
HI	SHWS	Sites List	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	SPILLS	Release Notifications	Department of Health	12/02/2014	12/22/2014	01/28/2015
HI	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	03/10/2012	01/03/2013	02/11/2013
HI	SWF/LF	Permitted Landfills in the State of Hawaii	Department of Health	09/17/2012	04/03/2013	05/10/2013
HI	UIC	Underground Injection Wells Listing	Department of Health	02/07/2013	02/12/2013	04/09/2013
HI	UST	Underground Storage Tank Database	Department of Health	03/02/2015	03/04/2015	03/17/2015
HI	VCP	Voluntary Response Program Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	04/22/2013	03/03/2015	03/09/2015
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2011	02/26/2013	04/19/2013
US	CERCLIS	Comprehensive Environmental Response, Compensation, and Liab	EPA	10/25/2013	11/11/2013	02/13/2014
US	CERCLIS-NFRAP	CERCLIS No Further Remedial Action Planned	EPA	10/25/2013	11/11/2013	02/13/2014
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	07/01/2014	09/10/2014	10/20/2014
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	01/23/2015	02/13/2015	03/09/2015
US	CORRACTS	Corrective Action Report	EPA	12/09/2014	12/29/2014	01/29/2015
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DELISTED NPL	National Priority List Deletions	EPA	12/16/2014	01/08/2015	02/09/2015
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	07/31/2012	08/07/2012	09/18/2012
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EDR US Hist Auto Stat	EDR Exclusive Historic Gas Stations	EDR, Inc.			
US	EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	09/29/2014	09/30/2014	11/06/2014
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	07/21/2014	10/07/2014	10/20/2014
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
US	FEMA UST	Underground Storage Tank Listing	FEMA	01/01/2010	02/16/2010	04/12/2010
US	FINDS	Facility Index System/Facility Registry System	EPA	08/16/2014	09/10/2014	10/20/2014
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	06/06/2014	09/10/2014	09/18/2014
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	12/29/2014	12/30/2014	03/09/2015
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	01/23/2015	02/06/2015	03/09/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	02/01/2013	05/01/2013	11/01/2013

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	01/30/2015	02/05/2015	03/09/2015
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/10/2015	03/13/2015
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	01/28/2015	01/30/2015	03/13/2015
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	01/08/2015	01/08/2015	02/09/2015
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2005	12/08/2006	01/11/2007
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	02/01/2013	05/01/2013	01/27/2014
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	01/30/2015	02/05/2015	03/13/2015
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/13/2015	03/13/2015
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	01/29/2015	01/30/2015	03/13/2015
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	12/14/2014	02/13/2015	03/13/2015
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	09/29/2014	10/01/2014	11/06/2014
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	11/25/2014	11/26/2014	01/29/2015
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	02/18/2014	03/18/2014	04/24/2014
US	LUCIS	Land Use Control Information System	Department of the Navy	12/03/2014	12/12/2014	01/29/2015
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	12/29/2014	01/08/2015	01/29/2015
US	NPL	National Priority List	EPA	12/16/2014	01/08/2015	02/09/2015
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	07/01/2014	10/15/2014	11/17/2014
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	02/01/2011	10/19/2011	01/10/2012
US	PRP	Potentially Responsible Parties	EPA	10/25/2013	10/17/2014	10/20/2014
US	Proposed NPL	Proposed National Priority List Sites	EPA	12/16/2014	01/08/2015	02/09/2015
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	10/07/2014	10/08/2014	10/20/2014
US	RCRA NonGen / NLR	RCRA - Non Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RMP	Risk Management Plans	Environmental Protection Agency	08/01/2014	08/12/2014	11/06/2014
US	ROD	Records Of Decision	EPA	11/25/2013	12/12/2013	02/24/2014
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	03/07/2011	03/09/2011	05/02/2011
US	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2011	07/31/2013	09/13/2013
US	TSCA	Toxic Substances Control Act	EPA	12/31/2012	01/15/2015	01/29/2015
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	09/14/2010	10/07/2011	03/01/2012
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/16/2014	10/31/2014	11/17/2014
US	US AIRS MINOR	Air Facility System Data	EPA	10/16/2014	10/31/2014	11/17/2014

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	12/22/2014	12/22/2014	01/29/2015
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	11/19/2014	11/21/2014	01/29/2015
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	12/30/2014	12/31/2014	01/29/2015
US	Oil/Gas Pipelines	GeoData Digital Line Graphs from 1:100,000-Scale Maps	USGS			
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
US	USGS 7.5' Topographic Map	Scanned Digital USGS 7.5' Topographic Map (DRG)	USGS			

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

HOOKIPA KAHALUU
47-330 AHUIMANU RD.
KANEOHE, HI 96744

TARGET PROPERTY COORDINATES

Latitude (North):	21.4479 - 21˚ 26' 52.44''
Longitude (West):	157.8334 - 157˚ 50' 0.24''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	620886.1
UTM Y (Meters):	2372029.8
Elevation:	33 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	21157-D7 KANEOHE, HI
Most Recent Revision:	Not reported

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

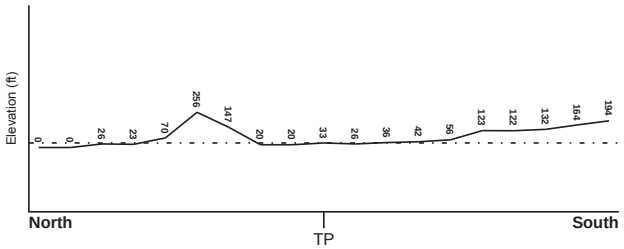
TOPOGRAPHIC INFORMATION

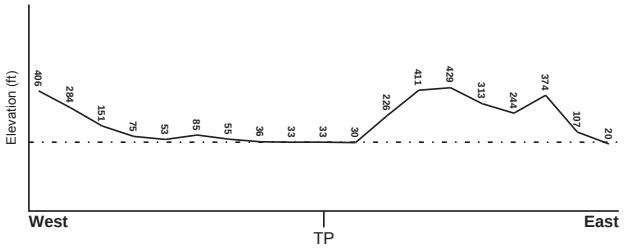
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General West

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 33 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
HONOLULU, HI	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 15003C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
KANEOHE	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

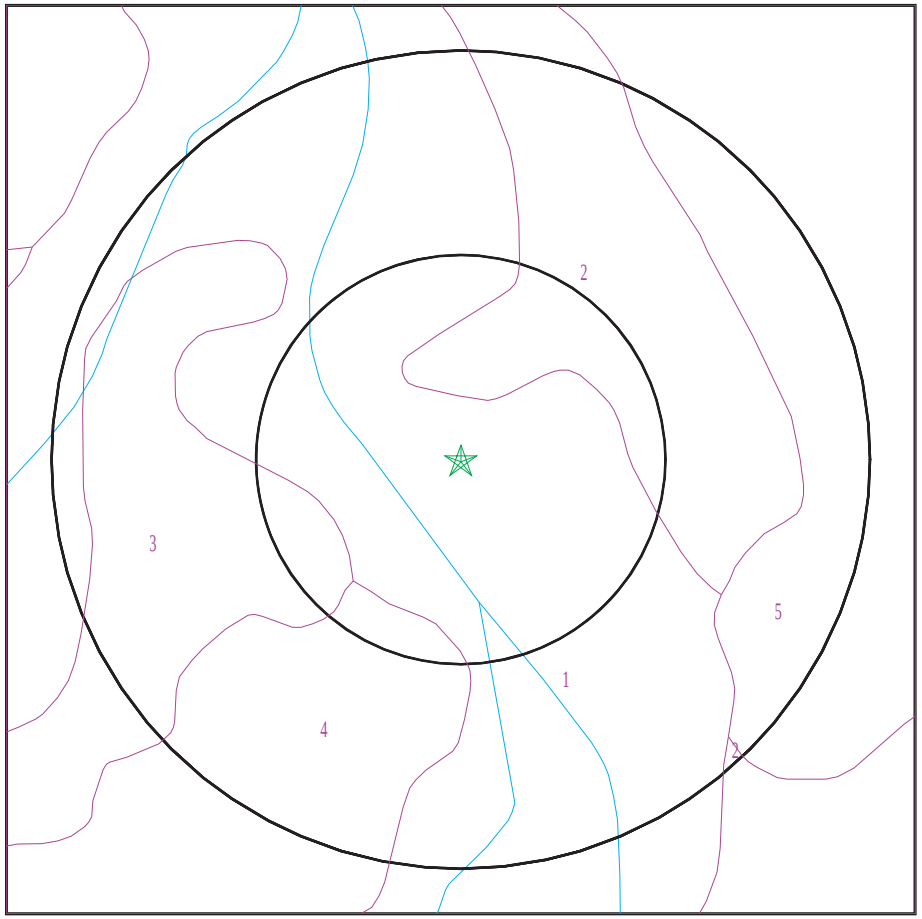
Era: -
System: -
Series: -
Code: N/A *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: -

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4237094.198s



★ Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME: Hookipa Kahaluu ADDRESS: 47-330 Ahuimanu Rd. Kaneohe HI 96744 LAT/LONG: 21.4479 / 157.8334	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.198s DATE: March 18, 2015 7:57 am

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DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Hanalei

Soil Surface Texture: silty clay

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 30 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	12 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 14 Min: 1.41	Max: 6.5 Min: 4.5
2	12 inches	25 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.1
3	25 inches	35 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.1

Soil Map ID: 2

Soil Component Name: Alaeloa

Soil Surface Texture: silty clay

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 42 Min: 4.23	Max: 6 Min: 5.1
2	48 inches	57 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 1.41 Min: 0.42	Max: 6 Min: 4.5
3	57 inches	70 inches	stony silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 1.41 Min: 0.42	Max: 6 Min: 4.5
4	9 inches	18 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 4.23 Min: 0.42	Max: 6 Min: 4.5

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
5	29 inches	48 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 4.23 Min: 1.41	Max: 6 Min: 4.5
6	18 inches	29 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 4.23 Min: 0.42	Max: 6 Min: 4.5

Soil Map ID: 3

Soil Component Name: Lolekaa

Soil Surface Texture: silty clay

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 42 Min: 4.23	Max: 5.5 Min: 4.5

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	9 inches	42 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 4.23 Min: 0.42	Max: 5.5 Min: 3.5
3	42 inches	64 inches	paragravelly loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 4.23 Min: 1.41	Max: 5 Min: 3.5

Soil Map ID: 4

Soil Component Name: Lolekaa

Soil Surface Texture: silty clay

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 42 Min: 4.23	Max: 5.5 Min: 4.5

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	9 inches	42 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 4.23 Min: 0.42	Max: 5.5 Min: 3.5
3	42 inches	64 inches	paragravelly loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 4.23 Min: 1.41	Max: 5 Min: 3.5

Soil Map ID: 5

Soil Component Name: Alaeloa

Soil Surface Texture: silty clay

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 42 Min: 4.23	Max: 6 Min: 5.1

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	48 inches	57 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 1.41 Min: 0.42	Max: 6 Min: 4.5
3	57 inches	70 inches	stony silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 1.41 Min: 0.42	Max: 6 Min: 4.5
4	9 inches	18 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 4.23 Min: 0.42	Max: 6 Min: 4.5
5	29 inches	48 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 4.23 Min: 1.41	Max: 6 Min: 4.5
6	18 inches	29 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Organic Clay or Organic Silt.	Max: 4.23 Min: 0.42	Max: 6 Min: 4.5

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
B2	USGS40000270831	1/2 - 1 Mile North
A3	USGS40000270785	1/2 - 1 Mile WSW
B4	USGS40000270834	1/2 - 1 Mile North
B5	USGS40000270832	1/2 - 1 Mile North
6	USGS40000270827	1/2 - 1 Mile NNW
C7	USGS40000270835	1/2 - 1 Mile North
D9	USGS40000270748	1/2 - 1 Mile SSE
C11	USGS40000270836	1/2 - 1 Mile NNW
E14	USGS40000270798	1/2 - 1 Mile West
E16	USGS40000270803	1/2 - 1 Mile West
F17	USGS40000270837	1/2 - 1 Mile NW
G20	USGS40000270746	1/2 - 1 Mile SSW
H21	USGS40000270843	1/2 - 1 Mile NNW
I23	USGS40000270815	1/2 - 1 Mile WNW
H25	USGS40000270846	1/2 - 1 Mile NNW
J27	USGS40000270822	1/2 - 1 Mile WNW

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

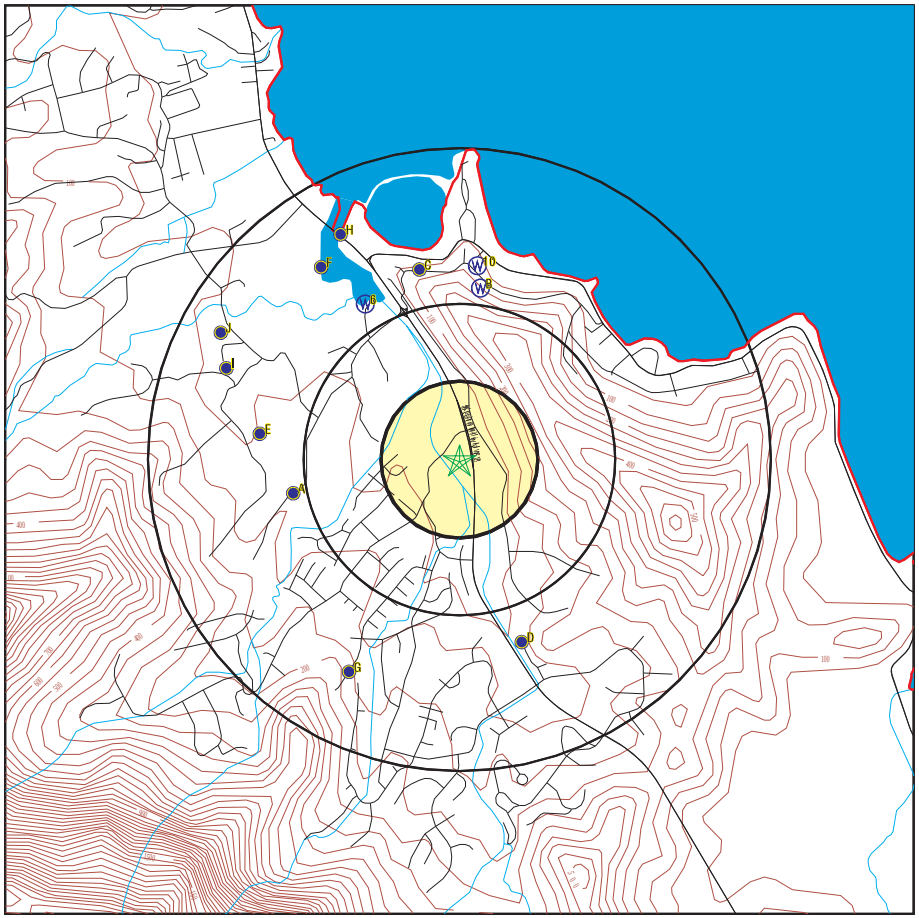
STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	HI8000000003414	1/2 - 1 Mile West
D8	HI8000000003376	1/2 - 1 Mile SSE
10	HI8000000003473	1/2 - 1 Mile North
C12	HI8000000003472	1/2 - 1 Mile NNW
E13	HI8000000003431	1/2 - 1 Mile West
E15	HI8000000003438	1/2 - 1 Mile West
F18	HI8000000003471	1/2 - 1 Mile NW
G19	HI8000000003370	1/2 - 1 Mile SSW
H22	HI8000000003478	1/2 - 1 Mile NNW
I24	HI8000000003448	1/2 - 1 Mile WNW

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
H26	HI8000000003485	1/2 - 1 Mile NNW
J28	HI8000000003456	1/2 - 1 Mile WNW

PHYSICAL SETTING SOURCE MAP - 4237094.198s



County Boundary
Major Roads
Contour Lines
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons

0 1/4 1/2 1 Miles

Groundwater Flow Direction
Indeterminate Groundwater Flow at Location
Groundwater Flow Varies at Location

SITE NAME: Hookipa Kahaluu ADDRESS: 47-330 Ahuimanu Rd. Kaneohe HI 96744 LAT/LONG: 21.4479 / 157.8334	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.198s DATE: March 18, 2015 7:57 am

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
A1 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003414**
B2 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270831**
A3 **WSW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270785**
B4 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270834**
B5 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270832**
6 **NNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270827**
C7 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270835**
D8 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003376**
D9 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270748**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
10 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003473**
C11 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270836**
C12 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003472**
E13 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003431**
E14 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270798**
E15 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003438**
E16 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270803**
F17 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270837**
F18 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003471**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
G19 **SSW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003370**
G20 **SSW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270746**
H21 **NNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270843**
H22 **NNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003478**
I23 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270815**
I24 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003448**
H25 **NNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270846**
H26 **NNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003485**
J27 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270822**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
J28 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003456**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for HONOLULU County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 96744

Number of sites tested: 22

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.091 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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HAWAII PUBLIC HOUSING AUTHORITY

ENVIRONMENTAL REVIEW

KAUHALE ʻOHANA

Waimānalo, Oʻahu

AMP 45
HPHA No. 1090

Prepared for:

State of Hawaii
Hawaii Public Housing Authority

Prepared by:

HHF PLANNERS
places for people

U.S. Department of Housing and Urban Development
451 Seventh Street, SW
Washington, DC 20410
www.hud.gov

espanol.hud.gov

Environmental Review for Activity/Project that is Categorically Excluded Subject to Section 58.5

Pursuant to 24 CFR 58.35(a)

Project Information

Project Name: Kauhale ʻOhana (AMP 45)

Responsible Entity: Hawaii Public Housing Authority
1002 North School Street
Honolulu, HI 96817

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

State/Local Identifier: State of Hawaiʻi

Preparer: Mr. Scott Ezer, Vice President
HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaiʻi 96813

Certifying Officer Name and Title: Mr. David Y. Ige
Governor, State of Hawaiʻi

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

Consultant (if applicable): HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaiʻi 96813

Direct Comments to: Mr. Hakim Ouansafi, Executive Director
Hawaii Public Housing Authority
1002 North School Street
Honolulu, Hawaiʻi 96817

Project Location: 41-1260 Kalanianaʻole Highway
Waimānalo, Hawaiʻi 96795

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]**:**

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a "major construction activity" and would involve one or a combination of several HUD designated categories of actions.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent;
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons;
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland;
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation;
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls);
7. Interior and exterior renovations and rehabilitation;
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site;
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Level of Environmental Review Determination:

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.5. Compliance with and completion of conformance determinations for other statute, executive order, or regulation has been completed and support the Categorical Exclusion.

Funding Information

Grant Number	HUD Program	Funding Amount
To be determined	Capital Fund	To be determined
To be determined	Economic Development Initiative Special Project Grant	To be determined
To be determined	Other Grants	To be determined

Estimated Total HUD Funded Amount:

To be determined by HUD using a formula and based upon federal budget.

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]**:**

Depends upon funds available.

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	*The project is not within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.*
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☒	*The State of Hawai'i does not have any designated coastal barrier resource units. (http://www.fws.gov/CBRA/Maps/Mapper.html)*
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes ☐ No ☒	*As indicated in the Flood Insurance Rate Panel 15003C0380H, Panel Effective Date: November 05, 2014, a portion of the southern boundary of the property is within an area designated as Flood Zone AO (flood depths of 1 to 3 feet, usually sheet flow on sloping terrain, and average depths determined) and Flood Zone AEF (Floodway areas in Zone AE. The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without increasing the BFE). These flood areas are associated with a tributary stream identified as Stream C. The remainder of the property and all existing housing structures are located within Flood Hazard Zone X (areas determined to be outside the 0.2% annual chance floodplain).* *No significant impacts to existing housing units or floodplain conditions are expected as a result of repair and rehabilitation improvements. Because*

		the housing project is on State-owned property, it would typically be exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). Therefore, the project will comply with applicable flood insurance standards as warranted.
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5		
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes ☐ No ☒	*The State of Hawai'i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. EPA's Green Book for currently designated "nonattainment areas" as of June 2015. Planned repair and rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.*
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes ☐ No ☒	*Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai'i's Coastal Zone Management (CZM) program.*
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☐ No ☒	*There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.*
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes ☒ No ☐	*The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (USFWS) in their letter dated September 28, 2015 which is included in the Appendices, while project-specific mitigation measures are identified in the following section*

Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes ☐ No ☒	*A field inspection identified an existing above-ground explosive or flammable material storage container in excess of 100 gallons. The liquid gas tank is surrounded by an approximately eight-foot-high chain link fence and bollards, located approximately 45 feet west of Building A. Repair and rehabilitation improvements for this project should not impact this fuel storage tank. Should rehabilitation improvements increase the density of the project (e.g. increase the number of units and associated persons exposed to the hazard within the acceptable separation distance), mitigative measures would need to be implemented for the fuel tank in compliance with HUD requirements.*
Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes ☐ No ☒	*The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.*
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes ☐ No ☒	*All existing housing structures are located within Flood Hazard Zone X (areas determined to be outside the 0.2% annual chance floodplain). Flood Hazard Zone: AO (flood depths of 1 to 3 feet, usually sheet flow on sloping terrain, and average depths determined) and Flood Zone AEF (Floodway areas in Zone AE) run along the southern portion of the property to the south of the housing units. Field inspection and information obtained from the AMP Manager confirmed no major flooding issues within the project site. Therefore, rehabilitation improvements implemented for this housing project should not have significant impact on existing floodplain conditions or pose a significant threat to human life, health, safety, and property as defined by Federal and State guidelines that would require mitigation.* *Areas located within Flood Zone AEF and AE would need "no-rise" certifications for any proposed fill or grading to ensure flood heights for nearby areas are not adversely affected. Design plans would be submitted to pertinent State and County agencies for review and approval as part of the design review process. Any required site modifications would comply*

		with applicable flood regulations and design standards. The implementation of the design review process and compliance with pertinent flood regulations should minimize any impacts on public health, safety, and welfare. The project is in compliance with Executive Order 11988.
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes ☐ No ☒	*Kauhale Ohana was first occupied in 1995 and is 20 years old. . To be eligible for listing in the National Register of Historic Places (NRHP), a property must meet the National Register criteria for evaluation which involves examining its integrity, significance, and age (generally at least 50 years old). Due to its age, this housing project does not meet the eligibility criteria to be evaluated for the NRHP. In a letter to the State Historic Preservation Officer dated July 23, 2015, the HPHA determined that no historic properties would be affected by repair and rehabilitation improvements for this housing project. No comments or objections about this no effect determination were received.*
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes ☐ No ☒	*The project site is not situated along a highway that has a high volume of vehicular traffic. The HUD noise calculator estimated noise levels at the project site to be 46.9 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.*
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes ☐ No ☒	*The housing project is located within the O'ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation.*
Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☐ No ☒	*There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.* *(http://www.fws.gov/wetlands/data/mapper.HTML)*
Wild and Scenic Rivers	Yes No	*There are no Wild and Scenic Rivers in Hawai'i, which excludes this project from mitigation or*

Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	☐ ☒	*formal consultation requirements (http://www.rivers.gov/map.php)*
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes No ☐ ☒	*Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, these improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects on minority populations and low-income populations. Improvements should benefit low-income and minority populations living within this housing project.*

Field Inspection (Date and completed by)**:** June 04, 2015
Questor Lau, Planner
HHF Planners

Summary of Findings and Conclusions:

Repair and rehabilitation improvements implemented for this existing housing project by HPHA should not result in significant environmental impacts based upon research data collected, a field inspection, consultation with the site manager and maintenance staff, consultation with pertinent resource agencies, and prior HPHA experience implementing repair and rehabilitation improvements. Therefore, repair and rehabilitation improvements would comply and be consistent with the statutes, executive orders, and regulations addressed. Furthermore, HPHA would evaluate improvements planned to ensure the work is consistent with the designated categories of actions described under the project description section. Compliance with these factors evaluated are further addressed in the attached Source Documentation Statutory Worksheet along with relevant technical reports/assessments.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Law, Authority, or Factor	Mitigation Measure
Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	*Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.* *Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.* *Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.* *Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.* *Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo'i, impoundments or other vegetated water bodies.* *1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols.* *2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.* *3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including*

	human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area. *In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.* *<u>Additional Measures</u>: The following additional measures would be implemented:* *1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.*

Determination:

☐ This categorically excluded activity/project converts to **EXEMPT** per Section 58.34(a)(12), because it does not require any mitigation for compliance with any listed statutes or authorities, nor requires any formal permit or license; **Funds may be committed and drawn down after certification of this part** for this (now) EXEMPT project; OR

☒ This categorically excluded activity/project cannot convert to Exempt status because one or more statutes or authorities listed at Section 58.5 requires formal consultation or mitigation. Complete consultation/mitigation protocol requirements, **publish NOI/RROF and obtain "Authority to Use Grant Funds"** (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR

☐ This project is not categorically excluded OR, if originally categorically excluded, is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

Preparer Signature: Scott Ezer Date: 11-10-15

Name/Title/Organization: Mr. Scott Ezer, Vice President
HHF Planners

Responsible Entity Agency Official Signature:

David Y. Ige Date: APR 28 2016

Name/Title: Mr. David Y. Ige, Governor

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

Kauhale Ohana (HA # 1090)

TMK: (1) 4-1-009: 286

Hawai‘i Public Housing Authority (HPHA) Environmental Review

SOURCE DOCUMENTATION (SD) STATUTORY WORKSHEET

Site Visit Date: June 4, 2015
Prepared By: Questor Lau

The Kauhale ‘Ohana housing project is located in the Waimānalo community on the island of O‘ahu. Waimānalo is situated in the eastern most end of Windward O‘ahu, east of Kailua, and north of Hawai‘i Kai.

The housing site is situated inland (south) of Kalaniana‘ole Highway on property positioned between Waimānalo Elementary and Intermediate School and Waimānalo District Park. As a result, vehicle access to the housing site is off of a driveway from the highway leading to the district park. A residential subdivision is located immediately east of the housing project site, Bellows Air Force Station is to the north along with Waimānalo Bay State Recreational Area across the highway. An unlined drainageway runs along the project site’s southern boundary. This housing project is within HPHA’s Asset Management Project (AMP) 45 which includes five other housing projects within the Windward district. Figure 3 identifies this housing project in relation to the other projects within AMP 45.

The property consists of 2.52 acres, and is identified as Tax Map Key (TMK) No. (1) 4-1-009: 286. The housing project was completed in 1995, and is comprised of five two-story low-rise townhome buildings with three-bedroom units and has a street address of 41-1260 Kalaniana‘ole Highway. The State’s land use designation for the property is the “Urban District.” The City’s zoning for the parcel is R-5, Residential District.

The project site is not located within a tsunami evacuation zone, however, a portion of the southern boundary of the property is within an area designated as Flood Zone AO and AEF (Flood Insurance Rate Map, Panel 15003C0380H, Effective Date November 05, 2014. The AO zone is defined as flood depths of 1 to 3 feet (usually sheet flow on sloping terrain), and average depths determined. This flood area is associated with a tributary stream identified as Stream C based upon a report generated from the Hawai‘i National Flood Insurance Program, Flood Hazard Assessment Tool. Flood Zone AEF (Floodway areas in Zone AE) runs through the northwest edge of the property associated with the drainageway.

No residential building structures are situated within these Flood Zones AO or AEF, and existing buildings near this area are elevated. A large open lawn area and another area with vegetation is present in this flood area. During heavy rains, storm water associated with the nearby stream flows thru this open grassed area of the property which is situated below and away from building structures. Remaining areas of the property are located in Zone X which is determined to be outside the 500-year flood zone.
The following figures in Exhibit A provide supporting information on this housing project:

Figure 1: Location Map
Figure 2: TMK Map
Figure 3: Site Map
Figure 4: Flood Map

COMPLIANCE FACTORS

I. AIRPORT CLEAR ZONES AND ACCIDENT POTENTIAL ZONES (24 CFR PART 51D)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The housing project does not lie within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: 24 CFR 51 (D).

Honolulu International Airport Master Plan - 2010 (August 1994), State Department of Transportation, Airports Division;

*Hawai`i Airports and Flying Safety Guide (2012-13, Fifth Edition, Revision 1)* Hawai`i Department of Transportation, Airports Division; and

http://hidot.hawaii.gov/airports/files/2013/01/Airport-Safety-Guide-2012-2013-5rev1.pdf

II. COASTAL BARRIER RESOURCES (COASTAL BARRIER IMPROVEMENT ACT OF 1990 [16 USC 3501])

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i does not have any designated coastal barrier resource units.

SUPPORTING DOCUMENTATION:

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/cbra/maps/mapper.html (Date accessed: 6/30/15).

III. FLOOD INSURANCE (FLOOD DISASTER PROTECTION ACT OF 1973 AND NATIONAL FLOOD INSURANCE REFORM ACT OF 1994 [42 USC 4001-4128 AND 42 USC 5154a])

	SUPPORTING DOCUMENTS
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program.

As indicated in the Flood Insurance Rate Panel 15003C0380H, Panel Effective Date: November 05, 2014, a portion of the southern boundary of the property is within an area designated as Flood Zone AO (flood depths of 1 to 3 feet, usually sheet flow on sloping terrain, and average depths determined). A Flood Zone AEF (Floodway areas in Zone AE) cuts through the northwest edge of the property associated with a drainageway identified as Stream C. The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without increasing the BFE. These flood areas encompass a lower lying open grassed area and vegetated area on the northwest end of the property as shown on Figure 4. The remainder of the property, which includes all existing residential building structures, are located within Flood Hazard Zone X (areas determined to be outside the 0.2% annual chance floodplain).

Based on its description, this project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal signs of flooding problems. An interview with the AMP Manager also determined that major ponding or flooding issues are currently not an issue for the project site.

Printed: Flood Insurance Rate Map, Community Panel Number 15003C0380H, Panel Effective Date: November 05, 2014.

Hawai`i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 7/27/15)

IV. CLEAN AIR ACT (40 CFR PARTS 6, 51, 93)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. Environmental Protection Agency’s Green Book for currently designated “nonattainment areas” as of June 2015. Planned rehabilitation improvements are not expected to generate significant pollutants affecting the State’s status as an attainment area.

SUPPORTING DOCUMENTATION:

Printed: *State of Hawai‘i Annual Summary 2013 Air Quality Data*. State of Hawai’i, Department of Health, July 2014.

U.S. Environmental Protection Agency website at: http://epa.gov/airquality/greenbk/

V. COASTAL ZONE MANAGEMENT ACT (16 USC 1451, SECTIONS 307 (C), (D)

CONTACT:
Mr. John Nakagawa
Office of Planning
Department of Business, Economic Development & Tourism
State of Hawai‘i
P.O. Box 2359
Honolulu, Hawai’i, 96804-2359

SUPPORTING DOCUMENTS

	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai‘i’s Coastal Zone Management (CZM) program.

SUPPORTING DOCUMENTATION:

Contact: In an email to the Office of Planning (OP) dated July 27, 2015, the HPHA determined that the use of HUD funds for the implementation of repair and rehabilitation improvements does not require review for consistency with Hawai‘i’s CZM program. The OP confirmed this determination in an email dated July 28, 2015 and it is included in the Appendices.

Experience: Previous reviews conducted by OP in 2003, 2005, and 2010 determined that projects receiving federal funds from HUD do not require CZM federal consistency review. OP's current determination confirms this condition is still applicable. Copies of these prior documentations are included in the Appendices.

VI. CONTAMINATION AND TOXIC SUBSTANCES (24 CFR PART 50.3 & 58.5(I)(2))

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Project Not Affected

There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.

SUPPORTING DOCUMENTATION:

Field: A site inspection and interview with the Asset Management Project (AMP) Manager revealed no presence of any toxic or radioactive materials on the project site that warrant concern. There is an unmarked, secured storage area within the western end of Building A, containing a few cans of paint and cleaning supplies.

Study: Environmental Data Resources, Inc. (EDR), conducted a search of available environmental records and prepared a Radius Map Report (Inquiry Number 4237094.216s, March 18, 2015). EDR reviewed more than 25 federal and statewide regulatory databases for information regarding the treatment, storage, disposal and release of toxic chemicals at the project site and within specific radii (generally 1 mile) of the site. A Detail Map within the EDR report documents those sites identified within a 0.25 mile radius of the project site. The EDR report in Exhibit B includes the results of their research findings.

The EDR report notes the following activities within a 0.125 mile radius of the project site: no hazardous or toxic materials were identified in the report.

This project site was not identified as a Formerly Used Defense Site (FUDS) by the U.S. Army Corps of Engineers and is not subject to any cleanup actions for Department of Defense-generated contamination.

VII. ENDANGERED SPECIES (50 CFR PART 402)

CONTACT:
Mr. Loyal Mehrhoff, Field Supervisor
Pacific Islands Administrator
Fish and Wildlife Services
U.S. Department of the Interior
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawai‘i 96813
Tel. #: 792-9400

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Adverse Effect Subject to Mitigation

The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence of this determination was received from the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices.

SUPPORTING DOCUMENTATION:

Contact: A letter from the HPHA dated July 24, 2015 was submitted to the Pacific Island Administrator for the FWS determining that repair and rehabilitation improvements that may be implemented using HUD funds for this housing project would have no likelihood of effect on any listed species or proposed species, or existing or proposed designated critical habitat subject to certain measures. Concurrence with this determination along with proposed minimization and avoidance measures was received from the FWS in a letter dated September 28, 2015 which is included in the Appendices. This housing project is subject to the following measures.

Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.

Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.

Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat’s birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.

Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and

maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.

Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo‘i, impoundments or other vegetated water bodies.

1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS’s recommended Hawaiian Waterbird Survey Protocols.
2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.
3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.

In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.

Additional Measures: The following additional measures would be implemented:

1. No vegetation or soil disturbance shall be conducted outside a project’s previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.

Experience: The FWS was previously consulted as part of environmental reviews that were completed in 2005 (39 housing projects) and 2010 (70 housing projects) which supported the determination that repair and rehabilitation improvements would either: 1) have no likelihood of effect for certain housing projects; or 2) not likely adversely affect federally listed species or critical habitat for certain housing projects subject to mitigative measures. A summary of these consultation efforts follows.

2005 Consultation: In a letter dated July 15, 2005, the Housing and Community Development Corporation of Hawai‘i (predecessor to the HPHA), determined that the implementation of minor repair and rehabilitation improvements for 39 housing projects would not have an adverse effect on federally-listed species or critical habitat. In a letter dated August 11, 2005, the FWS concurred with the HCDCH determination.

2010 Consultation: In a letter dated May 17, 2010, the HPHA informed the FWS that HUD funds would be used to immediately implement repair and rehabilitation improvements for six housing projects on O‘ahu and the island of Hawai`i. In a subsequent letter dated May 21, 2010, the FWS was informed that HPHA would be using HUD funds to implement minor repair and rehabilitation improvements for 64 projects throughout the State. In both letters, the HPHA determined that the repair and rehabilitation improvements were not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat. Based on further consultation and a

meeting with FWS staff on June 24, 2010, the HPHA determined that repair and rehabilitation improvements for most of their housing projects would not likely adversely affect any listed or proposed species, or existing or proposed designated habitat, subject to various mitigative measures for certain housing projects.

VIII. EXPLOSIVE AND FLAMMABLE OPERATIONS (24 CFR PART 51C)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact Subject to Conditions and Mitigation, if Applicable.

A field inspection identified an existing above-ground explosive or flammable material storage container in excess of 100 gallons. The liquid gas tank is surrounded by an approximately eight-foot-high chain link fence and bollards, located approximately 45 feet west of Building A. Repair and rehabilitation improvements for this project should not impact this fuel storage tank. Should rehabilitation improvements increase the density of the project (e.g. increase the number of units and associated persons exposed to the hazard within the acceptable separation distance), mitigative measures would need to be implemented for the fuel tank in compliance with HUD requirements.

Under CFR Title 24, Part 51, Subpart C, increasing the residential density and number of people under a rehabilitation project using HUD funding would be considered a "HUD-assisted project." Consequently, the existing fuel storage tank would be subject to standards under this regulation for establishing acceptable separation distances, or the application of the standards can be eliminated or modified if other conditions apply or mitigative measures are provided as identified below. HPHA would need to evaluate site conditions, comply with regulatory requirements, and determine the appropriate measure to implement.

1. The nature of the topography shields the proposed project form the hazard.
2. An existing permanent fire resistant structure of adequate size and strength will shield the proposed project from the hazard.
3. A barrier is constructed surrounding the hazard, at the site of the project, or in between the potential hazard and the proposed project.
4. The structure and outdoor areas used by people are designed to withstand blast overpressure and thermal radiation anticipated from the potential hazard (e.g., the project is of masonry and steel or reinforced concrete and steel construction).

SUPPORTING DOCUMENTATION:

Field: There is an approximately 500 gallon above-ground fuel storage tank located approximately 45 feet west of Building A. The tank is reportedly installed and owned by the gas company.

Printed: 24 CFR, Part 51, Subpart C.

Per CFR Title 24 Part 51.201 (Definitions), rehabilitation and modernization improvements that do not increase the density and number of people being exposed to hazardous operations do not meet the definition of a "HUD-assisted project," and are not subject to acceptable separation distance requirements under this regulation. Increasing the density (e.g. increase the number of units and associated persons exposed to the hazard within the acceptable separation distance) under a rehabilitation project using HUD funding would be considered a "HUD-assisted project." Consequently, the existing fuel storage tank would be subject to standards under this regulation for establishing acceptable separation distances, or the application of the standards can be eliminated or modified if other conditions apply or mitigative measures are provided as identified below. HPHA would need to evaluate site conditions, comply with regulatory requirements, and determine the appropriate measure to implement.

1. The nature of the topography shields the proposed project form the hazard.
2. An existing permanent fire resistant structure of adequate size and strength will shield the proposed project from the hazard.
3. A barrier is constructed surrounding the hazard, at the site of the project, or in between the potential hazard and the proposed project.
4. The structure and outdoor areas used by people are designed to withstand blast overpressure and thermal radiation anticipated from the potential hazard (e.g., the project is of masonry and steel or reinforced concrete and steel construction).

IX. FARMLANDS PROTECTION (7 CFR PART 658)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. Since the property consists of an existing housing development within an urbanized area, no farmlands would be impacted by the implementation of repair and rehabilitation improvements.

Printed: The property is designated for "Urban" use by the State Land Use Commission and the County's zoning for the parcel is RD-3.75 Double-Family Residential District.

Hawai`i Office of Planning website at: http://planning.hawaii.gov/gis/
(Date accessed: 6/30/2015)

X. FLOODPLAIN MANAGEMENT (EXECUTIVE ORDER 11988, 24 CFR PART 55)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Adversely Affect Floodplain

All existing housing structures are located within Flood Hazard Zone X (areas determined to be outside the 0.2% annual chance floodplain). Flood Hazard Zone: AO (flood depths of 1 to 3 feet, usually sheet flow on sloping terrain, and average depths determined) and Flood Zone AEF (floodway areas in Zone AE) run along the southern portion of the property to the south of the housing units. Field inspection and information obtained from the AMP Manager confirmed no major flooding issues within the project site. Therefore, rehabilitation improvements implemented for this housing project should not have significant impact on existing floodplain conditions or pose a significant threat to human life, health, safety, and property as defined by Federal and State guidelines that would require mitigation.

Areas located within Flood Zone AEF and AO would need "no-rise" certifications for any proposed fill or grading to ensure flood heights for nearby areas are not adversely affected. Design plans would be submitted to pertinent State and County agencies for review and approval as part of the design review process. Any required site modifications would comply with applicable flood regulations and design standards. The implementation of the design review process and compliance with pertinent flood regulations should minimize any impacts on public health, safety, and welfare. The project is in compliance with Executive Order 11988.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal signs of flooding problems. An interview with the AMP Manager also determined that no major ponding or flooding issues occur on the project site. Although no structures are located within Flood Zone AEF, Buildings D and E appear to come close to, but do not encroach into Flood Zone AO. These flood areas are comprised of open space consisting of grassed and vegetated areas (see photo). It was noted that Buildings C, D and E, located closest to Flood Zone AO, appear to have flood proofed concrete

foundations (see photo). During the site visit, it was also noted that an eroded area between Building C and D was protected with a chain link fence and the erosion appeared minor. Tenants have also accessed the rear grassy area over a number of years, and this did not appear to affect the foundation.

Printed: Flood Insurance Rate Map, Community Panel Number 15003C0380H, Panel Effective Date: November 05, 2014.

Hawai`i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/ (Date accessed7/21/15)

As indicated in the Flood Insurance Rate Panel 15003C0380H, Panel Effective Date: November 05, 2014, a portion of the southern boundary of the property is within an area designated as Flood Zone AO (flood depths of 1 to 3 feet, usually sheet flow on sloping terrain, and average depths determined). A Flood Zone AEF (Floodway areas in Zone AE) cuts through the northwest edge of the property associated with a drainageway identified as Stream C. The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without increasing the BFE. These flood areas encompass a lower lying open grassed area and vegetated area on the northwest end of the property as shown on Figure 4. The remainder of the property, which includes all existing residential building structures, are located within Flood Hazard Zone X (areas determined to be outside the 0.2% annual chance floodplain).

A 2015 Physical Needs Assessment of the subject property noted that according to the maintenance manager, the low lying backyard area is prone to flooding. The assessment also notes a steep grade change between Building C and D that contributes to erosion.

XI. HISTORIC PRESERVATION (NATIONAL HISTORIC PRESERVATION ACT OF 1966; SECTIONS 106 AND 110; 36 CFR, PART 800)

CONTACT:

Ms. Suzanne Case, Chairperson
Department of Land and Natural Resources (DLNR)
State of Hawai‘i
1151 Punchbowl Street
Honolulu, Hawai‘i 96813
Tel. #: 587-0400

SUPPORTING DOCUMENTS

X	Field
X	Contact
X	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Effect on Historic Properties

Subject housing site was initially occupied in 1995 and is 20 years old. To be eligible for listing in the National Register of Historic Places (NRHP), a property must meet the National Register criteria for evaluation which involves examining its integrity, significance, and age (generally at least 50 years old). Due to its age, this housing project does not meet the eligibility criteria to be evaluated for the National Register of Historic Places (NHRP). In a letter to the State Historic Preservation Officer (SHPO) dated July 23, 2015, the HPHA determined that no historic properties would be affected (no effect) by repair and rehabilitation improvements for this housing project. No comments or objections about this no effect determination were received.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not locate any existing or potential archaeological sites (e.g., heiau) or cultural features on the property. An interview with the AMP Manager indicates that no known sites or features are present on the property.

Contact: A letter from the HPHA dated July 23, 2015, which is included in the Appendix, was submitted to the State Historic Preservation Officer [SHPO] (Chair of State Board of Land and Natural Resources) as part of Section 106 consultation determining that no historic properties would be affected (no effect) by repair and rehabilitation improvements that may be implemented using HUD funds for this housing project. The SHPO did not submit any comments or objections on the “no effect” determination for this housing project, which included follow-up e-mails with the State Historic Preservation Division regarding a response. On September 28, 2015, notice of HPHA’s determination was also distributed to several native Hawaiian organizations and the various County Planning Departments. No concerns or opposition to this determination was received.

Printed: A review of the U.S. National Parks Service website for the National Register of Historic Places did not identify any historic properties within the limits of this housing project. A similar review of the State DLNR website for the State Register of Historic Places revealed that there are no historic properties within the project site.

National Register: U.S. National Park Service website at: http://www.nps.gov/nr/research/ (Date accessed: 7/2/15).

State Register: Hawai`i Department of Land and Natural Resources website at: http://dlnr.hawaii.gov/shpd/state-register/ (Date accessed: 7/2/15).

Experience: In letter to the State Historic Preservation Officer (SHPO) dated April 19, 2011, the HPHA determined that minor repair and rehabilitation improvement at 57 public housing projects throughout Hawai‘i (including this housing site) would have “no effect” on historic properties. The SHPO had no comments or objections on the “no effect” determination.

XII. NOISE ABATEMENT CONTROL (24 CFR PART 51B)

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Within HUD Noise Standards

The project site is not situated along a highway that has a high volume of vehicular traffic. The HUD noise calculator estimated noise levels at the project site to be 46.9 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

SUPPORTING DOCUMENTATION:

Field: No significant noise generating sources were identified within the project site during the site inspection. The subject housing site is located at the end of an unnamed street that provides access for this housing site and the abutting Waimānalo District Park. This unnamed street is expected to have low volumes of traffic because traffic in this area would primarily be to this housing site. The housing site abuts Waimānalo Elementary and Intermediate School’s play court, however, an approx. 20-foot-high concrete wall buffers the site from noise generated from the play court. Furthermore, an interview with the AMP Manager did not identify any loud noise producing sources in the area. As a result, notable noise sources are predominantly associated with vehicular traffic along adjacent Kalaniana‘ole Highway. Traffic noise did not appear significant during the site visit.

Study: The HUD day/night noise level calculator was used to estimate approximate traffic noise levels at the project site. Kalanianaole Highway is a primary State roadway. Kalanianaole Highway serves vehicular traffic entering and exiting Waimānalo along with providing access to other surrounding rural areas. Traffic counts were based on 2013 Hawai‘i State Department of Transportation data and applied to a distance of 900 feet from the project site. Using this HUD calculator, the estimated noise levels at the project site is 46.9 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

XIII. SOLE SOURCE AQUIFER (40 CFR PART 149)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact on Sole Source Aquifer

The housing project is located within the O‘ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation. However, if exceptional circumstances require compliance steps with any of these authorities, such compliance must be established and documented prior to approving the site-specific loan or grant.

SUPPORTING DOCUMENTATION:

Printed: This determination was based upon review of the Sole Source Aquifer Memorandum of 4/30/90 (Sections II.B.1 and II.B.2) and consideration of the type of rehabilitation related improvements that would be conducted for this project.

XIV. WETLANDS PROTECTION (EXECUTIVE ORDER 11990)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the property did not identify the presence of any wetlands.

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/wetlands/data/mapper.html (Date accessed 7/23/2015).

XV. WILD AND SCENIC RIVERS ACT (16 USC 1271, SECTION 7 (B), (C))

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no Wild and Scenic Rivers in Hawai‘i, which excludes this project from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: National Wild and Scenic Rivers System website at: http://www.rivers.gov/index.php (Date accessed: 6/30/2015).

XVI. ENVIRONMENTAL JUSTICE (EXECUTIVE ORDER NO. 12898)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Conflict with Requirements

Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, repair and rehabilitation improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations. Repair and rehabilitation improvements should benefit low-income and minority populations living within this housing project.

SUPPORTING DOCUMENTATION:

Printed: Executive Order 12898.

U.S. Department of Housing and Urban Development website at:
https://www.hudexchange.info/environmental-review/environmental-justice/

EXHIBIT A

Location Map, TMK Map, Site Map, Flood Map, and Site Photos

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

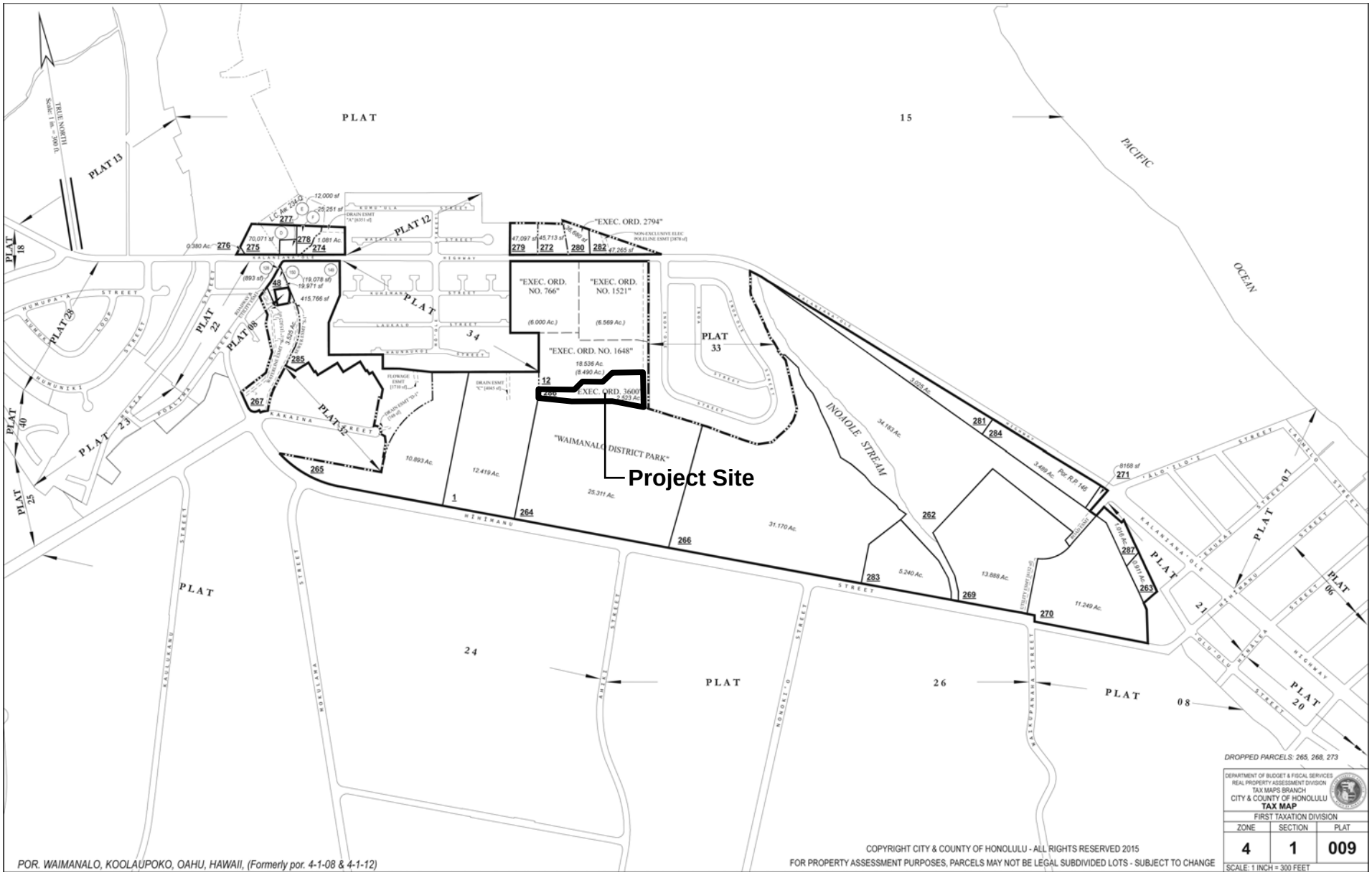
HPHA No. 1090 - Kauhale 'Ohana (AMP 45)

Figure 1 - Project Location Map

Waimānalo, O'ahu

1,500 FT

HHF PLANNERS
places for people



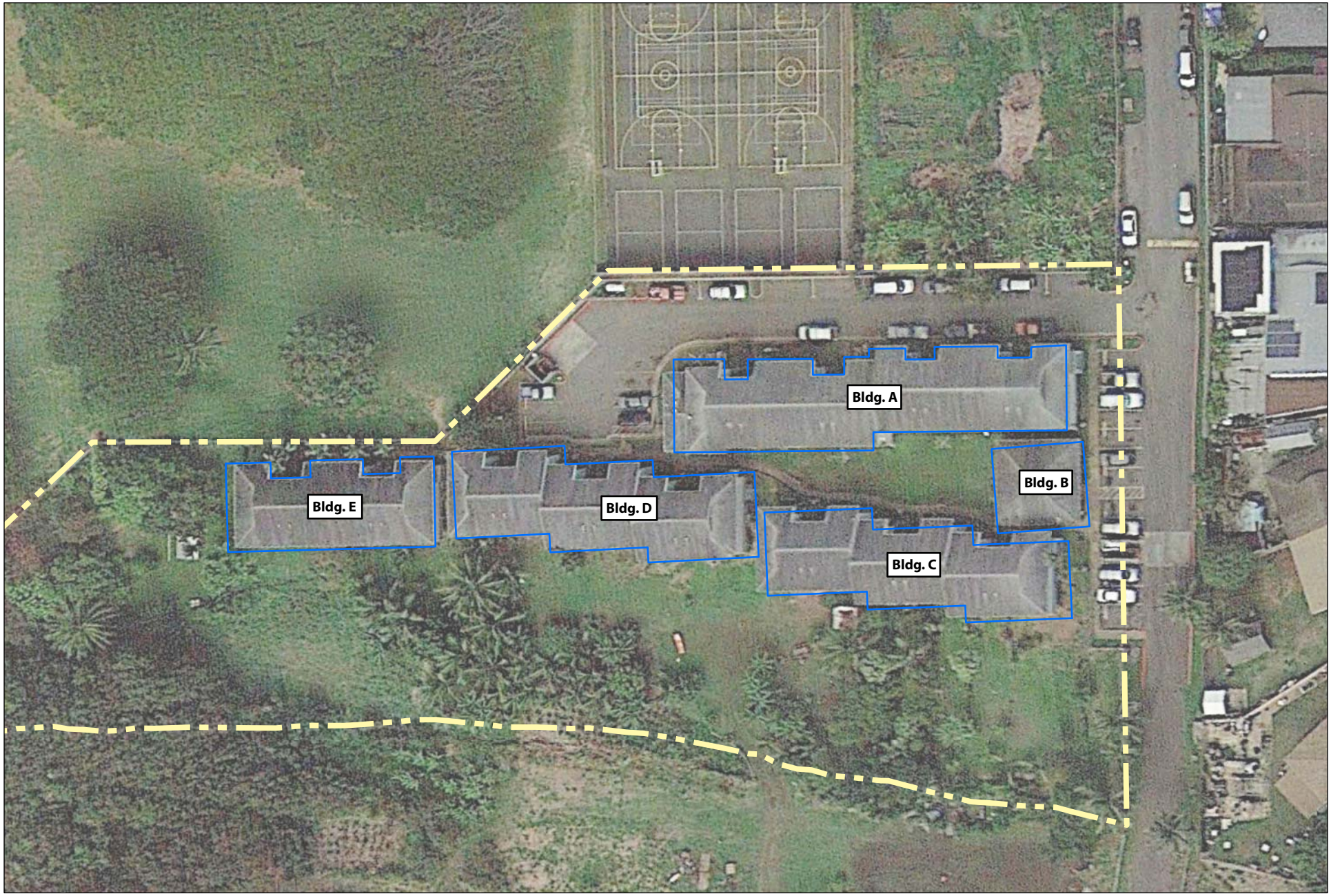
HPHA No. 1090 - Kauhale ‘Ohana (AMP 45)

Figure 2 - TMK Map

Waimānalo, O‘ahu

40 FEET

HHF PLANNERS
places for people



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

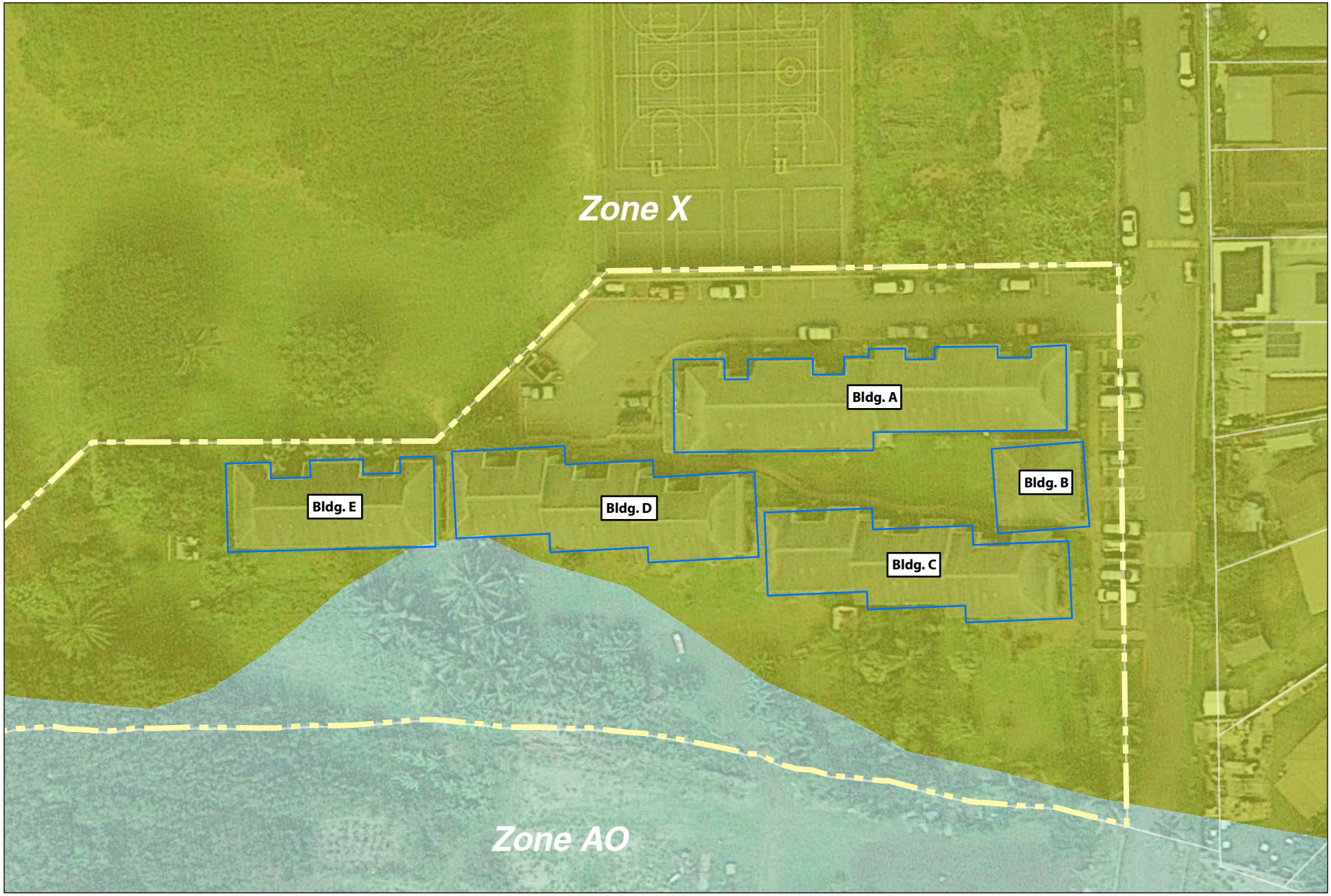
HPHA No. 1090 - Kauhale 'Ohana (AMP 45)

Figure 3 - Site Map

Waimānalo, O'ahu

40 FEET

HHF PLANNERS
places for people



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

LEGEND

- Zone X - Outside the 0.2% Annual Chance of Flood
- Zone AO - 1% Annual Chance of Shallow Flooding

HPHA No. 1090 - Kauhale 'Ohana (AMP 45)

Figure 4 - Flood Map

Waimānalo, O'ahu

40 FEET

HHF PLANNERS
places for people

KAUHALE ‘OHANA
SITE PHOTOS

Roadway entry to project

Roadway to project site is also the rear (locked) exit for Waimanalo District Park.

Roadway to project site, looking toward Kalanianaole Highway. Buildings shown are neighboring homes.

High concrete wall buffers Building A from school play court noise.

West property line (facing south) adjacent to the rail transport right-of-way, along Kamehameha Highway

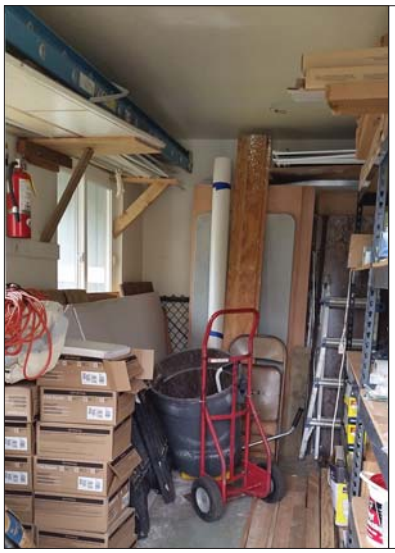
West property line (facing south) adjacent to the rail transport right-of-way, along Kamehameha Highway

KAUHALE ‘OHANA
SITE PHOTOS

West property line (facing south) adjacent to the rail transport right-of-way, along Kamehameha Highway

West property line (facing south) adjacent to the rail transport right-of-way, along Kamehameha Highway

Sewer lift station at Building D & E



Storage area in Building A

Trash pickup area

500 gallon tank located approx 20 feet south of Building 4

EXHIBIT B

EDR Radius Map Report

Kauhale Ohana
41-1260 Kalanianaole Hwy.
Waimanalo, HI 96795

Inquiry Number: 4237094.206s
March 18, 2015

EDR Summary Radius Map Report

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

FORM-NULL-PVC

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

41-1260 KALANIANAOLE HWY.
HONOLULU County, HI 96795

COORDINATES

Latitude (North):	21.3443000 - 21˚ 20' 39.48''
Longitude (West):	157.7146000 - 157˚ 42' 52.56''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	633291.8
UTM Y (Meters):	2360658.2
Elevation:	20 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	USGS 7.5 min quad index

MAPPED SITES SUMMARY

Target Property Address:
41-1260 KALANIANAOLE HWY.
, HI 96795

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
1	KAUHALE OHANA	41-1260 KALANIANAOLE	FINDS		TP
Reg	BELLOWS AIR FORCE ST		DOD	Same	3864, North
2	ST-1O SHERWOOD FORES		FUDS	Lower	2211, ENE
3	C&CH KAILUA CORP YAR	42-377 KALANIANAOLE	LUST, UST, Financial Assurance	Higher	2442, West
4	MID PAC PETROLEIUM 2	41-1517 KALANIANAOLE	LUST, UST, Financial Assurance	Higher	2636, WNW
5	HECO TRANSFORMER 277	41-1605 KALANIANAOLE	SHWS, SPILLS	Higher	3650, WNW
6	WAIMANALO AREAWIDE G	41-550 WAIKUPANAHA S	SHWS	Higher	4383, SSW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 7 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
KAUHALE OHANA 41-1260 KALANIANAOLE WAIMANALO, HI 96795	FINDS	N/A

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

State- and tribal - equivalent CERCLIS

SHWS: A review of the SHWS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 2 SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HECO TRANSFORMER 277	***41-1605 KALANIANAOLE***	***WNW 1/2 - 1 (0.691 mi.)***	***5***	***8***
WAIMANALO AREAWIDE G	41-550 WAIKUPANAHA S	SSW 1/2 - 1 (0.830 mi.)	6	8

State and tribal leaking storage tank lists

LUST: A review of the LUST list, as provided by EDR, and dated 03/02/2015 has revealed that there are 2 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
C&CH KAILUA CORP YAR Facility Status: Site Cleanup Completed (NFA)	***42-377 KALANIANAOLE***	***W 1/4 - 1/2 (0.463 mi.)***	***3***	***7***
MID PAC PETROLEIUM 2 Facility Status: Site Cleanup Completed (NFA)	***41-1517 KALANIANAOLE***	***WNW 1/4 - 1/2 (0.499 mi.)***	***4***	***7***

EXECUTIVE SUMMARY

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

DOD: A review of the DOD list, as provided by EDR, and dated 12/31/2005 has revealed that there is 1 DOD site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
BELLOWS AIR FORCE ST		N 1/2 - 1 (0.732 mi.)	0	7

FUDS: A review of the FUDS list, as provided by EDR, and dated 06/06/2014 has revealed that there is 1 FUDS site within approximately 1 mile of the target property.

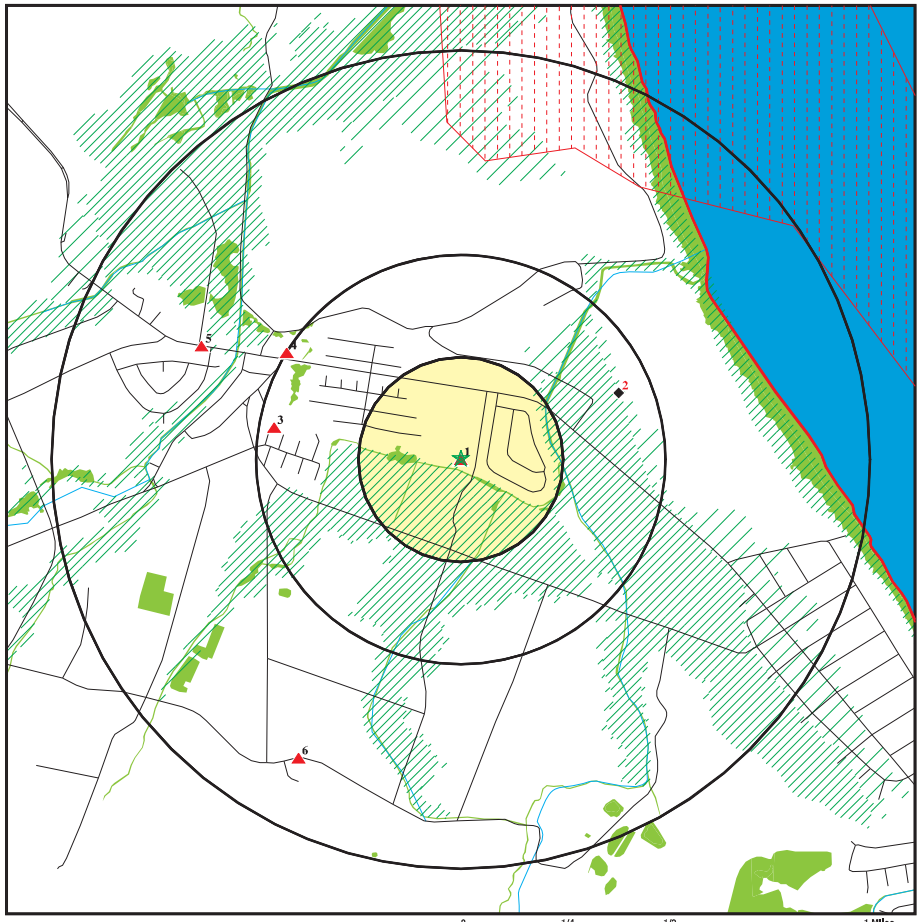
Lower Elevation	Address	Direction / Distance	Map ID	Page
ST-1O SHERWOOD FORES		ENE 1/4 - 1/2 (0.419 mi.)	2	7

ORPHAN SUMMARY

Count: 2 records.

City	EDR ID	Site Name	Site Address	Zip	Database(s)
WAIMANALO	S113230525	WAIMANALO SUGAR COMPANY DHHL PARCE	CORNER OF HIHIMANU AND KAKAINA	96795	SHWS
WAIMANALO	S115488728	WAIMANALO TIME WARNER CABLE PROPER	41-1510 KALANIANAOLE HWY	96795	SHWS

OVERVIEW MAP - 4237094.206S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

0 1/4 1/2 1 Miles

N

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Kauhale Ohana ADDRESS: 41-1260 Kalanianaole Hwy. Waimanalo HI 96795 LAT/LONG: 21.3443 / 157.7146	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.206s DATE: March 18, 2015 7:58 am

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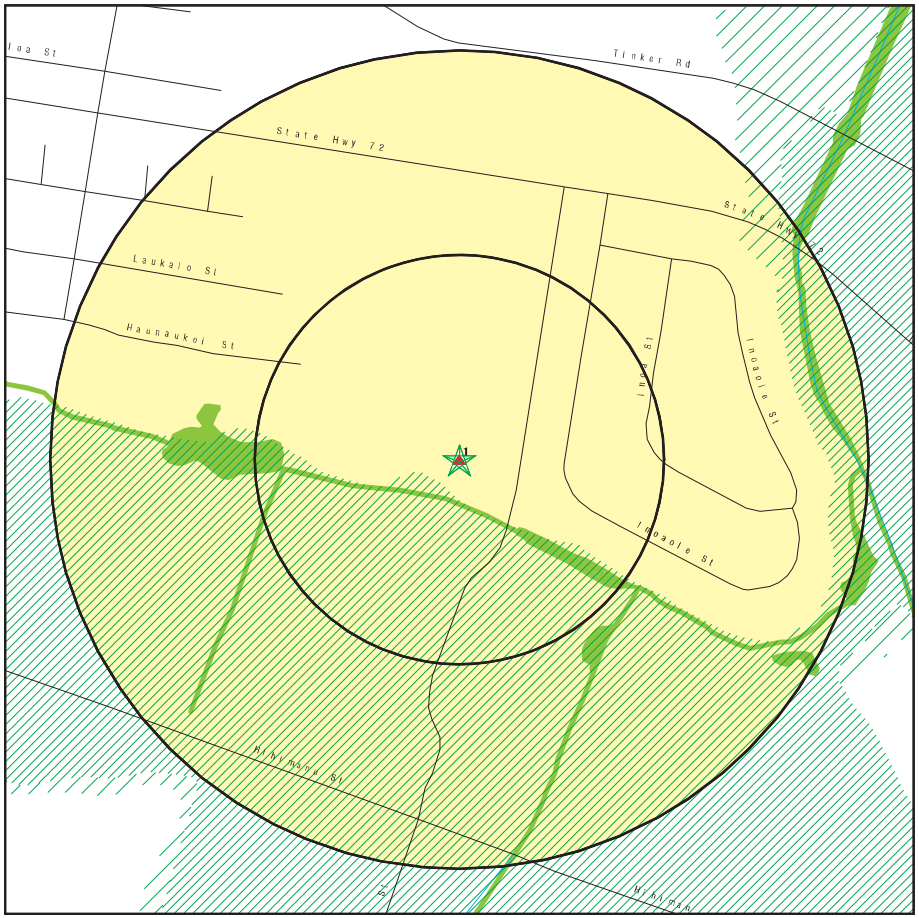
DETAIL MAP - 4237094.206S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

0 1/16 1/8 1/4 Miles

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Kauhale Ohana ADDRESS: 41-1260 Kalanianaole Hwy. Walmanalo HI 96795 LAT/LONG: 21.3443 / 157.7146	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.206s DATE: March 18, 2015 7:58 am

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
SHWS	1.000		0	0	0	2	NR	2
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	0	2	NR	NR	2
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		0	0	0	NR	NR	0
INST CONTROL	0.500		0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	1	NR	1
FUDS	1.000		0	0	1	0	NR	1
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP	1	NR	NR	NR	NR	NR	1
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		0	0	NR	NR	NR	0
EDR US Hist Cleaners	0.250		0	0	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
RGA HWS	TP		NR	NR	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

1
Target Property
Actual: 20 ft.

KAUHALE OHANA — **FINDS** — **1014696906**
41-1260 KALANIANAOLE HIGHWAY — **N/A**
WAIMANALO, HI 96795

Click here for full text details

DOD
Region North
1/2-1
3864 ft.

BELLOWS AIR FORCE STATION — **DOD** — **CUSA147746**
N/A

BELLOWS AIR FORCE STATION (County), HI

Click here for full text details

2
ENE
1/4-1/2
0.419 mi.
2211 ft.
Relative: Lower

ST-1O SHERWOOD FOREST USTS — **FUDS** — **1012129418**
N/A

WAIMANALO, HI

Click here for full text details

3
West
1/4-1/2
0.463 mi.
2442 ft.
Relative: Higher

C&CH KAILUA CORP YARD — **LUST** — **U003541815**
42-377 KALANIANAOLE HWY — **UST** — **N/A**
KAILUA, HI 96734 — **Financial Assurance**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-200125

UST
Tank Status: Permanently Out of Use
Tank Status: Currently In Use
Facility Id: 9-200125
Facility Id: 9-200153

4
WNW
1/4-1/2
0.499 mi.
2636 ft.
Relative: Higher

MID PAC PETROLEIUM 2705570 — **LUST** — **U001236319**
41-1517 KALANIANAOLE HWY — **UST** — **N/A**
WAIMANALO, HI 96795 — **Financial Assurance**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-201280

UST

MID PAC PETROLEIUM 2705570 (Continued) — **U001236319**

Tank Status: Currently in Use
Tank Status: Permanently Out of Use
Tank Status: Permanently out of Use
Facility Id: 9-201280

5
WNW
1/2-1
0.691 mi.
3650 ft.
Relative: Higher

HECO TRANSFORMER 27728 (VAULT 3032) — **SHWS** — **S108859681**
41-1605 KALANIANAOLE HWY — **SPILLS** — **N/A**
WAIMANALO, HI 96795

Click here for full text details

6
SSW
1/2-1
0.830 mi.
4383 ft.
Relative: Higher

WAIMANALO AREAWIDE GROUNDWATER CONTAMINATION — **SHWS** — **S107022545**
41-550 WAIKUPANAHA ST — **N/A**
WAIMANALO, HI 96795

Click here for full text details

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
HI	AIRS	List of Permitted Facilities	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	BROWNFIELDS	Brownfields Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	CDL	Clandestine Drug Lab Listing	Department of Health	08/04/2010	09/10/2010	10/22/2010
HI	DRYCLEANERS	Permitted Drycleaner Facility Listing	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	ENG CONTROLS	Engineering Control Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	Financial Assurance	Financial Assurance Information Listing	Department of Health	12/01/2014	12/19/2014	01/28/2015
HI	INST CONTROL	Sites with Institutional Controls	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	LUST	Leaking Underground Storage Tank Database	Department of Health	03/02/2015	03/04/2015	03/17/2015
HI	RGA HWS	Recovered Government Archive State Hazardous Waste Facilitie	Department of Health		07/01/2013	01/08/2014
HI	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Health		07/01/2013	01/17/2014
HI	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	Department of Health		07/01/2013	01/03/2014
HI	SHWS	Sites List	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	SPILLS	Release Notifications	Department of Health	12/02/2014	12/22/2014	01/28/2015
HI	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	03/10/2012	01/03/2013	02/11/2013
HI	SWF/LF	Permitted Landfills in the State of Hawaii	Department of Health	09/17/2012	04/03/2013	05/10/2013
HI	UIC	Underground Injection Wells Listing	Department of Health	02/07/2013	02/12/2013	04/09/2013
HI	UST	Underground Storage Tank Database	Department of Health	03/02/2015	03/04/2015	03/17/2015
HI	VCP	Voluntary Response Program Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	04/22/2013	03/03/2015	03/09/2015
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2011	02/26/2013	04/19/2013
US	CERCLIS	Comprehensive Environmental Response, Compensation, and Liab	EPA	10/25/2013	11/11/2013	02/13/2014
US	CERCLIS-NFRAP	CERCLIS No Further Remedial Action Planned	EPA	10/25/2013	11/11/2013	02/13/2014
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	07/01/2014	09/10/2014	10/20/2014
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	01/23/2015	02/13/2015	03/09/2015
US	CORRACTS	Corrective Action Report	EPA	12/09/2014	12/29/2014	01/29/2015
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DELISTED NPL	National Priority List Deletions	EPA	12/16/2014	01/08/2015	02/09/2015
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	07/31/2012	08/07/2012	09/18/2012
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EDR US Hist Auto Stat	EDR Exclusive Historic Gas Stations	EDR, Inc.			
US	EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	09/29/2014	09/30/2014	11/06/2014
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	07/21/2014	10/07/2014	10/20/2014
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
US	FEMA UST	Underground Storage Tank Listing	FEMA	01/01/2010	02/16/2010	04/12/2010
US	FINDS	Facility Index System/Facility Registry System	EPA	08/16/2014	09/10/2014	10/20/2014
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	06/06/2014	09/10/2014	09/18/2014
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	12/29/2014	12/30/2014	03/09/2015
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	01/23/2015	02/06/2015	03/09/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	02/01/2013	05/01/2013	11/01/2013

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	01/30/2015	02/05/2015	03/09/2015
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/10/2015	03/13/2015
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	01/28/2015	01/30/2015	03/13/2015
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	01/08/2015	01/08/2015	02/09/2015
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2005	12/08/2006	01/11/2007
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	02/01/2013	05/01/2013	01/27/2014
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	01/30/2015	02/05/2015	03/13/2015
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/13/2015	03/13/2015
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	01/29/2015	01/30/2015	03/13/2015
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	12/14/2014	02/13/2015	03/13/2015
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	09/29/2014	10/01/2014	11/06/2014
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	11/25/2014	11/26/2014	01/29/2015
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	02/18/2014	03/18/2014	04/24/2014
US	LUCIS	Land Use Control Information System	Department of the Navy	12/03/2014	12/12/2014	01/29/2015
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	12/29/2014	01/08/2015	01/29/2015
US	NPL	National Priority List	EPA	12/16/2014	01/08/2015	02/09/2015
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	07/01/2014	10/15/2014	11/17/2014
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	02/01/2011	10/19/2011	01/10/2012
US	PRP	Potentially Responsible Parties	EPA	10/25/2013	10/17/2014	10/20/2014
US	Proposed NPL	Proposed National Priority List Sites	EPA	12/16/2014	01/08/2015	02/09/2015
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	10/07/2014	10/08/2014	10/20/2014
US	RCRA NonGen / NLR	RCRA - Non Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RMP	Risk Management Plans	Environmental Protection Agency	08/01/2014	08/12/2014	11/06/2014
US	ROD	Records Of Decision	EPA	11/25/2013	12/12/2013	02/24/2014
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	03/07/2011	03/09/2011	05/02/2011
US	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2011	07/31/2013	09/13/2013
US	TSCA	Toxic Substances Control Act	EPA	12/31/2012	01/15/2015	01/29/2015
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	09/14/2010	10/07/2011	03/01/2012
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/16/2014	10/31/2014	11/17/2014
US	US AIRS MINOR	Air Facility System Data	EPA	10/16/2014	10/31/2014	11/17/2014

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	12/22/2014	12/22/2014	01/29/2015
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	11/19/2014	11/21/2014	01/29/2015
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	12/30/2014	12/31/2014	01/29/2015
US	Oil/Gas Pipelines	GeoData Digital Line Graphs from 1:100,000-Scale Maps	USGS			
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
US	USGS 7.5' Topographic Map	Scanned Digital USGS 7.5' Topographic Map (DRG)	USGS			

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

KAUHALE OHANA
41-1260 KALANIANAOLE HWY.
WAIMANALO, HI 96795

TARGET PROPERTY COORDINATES

Latitude (North):	21.3443 - 21˚ 20' 39.48''
Longitude (West):	157.7146 - 157˚ 42' 52.56''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	633291.8
UTM Y (Meters):	2360658.2
Elevation:	20 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	21157-C6 KOKO HEAD, HI
Most Recent Revision:	Not reported

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

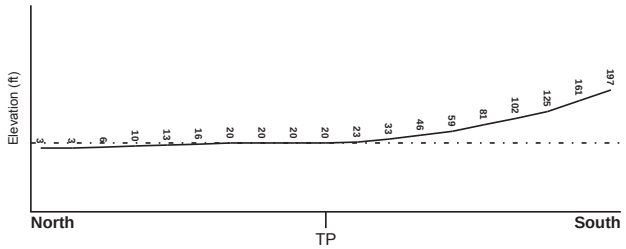
TOPOGRAPHIC INFORMATION

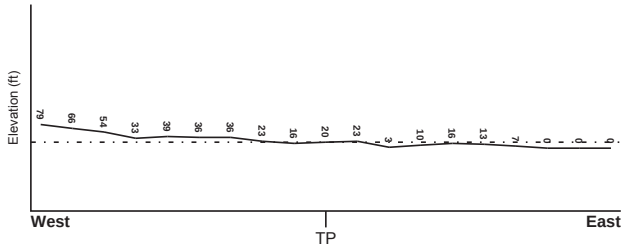
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General NE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 20 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
HONOLULU, HI	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 15003C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
KOKO HEAD	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT		GEOLOGIC AGE IDENTIFICATION	
Era:	-	Category:	-
System:	-		
Series:	-		
Code:	N/A *(decoded above as Era, System & Series)*		

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4237094.206s

★ Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME: Kauhale Ohana ADDRESS: 41-1260 Kalanianaole Hwy. Walmanalo HI 96795 LAT/LONG: 21.3443 / 157.7146	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.206s DATE: March 18, 2015 7:58 am

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DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Mamala

Soil Surface Texture: stony silty clay loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 48 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches	stony silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	CL-K (proposed)	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6
2	7 inches	18 inches	stony silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	CL-K (proposed)	Max: 14 Min: 4.23	Max: 7.8 Min: 7.4
3	18 inches	29 inches	bedrock	Not reported	Not reported	Max: 0.42 Min: 0.02	Max: Min:

Soil Map ID: 2

Soil Component Name: Haleiwa

Soil Surface Texture: silty clay

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	16 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Elastic silt.	Max: 14 Min: 4.23	Max: 6.5 Min: 6.1
2	16 inches	64 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Elastic silt.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6

Soil Map ID: 3

Soil Component Name: Ewa

Soil Surface Texture: silty clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Elastic silt.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6
2	7 inches	29 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Elastic silt.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6
3	29 inches	38 inches	bedrock	Not reported	Not reported	Max: 42 Min: 1	Max: Min:

Soil Map ID: 4

Soil Component Name: Waialua

Soil Surface Texture: clay

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Elastic silt.	Max: 14.11 Min: 1.41	Max: 7.3 Min: 6.1

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	11 inches	59 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Elastic silt.	Max: 4.23 Min: 1.41	Max: 7.3 Min: 6.1

Soil Map ID: 5

Soil Component Name: Coral outcrop

Soil Surface Texture: bedrock

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	59 inches	bedrock	Not reported	Not reported	Max: 42 Min: 1.41	Max: Min:

Soil Map ID: 6

Soil Component Name: Haleiwa

Soil Surface Texture: silty clay

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	16 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Elastic silt.	Max: 14 Min: 4.23	Max: 6.5 Min: 6.1
2	16 inches	64 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Elastic silt.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6

Soil Map ID: 7

Soil Component Name: Water > 40 acres

Soil Surface Texture: silty clay

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class:
Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	USGS40000270025	1/4 - 1/2 Mile NNE
B3	USGS40000270031	1/4 - 1/2 Mile NNE
C5	USGS40000269995	1/4 - 1/2 Mile ESE
D7	USGS40000270022	1/4 - 1/2 Mile ENE
E9	USGS40000270017	1/2 - 1 Mile WNW
F12	USGS40000269970	1/2 - 1 Mile ESE
G13	USGS40000270001	1/2 - 1 Mile East
F16	USGS40000269976	1/2 - 1 Mile ESE
F17	USGS40000269958	1/2 - 1 Mile ESE
F19	USGS40000269956	1/2 - 1 Mile ESE
H21	USGS40000269981	1/2 - 1 Mile ESE
I24	USGS40000269953	1/2 - 1 Mile ESE
I26	USGS40000269952	1/2 - 1 Mile ESE
I28	USGS40000269949	1/2 - 1 Mile SE
J29	USGS40000270012	1/2 - 1 Mile East
K31	USGS40000269915	1/2 - 1 Mile SSW
L33	USGS40000269983	1/2 - 1 Mile ESE
L35	USGS40000269994	1/2 - 1 Mile East
M37	USGS40000269985	1/2 - 1 Mile East

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

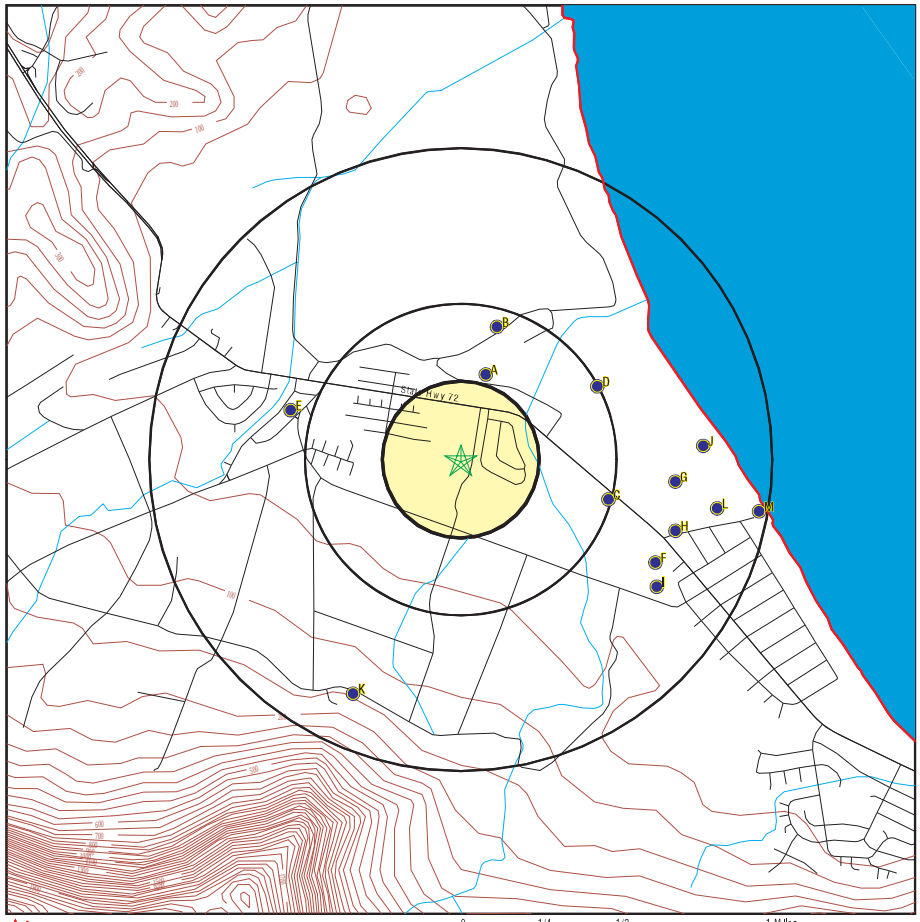
MAP ID	WELL ID	LOCATION FROM TP
A2	HI8000000002642	1/4 - 1/2 Mile NNE
B4	HI8000000002647	1/4 - 1/2 Mile NNE

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
C6	HI8000000002601	1/4 - 1/2 Mile ESE
D8	HI8000000002638	1/2 - 1 Mile ENE
E10	HI8000000002635	1/2 - 1 Mile WNW
F11	HI8000000002585	1/2 - 1 Mile ESE
G14	HI8000000002613	1/2 - 1 Mile East
F15	HI8000000002578	1/2 - 1 Mile ESE
F18	HI8000000002564	1/2 - 1 Mile ESE
H20	HI8000000002594	1/2 - 1 Mile ESE
H22	HI8000000002592	1/2 - 1 Mile ESE
I23	HI8000000002561	1/2 - 1 Mile ESE
I25	HI8000000002562	1/2 - 1 Mile ESE
I27	HI8000000002557	1/2 - 1 Mile SE
J30	HI8000000002630	1/2 - 1 Mile East
K32	HI8000000002503	1/2 - 1 Mile SSW
L34	HI8000000002596	1/2 - 1 Mile ESE
L36	HI8000000002602	1/2 - 1 Mile East
M38	HI8000000002598	1/2 - 1 Mile East

PHYSICAL SETTING SOURCE MAP - 4237094.206s



County Boundary
Major Roads
Contour Lines
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons

0 1/4 1/2 1 Miles

Groundwater Flow Direction
GI Indeterminate Groundwater Flow at Location
GV Groundwater Flow Varies at Location

N

SITE NAME: Kauhale Ohana ADDRESS: 41-1260 Kalanianaole Hwy. Waimanalo HI 96795 LAT/LONG: 21.3443 / 157.7146	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.206s DATE: March 18, 2015 7:58 am

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
A1 **NNE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270025**
A2 **NNE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002642**
B3 **NNE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270031**
B4 **NNE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002647**
C5 **ESE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269995**
C6 **ESE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002601**
D7 **ENE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270022**
D8 **ENE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002638**
E9 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270017**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
E10 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002635**
F11 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002585**
F12 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269970**
G13 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000270001**
G14 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002613**
F15 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002578**
F16 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269976**
F17 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269958**
F18 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002564**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
F19 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269956**
H20 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002594**
H21 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269981**
H22 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002592**
I23 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002561**
I24 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269953**
I25 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002562**
I26 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269952**
I27 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002557**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
I28 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269949**
J29 **East** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270012**
J30 **East** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002630**
K31 **SSW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269915**
K32 **SSW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002503**
L33 **ESE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269983**
L34 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002596**
L35 **East** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269994**
L36 **East** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002602**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
M37 **East** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269985**
M38 **East** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002598**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for HONOLULU County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 96795

Number of sites tested: 1

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	-0.300 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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HAWAII PUBLIC HOUSING AUTHORITY

ENVIRONMENTAL REVIEW

WAHIAWĀ TERRACE

Wahiawā, O`ahu

AMP 49
HPHA No. 1015

Prepared for:

State of Hawaii
Hawaii Public Housing Authority

Prepared by:

HHF PLANNERS
places for people

U.S. Department of Housing and Urban Development
451 Seventh Street, SW
Washington, DC 20410
www.hud.gov

espanol.hud.gov

Environmental Review for Activity/Project that is Categorically Excluded Subject to Section 58.5

Pursuant to 24 CFR 58.35(a)

Project Information

Project Name: Wahiawā Terrace (AMP 49)

Responsible Entity: Hawaii Public Housing Authority
1002 North School Street
Honolulu, HI 96817

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

State/Local Identifier: State of Hawai‘i

Preparer: Mr. Scott Ezer, Vice President
HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawai‘i 96813

Certifying Officer Name and Title: Mr. David Y. Ige
Governor, State of Hawai‘i

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

Consultant (if applicable)**:** HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawai‘i 96813

Direct Comments to: Mr. Hakim Ouansafi, Executive Director
Hawaii Public Housing Authority
1002 North School Street
Honolulu, Hawai‘i 96817

Project Location: 337 Palm Street
Wahiawā, Hawai‘i 96786

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]**:**

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a "major construction activity" and would involve one or a combination of several HUD designated categories of actions.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent;
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons;
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland;
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation;
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls);
7. Interior and exterior renovations and rehabilitation;
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site;
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Level of Environmental Review Determination:

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.5. Compliance with and completion of conformance determinations for other statute, executive order, or regulation has been completed and support the Categorical Exclusion.

Funding Information

Grant Number	HUD Program	Funding Amount
To be determined	Capital Fund	To be determined
To be determined	Economic Development Initiative Special Project Grant	To be determined
To be determined	Other Grants	To be determined

Estimated Total HUD Funded Amount:

To be determined by HUD using a formula and based upon federal budget.

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]**:**

Depends upon funds available.

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	*The project is not within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.*
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☒	*The State of Hawai'i does not have any designated coastal barrier resource units. (http://www.fws.gov/CBRA/Maps/Mapper.html)*
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes ☐ No ☒	*As indicated in Flood Insurance Rate Map Panel 15003C0120F, The project site is located in Zone D (area of undetermined flood hazard). A field inspection and information obtained from the Maintenance Supervisor confirmed no major flooding issues within the site. Based on its description, the Wahiawā Terrace housing project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance is not mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.*

STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5		
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes ☐ No ☒	*The State of Hawai'i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. EPA's Green Book for currently designated "nonattainment areas" as of June 2015. Planned repair and rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.*
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes ☐ No ☒	*Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai'i's Coastal Zone Management (CZM) program.*
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☐ No ☒	*There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.*
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes ☒ No ☐	*The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices.*
Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes ☐ No ☒	*There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.*

Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes ☐ No ☒	*The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.*
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes ☐ No ☒	*The project site is located in Zone D (area of undetermined flood hazard). A field inspection and information obtained from the Maintenance Supervisor confirmed no major flooding issues within the site. The project is in compliance with Executive Order 11988.*
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes ☒ No ☐	*Wahiawā Terrace is 49 years old and was constructed in 1966. The housing project has been renovated twice, in 1994 and during 2014 to 2015. In May 2015, Fung Associates conducted an Architectural Inventory Survey (AIS) for Wahiawā Terrace. The 2015 AIS notes that Wahiawā Terrace was the earliest known housing project in rural O‘ahu and was developed by the Hawai‘i Housing Authority (HHA), a predecessor to the HPHA. It is significant at the State level for its association with the history of public housing in Hawai‘i. It is also architecturally significant at the local level for its high quality of design and being the work of a master, the architectural firm of Wong & Wong. Wahiawā Terrace appears to meet the criteria for listing in the National Register of Historic Places. In a letter dated December 11, 2015, the State Historic Preservation Officer concurred with the HPHA's determination that repair and rehabilitation improvements for this housing project would have "no adverse effect" on historic properties pursuant to NHPA Section 106 and subject to certain mitigative measures*
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes ☐ No ☒	*The project site is not situated along a highway or arterial roadway with a high volume of vehicular traffic that may generate significant noise. Kamehameha Highway is a major State roadway (Route 99) that begins near Joint Base Pearl Harbor-Hickam and ends near Haleiwa. The highway becomes Route 80 as it enters Wahiawā and transitions back to Route 99 at the north edge of town. Kamehameha Highway provides access to vehicles entering and leaving Wahiawā. Kilani Avenue (Route 7041), a major City and County collector road, provides access to the project site*

		via a connection to Palm Street which dead ends about 840 feet from the intersection. The HUD noise level calculator estimated noise levels at the project site to be 44.6 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes ☐ No ☒	*The housing project is located within the O'ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation.*
Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☐ No ☒	*There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.* *(http://www.fws.gov/wetlands/data/mapper.HTML)*
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes ☐ No ☒	*There are no Wild and Scenic Rivers in Hawai'i, which excludes this project from mitigation or formal consultation requirements (http://www.rivers.gov/map.php)*
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes ☐ No ☒	*Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, these improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects on minority populations and low-income populations. Improvements should benefit low-income and minority populations living within this housing project.*

Field Inspection (Date and completed by)**:** June 8, 2015
Glenn Tadaki, Planner
HHF Planners

Summary of Findings and Conclusions:

Repair and rehabilitation improvements implemented for this existing housing project by HPHA should not result in significant environmental impacts based upon research data collected, a field inspection, consultation with the site manager and maintenance staff, consultation with pertinent resource agencies, and prior HPHA experience implementing repair and rehabilitation improvements. Therefore, repair and rehabilitation improvements would comply and be consistent with the statutes, executive orders, and regulations addressed. Furthermore, HPHA would evaluate improvements planned to ensure the work is consistent with the designated categories of actions described under the project description section. Compliance with these factors evaluated are further addressed in the attached Source Documentation Statutory Worksheet along with relevant technical reports/assessments.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Law, Authority, or Factor	Mitigation Measure
Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	*Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th).* *Newell's shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.* *Hawaiian goose (Nene): If Nene are known to be present within the project site, a qualified biologist will conduct a Nene survey at the project site prior to construction initiation. Nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their*

	own accord. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season. *<u>Additional Measures:</u> The following additional measures would be implemented:* *1. In the event that any earth-disturbing activities are proposed (e.g. foundation repair), Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.* *2. Where tree or brush removal outside the footprint of the existing development and landscaped areas is proposed, a qualified botanist will inspect the proposed disturbance area prior to project implementation to document any listed plant species. Should listed plants be discovered, they will either be avoided or consultation with the FWS be initiated..*
National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	*1.When considering rehabilitation improvements or building modifications: 1) the buildings' character-defining features shall be retained to the extent practicable; and 2) the renovations shall adhere to the Secretary of the Interior's (SOI) Standards for Rehabilitation.* *2. If rehabilitation improvements or building modifications cannot retain the character-defining features or adhere to the SOI's Standards, a Historic American Buildings Survey (HABS) will be conducted subject to the following conditions:* *a. Level II HABS documentation will be conducted in accordance with the National Park Service standards; and* *b. A representative sample of multiple building types would be selected for HABS documentation due to the multiple types of buildings constructed for housing projects.* *3. If ground disturbing activity is anticipated, HPHA must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation.* *a. Submit detailed plans, specifications and a detailed scope of work once the plans have been developed.* *b. Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation.* *c. Submit a TMK map showing the full extent of the project area within the affected parcel/s.* *d. Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area.*

	e. Summary of land use history, such as previous intensive cultivation, grubbing or grading. *f. Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.* *In addition to these mitigation measures, the HPHA would enter into a Programmatic Agreement with the SHPO to address the implementation of future repair and rehabilitation improvements to State housing projects after the current Section 106 review process is completed and prior to the next environmental review process in approximately five years. Furthermore, should subsurface human remains or other traces of human activity greater than 50 years old be encountered during construction, all work in the vicinity of the find would immediately stop and the SHPD would be promptly notified. The treatment of any human remains that are encountered would be conducted in accordance with applicable requirements of Chapter 6E, Hawai'i Revised Statutes (Historic Preservation) and Chapter 13-300, Hawai'i Administrative Rules (Rules of Practice and Procedure Relating to Burial Sites and Human Remains).*

Determination:

☐ This categorically excluded activity/project converts to **EXEMPT** per Section 58.34(a)(12), because it does not require any mitigation for compliance with any listed statutes or authorities, nor requires any formal permit or license; **Funds may be committed and drawn down after certification of this part** for this (now) EXEMPT project; OR

☒ This categorically excluded activity/project cannot convert to Exempt status because one or more statutes or authorities listed at Section 58.5 requires formal consultation or mitigation. Complete consultation/mitigation protocol requirements, **publish NOI/RROF and obtain "Authority to Use Grant Funds"** (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR

☐ This project is not categorically excluded OR, if originally categorically excluded, is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

Preparer Signature: Scott Ezer Date: 12-17-15

Name/Title/Organization: Mr. Scott Ezer, Vice President
HHF Planners

Responsible Entity Agency Official Signature:

David Y. Ige Date: APR 28 2016

Name/Title: Mr. David Y. Ige, Governor

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

WAHIAWA TERRACE (HA # 1015)

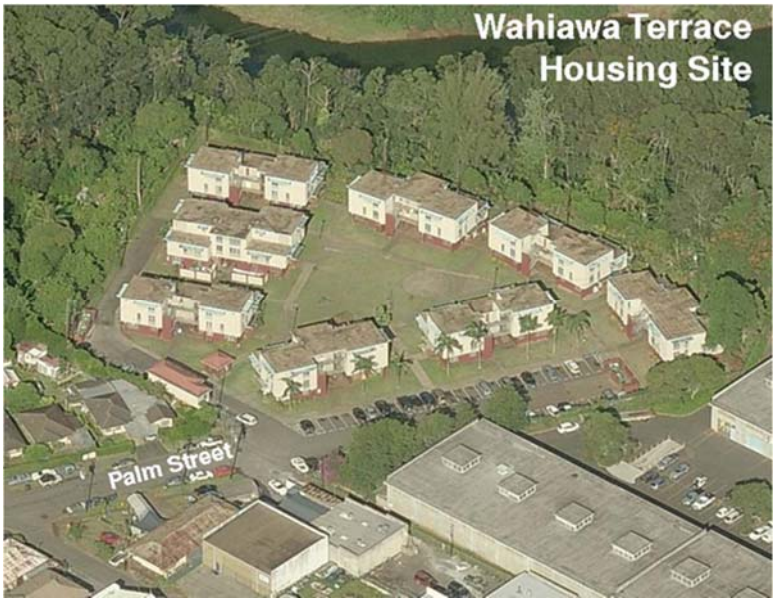
TMK: (1) 7-1-001: 034

Hawai‘i Public Housing Authority (HPHA) Environmental Review

SOURCE DOCUMENTATION (SD) STATUTORY WORKSHEET

Site Visit Date: June 8, 2015
Prepared By: Glenn Tadaki

PROJECT DESCRIPTION



The Wahiawā Terrace housing project is located in the Wahiawā community on the island of O‘ahu. Wahiawā is situated in Central O‘ahu to the east of Schofield Barracks Army Base.

The housing site is situated at the north end of Palm Street and backs up to the North Fork of Kaukonahua Stream. This housing project is within HPHA’s Asset Management Project (AMP) 49 which includes two other housing projects.

Wahiawā Terrace was first occupied in 1966 and has a street address of 337 Palm Street. The property consists of 2.75 acres, and it is identified by Tax Map Key (1) 7-1-001: 034. The housing project consists of eight three-story townhouses ranging from one, two, three, and four bedrooms per unit. A small two-story maintenance building is also located on the site. The property is designated for “Urban” use by the State Land Use Commission and is zoned for “A-2 Medium Density Apartment” use by the City and County of Honolulu.

The project site is not located within a tsunami evacuation zone, and the entire site is located in Flood Zone D, an unstudied area where flood hazards are undetermined, but where flooding is possible (Community Panel Number 15003C0120F, Revised November 2014).

The following figures in Exhibit A provide supporting information on this housing project:

Figure 1: Location Map
Figure 2: TMK Map
Figure 3: Site Map
Figure 4: Flood Map

I. AIRPORT CLEAR ZONES AND ACCIDENT POTENTIAL ZONES (24 CFR PART 51D)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The housing project does not lie within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: 24 CFR 51 (D).

Honolulu International Airport Master Plan - 2010 (August 1994), State Department of Transportation, Airports Division; and

*Hawai`i Airports and Flying Safety Guide (2012-13, Fifth Edition, Revision 1)* Hawai`i Department of Transportation, Airports Division.

HDOT website at: http://hidot.hawaii.gov/airports/files/2013/01/Airport-Safety-Guide-2012-2013-5rev1.pdf

II. COASTAL BARRIER RESOURCES (COASTAL BARRIER IMPROVEMENT ACT OF 1990 [16 USC 3501])

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i does not have any designated coastal barrier resource units.

SUPPORTING DOCUMENTATION:

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/cbra/maps/mapper.html (Date accessed: 6/30/15).

III. FLOOD INSURANCE (FLOOD DISASTER PROTECTION ACT OF 1973 AND NATIONAL FLOOD INSURANCE REFORM ACT OF 1994 [42 USC 4001-4128 AND 42 USC 5154a])

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program.

As indicated in Flood Insurance Rate Map Panel 15003C0120F, the project site is located in Zone D (area of undetermined flood hazard). A field inspection and information obtained from the Maintenance Supervisor confirmed no major flooding issues within the site. Based on its description, the Wahiawā Terrace housing project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance is not mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the Wahiawā Terrace housing project did not visually reveal any signs of previous flooding problems. Slight erosion was observed along part of the fenceline on the western boundary of the property. The North Fork of Kaukonahua Stream lies to the west of the project site and is about 150 feet away from the closest occupied building in the housing project. The stream is about 840 feet above mean sea level (amsl) at this location, while the building is approximately 900 feet amsl, a difference of 60 feet. An interview with the Maintenance Supervisor determined that no major ponding or flooding issues have occurred on the project site.

Printed: Flood Insurance Rate Map, City and County of Honolulu, Hawai‘i Community Panel Number Community Panel Number 15003C0120F, Revised November 2014).

Hawai`i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 6/30/15)

IV. CLEAN AIR ACT (40 CFR PARTS 6, 51, 93)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. Environmental Protection Agency's Green Book for currently designated "nonattainment areas" as of June 2015. Planned rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.

SUPPORTING DOCUMENTATION:

Printed: *State of Hawai‘i Annual Summary 2013 Air Quality Data*. State of Hawai'i, Department of Health, July 2014.

U.S. Environmental Protection Agency website at: http://epa.gov/airquality/greenbk/

V. COASTAL ZONE MANAGEMENT ACT (16 USC 1451, SECTIONS 307 (C), (D)

CONTACT:
Mr. John Nakagawa
Office of Planning
Department of Business, Economic Development & Tourism
State of Hawai‘i
P.O. Box 2359
Honolulu, Hawai'i, 96804-2359

SUPPORTING DOCUMENTS

	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai‘i's Coastal Zone Management (CZM) program.

SUPPORTING DOCUMENTATION:

Contact: In an e-mail to the Office of Planning (OP) dated July 27, 2015, the HPHA determined that the use of HUD funds for the implementation of repair and rehabilitation improvements does not require review for consistency with Hawai‘i's CZM program. The OP confirmed this determination in an e-mail dated July 28, 2015 and included in the Appendices.

Experience: As part of past environmental reviews in December 2010, a letter from the OP dated July 20, 2005 determined that their review for consistency with Hawai'i's CZM program was not required. A copy of this letter is included in the Appendices.

VI. CONTAMINATION AND TOXIC SUBSTANCES (24 CFR PART 50.3 & 58.5(I)(2))

	SUPPORTING DOCUMENTS
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Project Not Affected.

There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.

SUPPORTING DOCUMENTATION:

Field: A site inspection and interview with the Maintenance Supervisor revealed no presence of any toxic or radioactive materials on the project site that warrant any concern. Flammable and hazardous materials are kept in a secure storage room within a utility building by Building 1. The storage room is in acceptable condition and labeled with signage.

Study: Environmental Data Resources, Inc. (EDR), conducted a search of available environmental records and prepared a Radius Map Report (Inquiry Number 4237094.238s, March 17, 2015). EDR reviewed more than 25 federal and statewide regulatory databases for information regarding the treatment, storage, disposal and release of toxic chemicals at the project site and within specific radii (generally 1 mile) of the site. A Detail Map within the EDR report documents those sites identified within a 0.25 mile radius of the project site. Some of the sites contain underground storage tanks (UST) that are currently in use or are permanently out of use. The EDR report in Exhibit B includes the results of their research findings.

In the vicinity of the project site, the EDR report notes that two gasoline USTs (total 2,550 gallons) at 911 Palm Place and one gasoline UST (1,000 gallons) at 930 Palm Place are permanently out of use. It also notes that cleanup for a leaking UST at the Wahiawā Police Station on 330 N. Cane Street was completed in 1999 and that one 12,000 gallon gasoline UST is presently in use, while four gasoline USTs (total 9,000 gallons) are permanently out of use. In addition, Wahiawā Industrial Center on 401 N. Cane Street, is currently classified as a non-generator because it does not generate hazardous waste. No violations were found when the industrial center was formerly classified as a large quantity generator.

The project site was not identified as a Formerly Used Defense Site (FUDS) by the U.S. Army Corps of Engineers and is not subject to any cleanup actions for Department of Defense-generated contamination.

VII. ENDANGERED SPECIES (50 CFR PART 402)

CONTACT:
Mr. Loyal Mehrhoff, Field Supervisor
Pacific Islands Administrator
Fish and Wildlife Services
U.S. Department of the Interior
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawai'i 96813
Tel. #: 792-9400

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Adverse Effect Subject to Mitigation

The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received by the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices.

SUPPORTING DOCUMENTATION:

Contact: A letter from the HPHA dated July 24, 2015 was submitted to the Pacific Island Administrator for the FWS determining that repair and rehabilitation improvements that may be implemented using HUD funds for this housing project would have no likelihood of effect on any listed species or proposed species, or existing or proposed designated critical habitat subject to certain measures. Concurrence with this determination along with proposed minimization and avoidance measures was received from the FWS in a letter dated September 28, 2015 which is included in the Appendices. This housing project is subject to the following measures.

Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.

Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.

Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.

Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and

maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.

Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo‘i, impoundments or other vegetated water bodies.

1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols.
2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.
3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.

In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.

Additional Measures: The following additional measures would be implemented:

1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.

Experience: The FWS was previously consulted as part of environmental reviews that were completed in 2005 (39 housing projects) and 2010 (70 housing projects) which supported the determination that repair and rehabilitation improvements would either: 1) have no likelihood of effect for certain housing projects; or 2) not likely adversely affect federally listed species or critical habitat for certain housing projects subject to mitigative measures. A summary of these consultation efforts follows.

2005 Consultation: In a letter dated July 15, 2005, the Housing and Community Development Corporation of Hawai‘i (predecessor to the HPHA), determined that the implementation of minor repair and rehabilitation improvements for 39 housing projects would not have an adverse effect on federally-listed species or critical habitat. In a letter dated August 11, 2005, the FWS concurred with the HCDCH determination.

2010 Consultation: In a letter dated May 17, 2010, the HPHA informed the FWS that HUD funds would be used to immediately implement repair and rehabilitation improvements for six housing projects on O‘ahu and the island of Hawai`i. In a subsequent letter dated May 21, 2010, the FWS was informed that HPHA would be using HUD funds to implement minor repair and rehabilitation improvements for 64 projects throughout the State. In both letters, the HPHA determined that the repair and rehabilitation improvements were not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat. Based on further consultation and a

meeting with FWS staff on June 24, 2010, the HPHA determined that repair and rehabilitation improvements for most of their housing projects would not likely adversely affect any listed or proposed species, or existing or proposed designated habitat, subject to various mitigative measures for certain housing projects.

VIII. EXPLOSIVE AND FLAMMABLE OPERATIONS (24 CFR PART 51C)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

SUPPORTING DOCUMENTATION:

Field: Field inspection was limited to the exterior of residential buildings and associated structures for this housing project. No above-ground explosive or flammable material storage containers in excess of 100 gallons were observed at the site.

Printed: 24 CFR Part 51, Subpart C addresses acceptable separation distance from above-ground explosive or flammable fuels or chemical containers. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

IX. FARMLANDS PROTECTION (7 CFR PART 658)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. Since the property consists of an existing housing development within an urbanized area, no farmlands would be impacted by the implementation of repair and rehabilitation improvements.

Printed: The property is designated for "Urban" use by the State Land Use Commission and is zoned for "A-2 Medium Density Apartment" use by the City and County of Honolulu.

Hawai`i Office of Planning website at: http://planning.hawaii.gov/gis/
(Date accessed: 6/30/2015)

X. FLOODPLAIN MANAGEMENT (EXECUTIVE ORDER 11988, 24 CFR PART 55)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program.

The project site is located in Zone D (area of undetermined flood hazard). A field inspection and information obtained from the Maintenance Supervisor confirmed no major flooding issues within the site. The project is in compliance with Executive Order 11988.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the Wahiawā Terrace housing project did not visually reveal any signs of previous flooding problems. Slight erosion was observed along part of the fenceline on the western boundary of the property. The North Fork of Kaukonahua Stream lies to the west of the project site and is about 150 feet away from the closest occupied building in the housing project. The stream is about 840 feet above mean sea level (amsl) at this location, while the building is approximately 900 feet amsl, a difference of 60 feet. An interview with the Maintenance Supervisor determined that no major ponding or flooding issues have occurred on the project site.

Printed: Flood Insurance Rate Map, City and County of Honolulu, Hawai'i Community Panel Number Community Panel Number 15003C0120F, Revised November 2014).

Hawai`i Department of Land and Natural Resources website at:
http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 6/30/15)

XI. HISTORIC PRESERVATION (NATIONAL HISTORIC PRESERVATION ACT OF 1966; SECTIONS 106 AND 110; 36 CFR, PART 800)

CONTACT:

Ms. Suzanne Case, Chairperson
Department of Land and Natural Resources (DLNR)
State of Hawai‘i
1151 Punchbowl Street
Honolulu, Hawai‘i 96813
Tel. #: 587-0400

SUPPORTING DOCUMENTS

X	Field
X	Contact
X	Printed
X	Experience
X	Study

DETERMINATION:

Status Category: No Adverse Effect on Historic Properties with Mitigation.

Wahiawā Terrace is 49 years old and was initially occupied in 1966. The housing project has been renovated twice, in 1994 and during 2014 to 2015. In May 2015, Fung Associates conducted an Architectural Inventory Survey (AIS) for Wahiawā Terrace. The 2015 AIS notes that Wahiawā Terrace was the earliest known housing project in rural O‘ahu and was developed by the Hawai‘i Housing Authority (HHA), a predecessor to the HPHA. It is significant at the State level for its association with the history of public housing in Hawai`i. It is also architecturally significant at the local level for its high quality of design and being the work of a master, the architectural firm of Wong & Wong. Wahiawā Terrace appears to meet the criteria for listing in the National Register of Historic Places (NRHP). To be considered eligible, a property must meet the National Register criteria for evaluation which involves examining its integrity, significance, and age (generally at least 50 years old). In a letter to the State Historic Preservation Officer (SHPO) dated August 20, 2015, the HPHA determined that repair and rehabilitation improvements for this housing project would have “no adverse effect” on historic properties subject to certain mitigative measures. In a letter dated December 11, 2015, the SHPO concurred with the HPHA’s determination and provided additional conditions for ground-disturbing activities. In responding to this letter, the HPHA concurred with the conditions set forth by the SHPO.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the Wahiawā Terrace housing project did not locate any existing or potential archaeological sites (e.g., heiau) or cultural features on the property. The project site has undergone extensive ground-altering activities since it was initially developed and improved with buildings, driveways, parking lots, sidewalks, and other related improvements. An interview with the Maintenance Supervisor indicates that no known sites or features are present on the property.

Contact: Based on the findings and recommendations of the 2015 AIS, the HPHA submitted a letter to the State Historic Preservation Officer dated August 20, 2015 regarding 28 housing projects, which is included in the Appendix. Of this total, 15 housing projects did not meet National Register eligibility criteria, therefore, a “no historic properties affected” determination was proposed for these repair and rehabilitation improvements. Repair and rehabilitation improvements for the other 13 housing projects (including Wahiawā Terrace) were determined to meet National Register eligibility criteria and were proposed to have “no adverse effect” on historic properties subject to certain mitigative measures.

In a letter dated December 11, 2015, the SHPO concurred with the HPHA’s determination that repair and rehabilitation improvements for this housing project would have “no

adverse effect" on historic properties pursuant to NHPA Section 106 and subject to the following mitigative measures. . In response to this letter, the HPHA concurred with the conditions set forth by the SHPO. A copy of these letters are included in Exhibit C.

1. When considering rehabilitation improvements or building modifications: 1) the buildings' character-defining features shall be retained to the extent practicable; and 2) the renovations shall adhere to the Secretary of the Interior's (SOI) Standards for Rehabilitation.

2. If rehabilitation improvements or building modifications cannot retain the character-defining features or adhere to the SOI's Standards, a Historic American Buildings Survey (HABS) will be conducted subject to the following conditions:

    a. Level II HABS documentation will be conducted in accordance with the National Park Service standards; and

    b. A representative sample of multiple building types would be selected for HABS documentation due to the multiple types of buildings constructed for housing projects.

3. If ground disturbing activity is anticipated, HPHA must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation.

    a. Submit detailed plans, specifications and a detailed scope of work once the plans have been developed.

    b. Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation.

    c. Submit a TMK map showing the full extent of the project area within the affected parcel/s.

    d. Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area.

    e. Summary of land use history, such as previous intensive cultivation, grubbing or grading.

    f. Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

In addition to these mitigation measures, the HPHA would enter into a Programmatic Agreement with the SHPO to address the implementation of future repair and rehabilitation improvements to State housing projects after the current Section 106 review process is completed and prior to the next environmental review process in approximately five years. Furthermore, should subsurface human remains or other traces of human activity greater than 50 years old be encountered during construction, all work in the vicinity of the find would immediately stop and the SHPD would be promptly notified. The treatment of any cultural artifacts and human remains that are encountered would be conducted in accordance with applicable requirements of Chapter 6E, Hawai'i Revised Statutes

(Historic Preservation) and Chapter 13-300, Hawai‘i Administrative Rules **(**Rules of Practice and Procedure Relating to Burial Sites and Human Remains).

Printed: A review of the U.S. National Parks Service website for the National Register of Historic Places did not identify any historic properties within the limits of this housing project. A similar review of the State DLNR website for the State Register of Historic Places revealed that there are no historic properties within the project site.

National Register: U.S. National Park Service website at: http://www.nps.gov/nr/research/ (Date accessed: 7/2/15).

State Register: Hawai`i Department of Land and Natural Resources website at: http://dlnr.hawaii.gov/shpd/state-register/ (Date accessed: 7/2/15).

Experience: In a letter to the SHPD dated July 15, 2005, the Housing and Community Development Corporation of Hawai`i (HCDCH), a predecessor to the HPHA, proposed minor repair and rehabilitation improvement at 39 public housing projects throughout Hawai‘i (including Wahiawā Terrace) and believed the work would have “no effect” on significant historic sites. The HCDCH also asked the SHPD to: (1) define the area of potential effect for the housing projects; (2) identify and evaluate historic properties within the housing projects; and (3) assess and resolve any adverse effects of the housing projects per Section 106 of the National Historic Preservation Act of 1966.

In a letter to the HCDCH dated September 27, 2005, the SHPO responded by requesting that a programmatic agreement (PA) with the HCDCH be developed that would also address the recordation of housing projects that have not yet reached the 50-year milestone but may face possible adverse effects from the proposed work.

Based on follow up discussions with the SHPD, Mason Architects prepared a historic property evaluation (HPE) on behalf of the HCDCH in April 2006 for six public housing projects on Hawai‘i Island and O‘ahu (did not include Wahiawā Terrace because it was only 40 years old at the time). The six projects covered by the HPE met, or would soon meet, the 50-year age criteria to become eligible for listing in the NRHP. At the time, only two of the projects were over 50 years old and only two met NRHP eligibility criteria. The HPE was submitted to the SHPD for review and comment on June 6, 2006. No comments or objections were received from the SHPO on the 2006 HPE or the “no effect” determination that was set forth in the HCDCH letter dated July 15, 2005.

In letter to the SHPO dated April 19, 2011, the HPHA determined that minor repair and rehabilitation improvement at 57 public housing projects throughout Hawai‘i (including Wahiawā Terrace) would have “no effect” on historic properties. The SHPO had no comments or objections on the “no effect” determination.

Study: The 2015 AIS evaluated 17 HPHA housing projects including Wahiawā Terrace. The purpose of the AIS was to evaluate certain previously-evaluated housing projects along with other housing projects in order to determine if they would meet NRHP eligibility criteria. The section of the AIS that covers this housing project is included in Exhibit C, while the entire document is included in the Appendices.

Wahiawā Terrace is 49 years old and was first occupied in 1966. The housing project has been renovated twice, in 1994 and during 2014 to 2015. The 2015 AIS notes that Wahiawā Terrace was the earliest known housing project in rural O‘ahu and was developed by the Hawai‘i Housing Authority (HHA), a predecessor to the HPHA. It is significant at the State

level for its association with the history of public housing in Hawai'i. It is also architecturally significant at the local level for its high quality of design and being the work of a master, the architectural firm of Wong & Wong.

Wahiawā Terrace follows a modified perimeter block plan, with the buildings sited on the periphery of the property and enclosing a central courtyard. The modified block plan, coupled with the modern design of the buildings, with their open central core, and cantilevered canopies and upper levels, makes for a distinctive and engaging composition of high quality. The overall sensibility and high level of design is sufficiently strong that window replacements and interior remodeling have not compromised the historic integrity of this project. Wahiawā Terrace is considered an excellent example of a perimeter block plan housing project being adapted for use in Hawai`i. This project appears to meet the criteria for listing in the National Register of Historic Places (NRHP). Repair and rehabilitation improvements to this project should not have an adverse effect subject to mitigative measures.

XII. NOISE ABATEMENT CONTROL (24 CFR PART 51B)

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

Status Category: Within HUD Noise Standards

The project site is not situated along a highway or arterial roadway with a high volume of vehicular traffic that may generate significant noise. Kamehameha Highway is a major State roadway (Route 99) that begins near Joint Base Pearl Harbor-Hickam and ends near Haleiwa. The highway becomes Route 80 as it enters Wahiawā and transitions back to Route 99 at the north edge of town. Kamehameha Highway provides access to vehicles entering and leaving Wahiawā. Kilani Avenue (Route 7041), a major City and County collector road, provides access to the project site via a connection to Palm Street which dead ends about 840 feet from the intersection. The HUD noise level calculator estimated noise levels at the project site to be 44.6 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

SUPPORTING DOCUMENTATION:

Field: Palm Street is located near the commercial core of Wahiawā. It provides access to Wahiawā Terrace and terminates at the entrance to the housing project, about 840 feet north from its intersection with Kilani Avenue. Because it results in a dead end, the traffic volume along Palm Street is light and noise generated by traffic along Kilani Avenue is minimal due to the distance between the street and the housing project. Intervening buildings between Kilani Avenue and the housing project also help dampen any ambient traffic noise to insignificant levels. No significant noise generating sources were identified at the project site during the site inspection and an interview with the Maintenance Supervisor did not identify any loud noise producing sources in the area. Noise sources

are predominantly associated with vehicular traffic along adjacent roadways and voices from surrounding activities.

Study: Land uses in the vicinity of the project site is primarily residential and commercial. The HUD day/night noise level calculator was used to estimate approximate traffic noise levels at the project site. Kilani Avenue is a major City and County roadway that is generally aligned in an easterly to westerly direction. It serves as one of two collector roads serving Wahiawā and accommodates vehicle traffic entering and leaving the town. Kilani Avenue handles about 13,272 vehicles a day based upon State Department of Transportation 2014 traffic data. Given the distance between the project site and the center line of this roadway (about 800 feet), the estimated noise levels at the project site using the HUD calculator was 44.6 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

XIII. SOLE SOURCE AQUIFER (40 CFR PART 149)

SUPPORTING DOCUMENTS	
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact on Sole Source Aquifer.

The housing project is located within the O‘ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation. However, if exceptional circumstances require compliance steps with any of these authorities, such compliance must be established and documented prior to approving the site-specific loan or grant.

SUPPORTING DOCUMENTATION:

Printed: This determination was based upon review of the Sole Source Aquifer Memorandum of 4/30/90 (Sections II.B.1 and II.B.2) and consideration of the type of rehabilitation related improvements that would be conducted for this project.

XIV. WETLANDS PROTECTION (EXECUTIVE ORDER 11990)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the property did not identify the presence of any wetlands.

Printed: U.S Fish and Wildlife Service website at: http://www.fws.gov/wetlands/data/mapper.html (Date accessed: 6/30/2015).

XV. WILD AND SCENIC RIVERS ACT (16 USC 1271, SECTION 7 (B), (C))

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no Wild and Scenic Rivers in Hawai‘i, which excludes this project from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: National Wild and Scenic Rivers System website at: http://www.rivers.gov/index.php (Date accessed: 6/30/2015).

XVI. ENVIRONMENTAL JUSTICE (EXECUTIVE ORDER NO. 12898)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact on Requirements.

Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, repair and rehabilitation improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations. Repair and rehabilitation improvements should benefit low-income and minority populations living within this housing project.

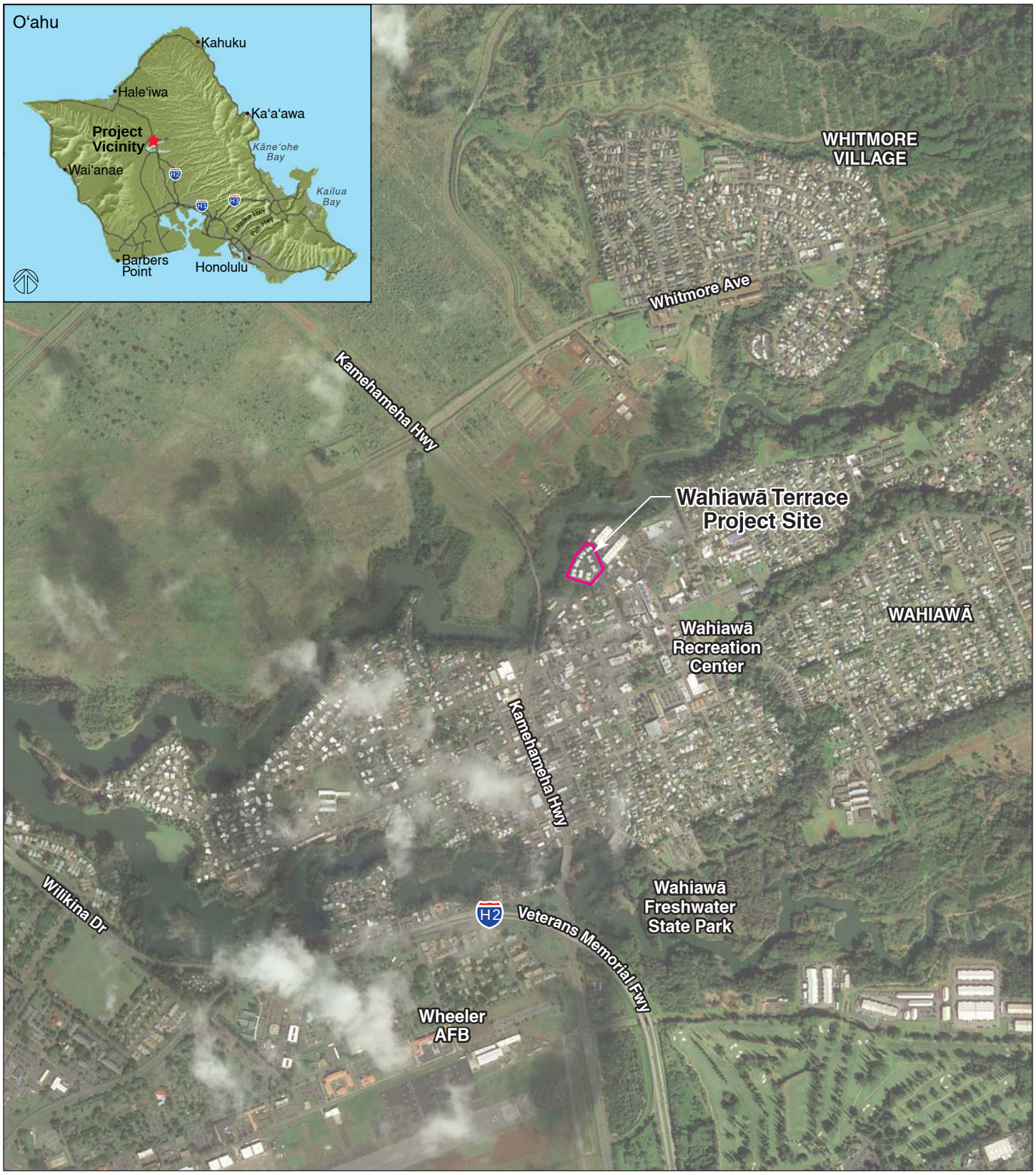
SUPPORTING DOCUMENTATION:

Printed: Executive Order 12898.

U.S. Department of Housing and Urban Development website at:
https://www.hudexchange.info/environmental-review/environmental-justice/

EXHIBIT A

Location Map, TMK Map, Site Map, Flood Map, and Site Photos



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

HPHA No. 1015 - Wahiawā Terrace (AMP 49)

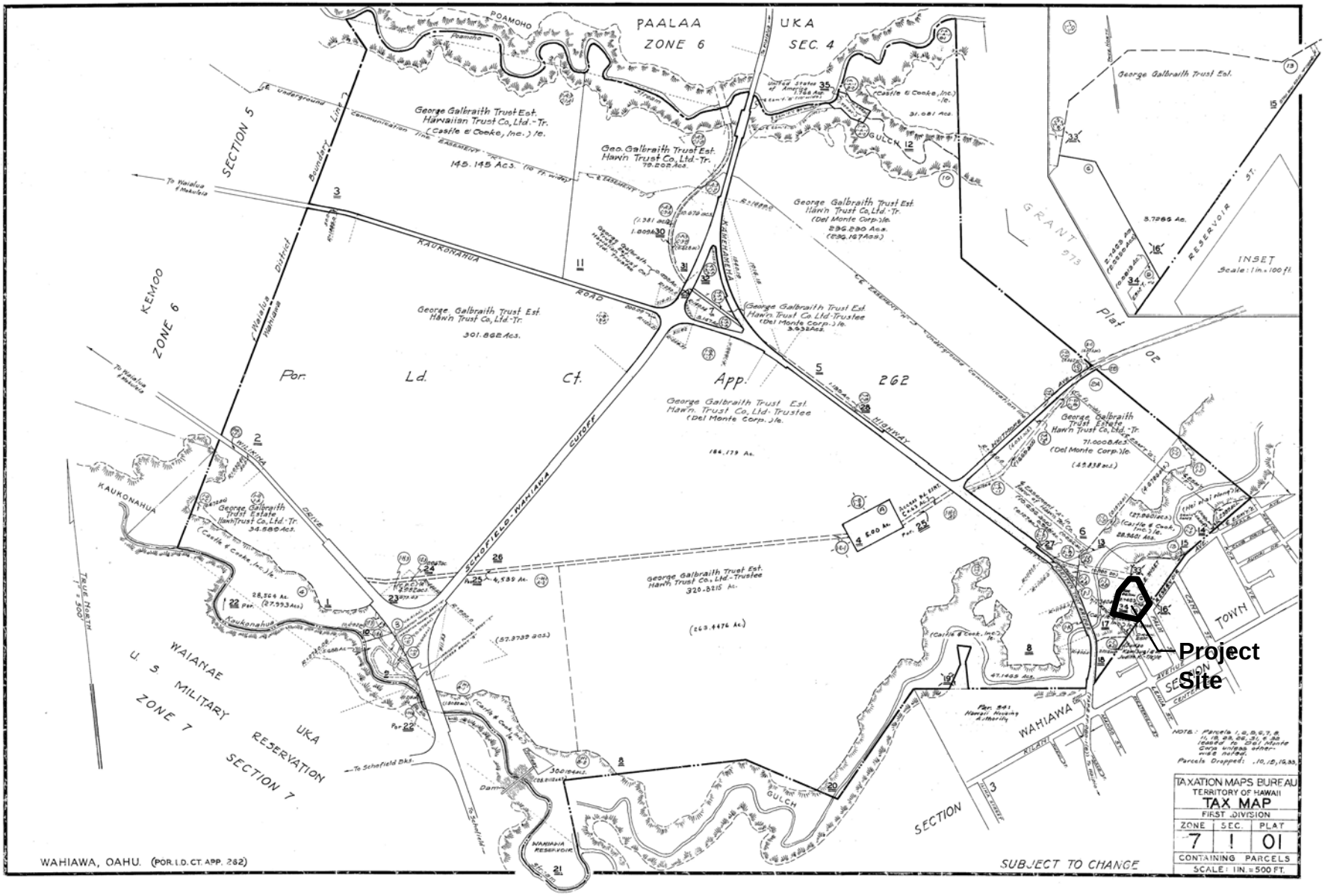
Figure 1 - Project Location Map

3/3/2014

Wahiawā, O'ahu

2,000 FT

HHF PLANNERS
places for people



HPHA No. 1015 - Wahiawā Terrace (AMP 49)

Figure 2 - TMK Map

Wahiawā, O'ahu

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1015 - Wahiawā Terrace (AMP 49)

Figure 3 - Site Map

Wahiawā, O'ahu

50 FEET

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

LEGEND

Zone D - Unstudied Area

HPHA No. 1015 - Wahiawā Terrace (AMP 49)

Figure 4 - Flood Map

Wahiawā, O'ahu

50 FEET

HHF PLANNERS
places for people

WAHIAWĀ TERRACE
SITE PHOTOS

Project sign on Building 1

Project parking, Building 7 on left

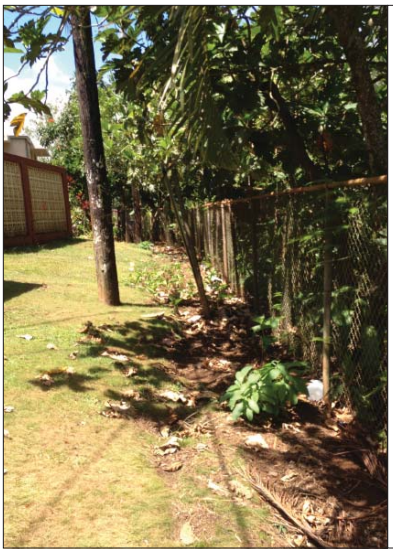
Project's eastern boundary, at Palm Street, view fronting Building 1, facing south

Project's northern boundary/parking area, facing north-east

Project's western boundary, facing north

Project's southern boundary, facing west

WAHIAWĀ TERRACE
SITE PHOTOS

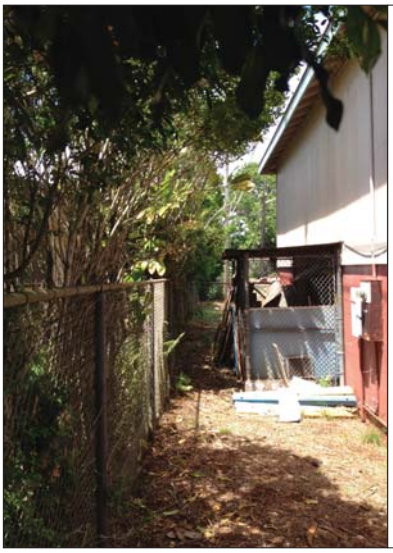


Project's western boundary, facing south

View between Buildings 2 (right) and 3 (left)

Project's northern boundary, near Building 7, adjacent neighbor's building (at right)

Trash pickup area, near Building 2



Storage Area behind Utility Building

Hazardous material storage and work area in utility building

EXHIBIT B

EDR Radius Map Report

Wahiawa Terrace
337 Palm St.
Wahiawa, HI 96786

Inquiry Number: 4237094.238s
March 17, 2015

EDR Summary Radius Map Report

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

FORM-NULL-PVC

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

337 PALM ST.
HONOLULU County, HI 96786

COORDINATES

Latitude (North):	21.5015000 - 21˚ 30' 5.40''
Longitude (West):	158.0278000 - 158˚ 1' 40.08''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	600703.4
UTM Y (Meters):	2377825.0
Elevation:	890 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	USGS 7.5 min quad index

Target Property:	S
Source:	USGS 7.5 min quad index

MAPPED SITES SUMMARY

Target Property Address:
337 PALM ST.
, HI 96786

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
Reg	WHEELER AIR FORCE BA		DOD	Same	4291, South
Reg	SCHOFIELD BARRACKS M		DOD	Same	3718, South
A1		322 PALM ST	EDR US Hist Auto Stat	Lower	287, SE
A2	T-N-H PLUMBING, INC.	911 PALM PL	UST, Financial Assurance	Higher	348, ESE
B3		918 PALM PL	EDR US Hist Auto Stat	Higher	372, ESE
B4		920 PALM PL	EDR US Hist Auto Stat	Higher	376, East
B5	KIHARA ELECTRIC, INC	930 PALM PL	UST	Higher	393, ESE
C6	WAHIAWA INDUSTRIAL C	401 N CANE	RCRA NonGen / NLR	Higher	681, East
C7	WAHIAWA POLICE STATI	330 N CANE ST	LUST, UST, Financial Assurance	Higher	767, ESE
D8		202 PALM ST	EDR US Hist Auto Stat	Higher	889, SSE
D9	PIONEER CONTRACTING	930 KILANI AVE	UST	Higher	941, SE
D10	PIONEER CONTRACTING	930 KILANI AVE	RCRA-CESQG, FINDS	Higher	941, SE
D11	MAHALO KILANI MART	935 KILANI AVE	UST, Financial Assurance	Higher	956, SE
E12		207 N CANE BAY 4	EDR US Hist Auto Stat	Higher	1009, SE
F13	ACE TRANSMISSION	720 KILANI AVE	LUST, UST, Financial Assurance	Higher	1011, South
F14		720 KILANI AVE	EDR US Hist Auto Stat	Higher	1011, South
E15		207 N CANE ST	EDR US Hist Auto Stat	Higher	1051, SE
F16		656 KILANI AVE	EDR US Hist Auto Stat	Higher	1091, South
G17	PERFECTION DRY CLEAN	650 KILANI AVE	UST	Higher	1098, SSW
G18		651 KILANI AVE	EDR US Hist Auto Stat	Higher	1168, SSW
G19	NAPA AUTOMOTIVE RETA	651 KILANI AVE	UST	Higher	1168, SSW
20	7-11 WAHIAWA	202 N KAMEHAMEHA HWY	UST, Financial Assurance	Higher	1250, SSW
H21	NCTAMS EASTPAC - WAH	500 CENTER ST	RCRA-SQG	Higher	1258, SSE
H22	NCTAMSPAC CENTER STR	500 CENTER ST	SHWS, SPILLS, ENG CONTROLS	Higher	1258, SSE
H23	NAVAL COMPUTER AND T	500 CENTER STREET	NPL, CERCLIS, US ENG CONTROLS, US INST CONTROL,...	Higher	1258, SSE
I24	WAHIAWA GENERAL HOSP	128 LEHUA ST	UST, Financial Assurance	Higher	1267, South
25	CHEE HING CATERING	125 WESTERVELT ST	UST	Higher	1275, South
I26	U.S. POSTAL SERVICE	115 LEHUA ST	LUST, UST, Financial Assurance	Higher	1400, SSE
27	WAHIAWA CENTRAL OFFI	252 KOA ST	LUST, UST, Financial Assurance	Higher	1443, East
28	IMM WAHIAWA	150 N. KAMEHAMEHA HW	LUST, UST, Financial Assurance	Higher	1535, SSW
29	WAHIAWA CIVIC CENTER	910 CALIFORNIA AVE	LUST, UST	Higher	1594, SSE
30	MID PAC PETROLEUM LL	966 CALIFORNIA AVE	SHWS, LUST, UST, Financial Assurance	Higher	1596, SE
31	YAMA'S TEXACO	805 CALIFORNIA AVE	LUST, UST	Higher	1603, SSE
32	WAHIAWA CHEVRON SS	1011 CALIFORNIA AVE	SHWS, LUST, UST, Financial Assurance	Higher	1715, SE
33	MAHALO WAHIAWA	119 N KAMEHAMEHA HWY	LUST, UST, Financial Assurance	Higher	1729, SSW
34	C&CH WAHIAWA FIRE ST	640 CALIFORNIA AVE	LUST, UST	Higher	1748, South
35	F & M FOOD MART CORP	10 S KAMEHAMEHA HWY	LUST, UST, Financial Assurance	Lower	2183, SSW
36	WAHIAWA UNION	58 S KAMEHAMEHA HWY	LUST, UST, Financial Assurance	Lower	2396, SSW
37	SERVICE MOTOR CO	105 S KAM HWY	RCRA-CESQG, LUST, UST	Lower	2623, South

MAPPED SITES SUMMARY

Target Property Address:
337 PALM ST.
, HI 96786

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
38	SILVER CREST ELDERLY	529 PINE ST	SHWS	Lower	3267, South

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: A review of the NPL list, as provided by EDR, and dated 12/16/2014 has revealed that there is 1 NPL site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NAVAL COMPUTER AND T	***500 CENTER STREET***	***SSE 1/8 - 1/4 (0.238 mi.)***	***H23***	***11***

Federal CERCLIS list

CERCLIS: A review of the CERCLIS list, as provided by EDR, and dated 10/25/2013 has revealed that there is 1 CERCLIS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NAVAL COMPUTER AND T	***500 CENTER STREET***	***SSE 1/8 - 1/4 (0.238 mi.)***	***H23***	***11***

Federal RCRA generators list

RCRA-SQG: A review of the RCRA-SQG list, as provided by EDR, and dated 12/09/2014 has revealed that there is 1 RCRA-SQG site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NCTAMS EASTPAC - WAH	500 CENTER ST	SSE 1/8 - 1/4 (0.238 mi.)	H21	11

RCRA-CESQG: A review of the RCRA-CESQG list, as provided by EDR, and dated 12/09/2014 has revealed that there is 1 RCRA-CESQG site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PIONEER CONTRACTING	***930 KILANI AVE***	***SE 1/8 - 1/4 (0.178 mi.)***	***D10***	***9***

Federal institutional controls / engineering controls registries

US ENG CONTROLS: A review of the US ENG CONTROLS list, as provided by EDR, and dated 09/18/2014 has revealed that there is 1 US ENG CONTROLS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NAVAL COMPUTER AND T	***500 CENTER STREET***	***SSE 1/8 - 1/4 (0.238 mi.)***	***H23***	***11***

US INST CONTROL: A review of the US INST CONTROL list, as provided by EDR, and dated 09/18/2014 has revealed that there is 1 US INST CONTROL site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NAVAL COMPUTER AND T	***500 CENTER STREET***	***SSE 1/8 - 1/4 (0.238 mi.)***	***H23***	***11***

State- and tribal - equivalent CERCLIS

SHWS: A review of the SHWS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 4 SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NCTAMSPAC CENTER STR	***500 CENTER ST***	***SSE 1/8 - 1/4 (0.238 mi.)***	***H22***	***11***
MID PAC PETROLEUM LL	***966 CALIFORNIA AVE***	***SE 1/4 - 1/2 (0.302 mi.)***	***30***	***13***
WAHIAWA CHEVRON SS	***1011 CALIFORNIA AVE***	***SE 1/4 - 1/2 (0.325 mi.)***	***32***	***14***

Lower Elevation	Address	Direction / Distance	Map ID	Page
SILVER CREST ELDERLY	529 PINE ST	S 1/2 - 1 (0.619 mi.)	38	16

State and tribal leaking storage tank lists

LUST: A review of the LUST list, as provided by EDR, and dated 12/16/2014 has revealed that there are 14 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WAHIAWA POLICE STATI	***330 N CANE ST***	***ESE 1/8 - 1/4 (0.145 mi.)***	***C7***	***8***
Facility Status: Site Cleanup Completed (NFA)				
ACE TRANSMISSION	***720 KILANI AVE***	***S 1/8 - 1/4 (0.191 mi.)***	***F13***	***9***
Facility Status: Site Cleanup Completed (NFA)				
U.S. POSTAL SERVICE	***115 LEHUA ST***	***SSE 1/4 - 1/2 (0.265 mi.)***	***I26***	***12***
Facility Status: Site Cleanup Completed (NFA)				
WAHIAWA CENTRAL OFFI	***252 KOA ST***	***E 1/4 - 1/2 (0.273 mi.)***	***27***	***12***
Facility Status: Site Cleanup Completed (NFA)				
IMM WAHIAWA	***150 N. KAMEHAMEHA HW***	***SSW 1/4 - 1/2 (0.291 mi.)***	***28***	***13***
Facility Status: Site Cleanup Completed (NFA)				
Facility Status: Exposure Prevention Management Plan				
WAHIAWA CIVIC CENTER	***910 CALIFORNIA AVE***	***SSE 1/4 - 1/2 (0.302 mi.)***	***29***	***13***
Facility Status: Site Cleanup Completed (NFA)				
MID PAC PETROLEUM LL	***966 CALIFORNIA AVE***	***SE 1/4 - 1/2 (0.302 mi.)***	***30***	***13***
Facility Status: Site Cleanup Completed (NFA)				
YAMA'S TEXACO	***805 CALIFORNIA AVE***	***SSE 1/4 - 1/2 (0.304 mi.)***	***31***	***14***
Facility Status: Site Cleanup Completed (NFA)				
WAHIAWA CHEVRON SS	***1011 CALIFORNIA AVE***	***SE 1/4 - 1/2 (0.325 mi.)***	***32***	***14***
Facility Status: Site Cleanup Completed (NFA)				
MAHALO WAHIAWA	***119 N KAMEHAMEHA HWY***	***SSW 1/4 - 1/2 (0.327 mi.)***	***33***	***14***
Facility Status: Site Cleanup Completed (NFA)				
C&CH WAHIAWA FIRE ST	***640 CALIFORNIA AVE***	***S 1/4 - 1/2 (0.331 mi.)***	***34***	***15***
Facility Status: Site Cleanup Completed (NFA)				

Lower Elevation	Address	Direction / Distance	Map ID	Page
F & M FOOD MART CORP	***10 S KAMEHAMEHA HWY***	***SSW 1/4 - 1/2 (0.413 mi.)***	***35***	***15***
Facility Status: Site Cleanup Completed (NFA)				
WAHIAWA UNION	***58 S KAMEHAMEHA HWY***	***SSW 1/4 - 1/2 (0.454 mi.)***	***36***	***15***
Facility Status: Site Cleanup Completed (NFA)				
SERVICE MOTOR CO	***105 S KAM HWY***	***S 1/4 - 1/2 (0.497 mi.)***	***37***	***15***
Facility Status: Site Cleanup Completed (NFA)				

State and tribal registered storage tank lists

UST: A review of the UST list, as provided by EDR, and dated 12/18/2014 has revealed that there are 11 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
T-N-H PLUMBING, INC.	***911 PALM PL***	***ESE 0 - 1/8 (0.066 mi.)***	***A2***	***7***
KIHARA ELECTRIC, INC	930 PALM PL	ESE 0 - 1/8 (0.074 mi.)	B5	8
WAHIAWA POLICE STATI	***330 N CANE ST***	***ESE 1/8 - 1/4 (0.145 mi.)***	***C7***	***8***
PIONEER CONTRACTING	930 KILANI AVE	SE 1/8 - 1/4 (0.178 mi.)	D9	9
MAHALO KILANI MART	***935 KILANI AVE***	***SE 1/8 - 1/4 (0.181 mi.)***	***D11***	***9***
ACE TRANSMISSION	***720 KILANI AVE***	***S 1/8 - 1/4 (0.191 mi.)***	***F13***	***9***
PERFECTION DRY CLEAN	650 KILANI AVE	SSW 1/8 - 1/4 (0.208 mi.)	G17	10

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NAPA AUTOMOTIVE RETA	651 KILANI AVE	SSW 1/8 - 1/4 (0.221 mi.)	G19	11
7-11 WAHIAWA	***202 N KAMEHAMEHA HWY***	***SSW 1/8 - 1/4 (0.237 mi.)***	***20***	***11***
WAHIAWA GENERAL HOSP	***128 LEHUA ST***	***S 1/8 - 1/4 (0.240 mi.)***	***I24***	***12***
CHEE HING CATERING	125 WESTERVELT ST	S 1/8 - 1/4 (0.241 mi.)	25	12

State and tribal institutional control / engineering control registries

ENG CONTROLS: A review of the ENG CONTROLS list, as provided by EDR, and dated 12/02/2014 has revealed that there is 1 ENG CONTROLS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NCTAMSPAC CENTER STR	***500 CENTER ST***	***SSE 1/8 - 1/4 (0.238 mi.)***	***H22***	***11***

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

RCRA NonGen / NLR: A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 12/09/2014 has revealed that there is 1 RCRA NonGen / NLR site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WAHIAWA INDUSTRIAL C	401 N CANE	E 1/8 - 1/4 (0.129 mi.)	C6	8

DOD: A review of the DOD list, as provided by EDR, and dated 12/31/2005 has revealed that there are 2 DOD sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WHEELER AIR FORCE BA		S 1/2 - 1 (0.813 mi.)	0	7
SCHOFIELD BARRACKS M		S 1/2 - 1 (0.704 mi.)	0	7

ROD: A review of the ROD list, as provided by EDR, and dated 11/25/2013 has revealed that there is 1 ROD site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NAVAL COMPUTER AND T	***500 CENTER STREET***	***SSE 1/8 - 1/4 (0.238 mi.)***	***H23***	***11***

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Auto Stat: A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there are 9 EDR US Hist Auto Stat sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	918 PALM PL	ESE 0 - 1/8 (0.070 mi.)	B3	7
Not reported	920 PALM PL	E 0 - 1/8 (0.071 mi.)	B4	8
Not reported	202 PALM ST	SSE 1/8 - 1/4 (0.168 mi.)	D8	8
Not reported	207 N CANE BAY 4	SE 1/8 - 1/4 (0.191 mi.)	E12	9
Not reported	720 KILANI AVE	S 1/8 - 1/4 (0.191 mi.)	F14	10
Not reported	207 N CANE ST	SE 1/8 - 1/4 (0.199 mi.)	E15	10
Not reported	656 KILANI AVE	S 1/8 - 1/4 (0.207 mi.)	F16	10
Not reported	651 KILANI AVE	SSW 1/8 - 1/4 (0.221 mi.)	G18	10

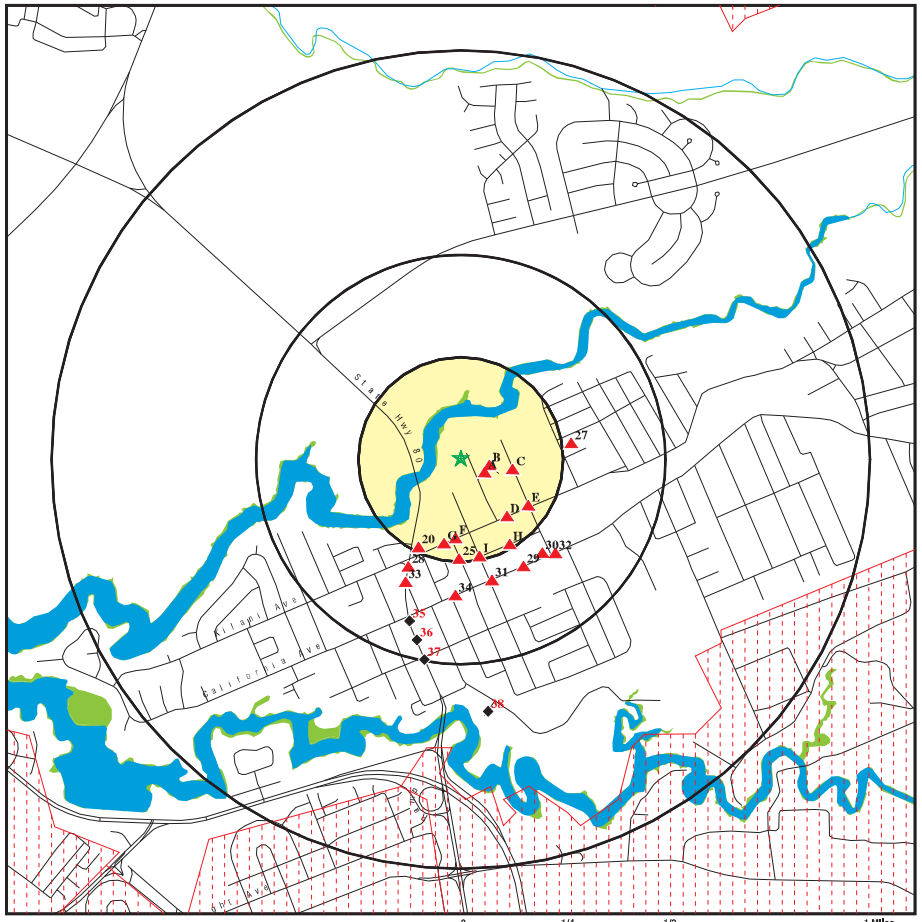
Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	322 PALM ST	SE 0 - 1/8 (0.054 mi.)	A1	7

ORPHAN SUMMARY

Count: 2 records.

City	EDR ID	Site Name	Site Address	Zip	Database(s)
WAHIAWA	1006819278	KAUKONAHUA BRIDGE	KAUKONAHUA STREAM RD & WILKIN	96786	SHWS, SPILLS
WAHIAWA	S117391490	WHITMORE VILLAGE	WHITMORE AVE	96786	SHWS, ENG CONTROLS, INST CON

OVERVIEW MAP - 4237094.238S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Wahiawa Terrace ADDRESS: 337 Palm St. Wahiawa HI 96786 LAT/LONG: 21.5015 / 158.0278	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.238s DATE: March 17, 2015 5:48 pm

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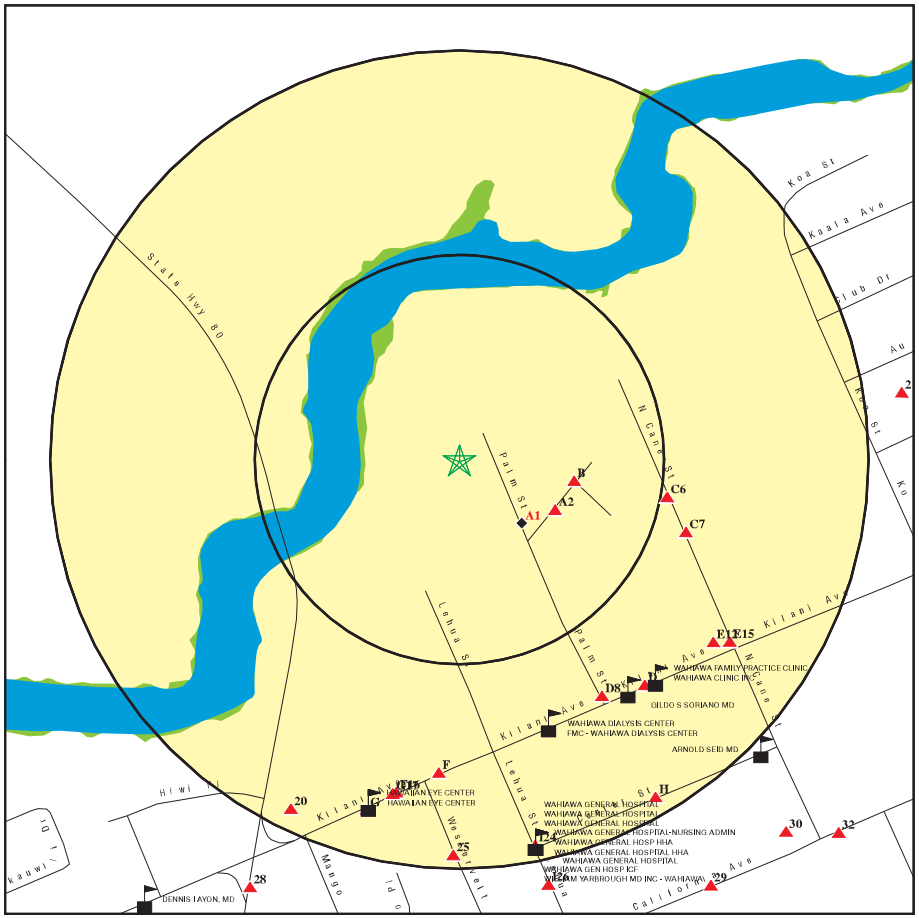
DETAIL MAP - 4237094.238S



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Wahiawa Terrace ADDRESS: 337 Palm St. Wahiawa HI 96786 LAT/LONG: 21.5015 / 158.0278	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.238s DATE: March 17, 2015 5:48 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	1	0	0	NR	1
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	1	0	NR	NR	1
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	1	NR	NR	NR	1
RCRA-CESQG	0.250		0	1	NR	NR	NR	1
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	1	0	NR	NR	1
US INST CONTROL	0.500		0	1	0	NR	NR	1
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
SHWS	1.000		0	1	2	1	NR	4
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	2	12	NR	NR	14
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250		2	9	NR	NR	NR	11

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		0	1	0	NR	NR	1
INST CONTROL	0.500		0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	1	NR	NR	NR	1
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	2	NR	2
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	1	0	0	NR	1
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		3	6	NR	NR	NR	9
EDR US Hist Cleaners	0.250		0	0	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
RGA HWS	TP		NR	NR	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

DOD
Region South
1/2-1
4291 ft.

WHEELER AIR FORCE BASE — **DOD** — **CUSA147733** / **N/A**

WHEELER AIR FORCE BASE (County), HI

Click here for full text details

DOD
Region South
1/2-1
3718 ft.

SCHOFIELD BARRACKS MILITARY RESERVATION — **DOD** — **CUSA147731** / **N/A**

SCHOFIELD BARRACKS MILITA (County), HI

Click here for full text details

A1
SE
< 1/8
0.054 mi.
287 ft.

Relative: Lower

322 PALM ST — **EDR US Hist Auto Stat** — **1015424129** / **N/A**
WAHIAWA, HI 96786

Click here for full text details

A2
ESE
< 1/8
0.066 mi.
348 ft.

Relative: Higher

T-N-H PLUMBING, INC. — **UST** — **U001236229**
911 PALM PL — **Financial Assurance** — **N/A**
SCHOFIELD BARRACKS, HI 96786

Click here for full text details

UST
Facility Id: 9-200940
Tank Status: Permanently Out of Use

B3
ESE
< 1/8
0.070 mi.
372 ft.

Relative: Higher

918 PALM PL — **EDR US Hist Auto Stat** — **1015674419** / **N/A**
WAHIAWA, HI 96786

Click here for full text details

B4
East
< 1/8
0.071 mi.
376 ft.

Relative: Higher

920 PALM PL — **EDR US Hist Auto Stat** — **1015675150** / **N/A**
WAHIAWA, HI 96786

Click here for full text details

B5
ESE
< 1/8
0.074 mi.
393 ft.

Relative: Higher

KIHARA ELECTRIC, INC. — **UST** — **U003541823** / **N/A**
930 PALM PL
SCHOFIELD BARRACKS, HI 96786

Click here for full text details

UST
Facility Id: 9-200735
Tank Status: Permanently Out of Use

C6
East
1/8-1/4
0.129 mi.
681 ft.

Relative: Higher

WAHIAWA INDUSTRIAL CENTER — **RCRA NonGen / NLR** — **1010316415** / **HIP000049908**
401 N CANE
WAHIAWA, HI 96786

Click here for full text details

RCRA NonGen / NLR
EPA Id: HIP000049908

C7
ESE
1/8-1/4
0.145 mi.
767 ft.

Relative: Higher

WAHIAWA POLICE STATION — **LUST** — **U004154611**
330 N CANE ST — **UST** — **N/A**
WAHIAWA, HI 96786 — **Financial Assurance**

Click here for full text details

LUST
Facility Id: 9-200111
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-200111
Tank Status: Permanently Out of Use
Tank Status: Currently In Use

D8
SSE
1/8-1/4
0.168 mi.
889 ft.

Relative: Higher

202 PALM ST — **EDR US Hist Auto Stat** — **1015307528** / **N/A**
WAHIAWA, HI 96786

Click here for full text details

D9
SE
1/8-1/4
0.178 mi.
941 ft.

Relative: Higher

PIONEER CONTRACTING CO LTD
930 KILANI AVE
SCHOFIELD BARRACKS, HI 96786

UST — **U001236216**
N/A

Click here for full text details

UST
Facility Id: 9-200903
Tank Status: Permanently Out of Use

D10
SE
1/8-1/4
0.178 mi.
941 ft.

Relative: Higher

PIONEER CONTRACTING CO LTD
930 KILANI AVE
WAHIAWA, HI 96786

RCRA-CESQG — **1000906737**
FINDS — **HI0000440222**

Click here for full text details

RCRA-CESQG
EPA Id: HI0000440222

D11
SE
1/8-1/4
0.181 mi.
956 ft.

Relative: Higher

MAHALO KILANI MART
935 KILANI AVE
WAHIAWA, HI 96786

UST — **U001236292**
Financial Assurance — **N/A**

Click here for full text details

UST
Facility Id: 9-201202
Tank Status: Currently In Use
Tank Status: Permanently Out of Use

E12
SE
1/8-1/4
0.191 mi.
1009 ft.

Relative: Higher

207 N CANE BAY 4
WAHIAWA, HI 96786

EDR US Hist Auto Stat — **1015315148**
N/A

Click here for full text details

F13
South
1/8-1/4
0.191 mi.
1011 ft.

Relative: Higher

ACE TRANSMISSION
720 KILANI AVE
SCHOFIELD BARRACKS, HI 96786

LUST — **U003154915**
UST — **N/A**
Financial Assurance

Click here for full text details

LUST
Facility Id: 9-201023
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-201023

ACE TRANSMISSION (Continued) — **U003154915**

Tank Status: Permanently Out of Use

F14
South
1/8-1/4
0.191 mi.
1011 ft.

Relative: Higher

720 KILANI AVE
WAHIAWA, HI 96786

EDR US Hist Auto Stat — **1015614896**
N/A

Click here for full text details

E15
SE
1/8-1/4
0.199 mi.
1051 ft.

Relative: Higher

207 N CANE ST
WAHIAWA, HI 96786

EDR US Hist Auto Stat — **1015315149**
N/A

Click here for full text details

F16
South
1/8-1/4
0.207 mi.
1091 ft.

Relative: Higher

656 KILANI AVE
WAHIAWA, HI 96786

EDR US Hist Auto Stat — **1015592560**
N/A

Click here for full text details

G17
SSW
1/8-1/4
0.208 mi.
1098 ft.

Relative: Higher

PERFECTION DRY CLEANERS LTD
650 KILANI AVE
WAHIAWA, HI 96786

UST — **U001236195**
N/A

Click here for full text details

UST
Facility Id: 9-200836
Tank Status: Permanently Out of Use

G18
SSW
1/8-1/4
0.221 mi.
1168 ft.

Relative: Higher

651 KILANI AVE
WAHIAWA, HI 96786

EDR US Hist Auto Stat — **1015591149**
N/A

Click here for full text details

G19
SSW
1/8-1/4
0.221 mi.
1168 ft.

Relative: Higher

NAPA AUTOMOTIVE RETAIL/WHOLESALE
651 KILANI AVE
SCHOFIELD BARRACKS, HI 96786

UST — **U001236196**
N/A

Click here for full text details

UST
Facility Id: 9-200837
Tank Status: Permanently Out of Use

20
SSW
1/8-1/4
0.237 mi.
1250 ft.

Relative: Higher

7-11 WAHIAWA
202 N KAMEHAMEHA HWY
WAHIAWA, HI 96786

UST
Financial Assurance — **U001236295**
N/A

Click here for full text details

UST
Facility Id: 9-201205
Tank Status: Permanently Out of Use
Tank Status: Currently in Use

H21
SSE
1/8-1/4
0.238 mi.
1258 ft.

Relative: Higher

NCTAMS EASTPAC - WAHIAWA
500 CENTER ST
WAHIAWA, HI 96786

RCRA-SQG — **1000473233**
HI6170024388

Click here for full text details

RCRA-SQG
EPA Id: HI6170024388

H22
SSE
1/8-1/4
0.238 mi.
1258 ft.

Relative: Higher

NCTAMSPAC CENTER STREET
500 CENTER ST
WAHIAWA, HI 96786

SHWS
SPILLS
ENG CONTROLS — **S106819229**
N/A

Click here for full text details

H23
SSE
1/8-1/4
0.238 mi.
1258 ft.

Relative: Higher

NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EA
500 CENTER STREET
WAHIAWA, HI 96786

NPL
CERCLIS
US ENG CONTROLS
US INST CONTROL
ROD
ICIS — **1000167735**
HI0170090054

Click here for full text details

NPL
EPA Id: HI0170090054

CERCLIS
EPA Id: HI0170090054

I24
South
1/8-1/4
0.240 mi.
1267 ft.

Relative: Higher

WAHIAWA GENERAL HOSPITAL
128 LEHUA ST
WAHIAWA, HI 96786

UST
Financial Assurance — **U004200898**
N/A

Click here for full text details

UST
Facility Id: 9-203206
Tank Status: Currently In Use
Tank Status: Permanently Out of Use

25
South
1/8-1/4
0.241 mi.
1275 ft.

Relative: Higher

CHEE HING CATERING
125 WESTERVELT ST
SCHOFIELD BARRACKS, HI 96786

UST — **U003222030**
N/A

Click here for full text details

UST
Facility Id: 9-201464
Tank Status: Permanently Out of Use

I26
SSE
1/4-1/2
0.265 mi.
1400 ft.

Relative: Higher

U.S. POSTAL SERVICE - WAHIAWA
115 LEHUA ST
WAHIAWA, HI 96786

LUST
UST
Financial Assurance — **U001236404**
N/A

Click here for full text details

LUST
Facility Id: 9-201776
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-201776
Tank Status: Permanently Out of Use

27
East
1/4-1/2
0.273 mi.
1443 ft.

Relative: Higher

WAHIAWA CENTRAL OFFICE
252 KOA ST
WAHIAWA, HI 96786

LUST
UST
Financial Assurance — **U001236167**
N/A

Click here for full text details

LUST
Facility Id: 9-200532
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-200532
Tank Status: Temporarily Out of Use
Tank Status: Permanently Out of Use
Tank Status: Currently In Use

28 SSW 1/4-1/2 0.291 mi. 1535 ft.
Relative: Higher

IMM WAHIAWA
150 N. KAMEHAMEHA HWY.
WAHIAWA, HI 96786

LUST **U001236129**
UST **N/A**
Financial Assurance

Click here for full text details

LUST
Facility Id: 9-200329
Facility Status: Site Cleanup Completed (NFA)
Facility Status: Exposure Prevention Management Plan

UST
Facility Id: 9-200329
Tank Status: Currently in Use
Tank Status: Permanently Out of Use

---

29 SSE 1/4-1/2 0.302 mi. 1594 ft.
Relative: Higher

WAHIAWA CIVIC CENTER
910 CALIFORNIA AVE
SCHOFIELD BARRACKS, HI 96786

LUST **U003222111**
UST **N/A**

Click here for full text details

LUST
Facility Id: 9-202643
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-202643
Tank Status: Permanently Out of Use

---

30 SE 1/4-1/2 0.302 mi. 1596 ft.
Relative: Higher

MID PAC PETROLEUM LLC 2705799
966 CALIFORNIA AVE
WAHIAWA, HI 96786

SHWS **U001236034**
LUST **N/A**
UST
Financial Assurance

Click here for full text details

LUST
Facility Id: 9-200030
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-200030
Tank Status: Permanently Out of Use
Tank Status: Currently In Use

31 SSE 1/4-1/2 0.304 mi. 1603 ft.
Relative: Higher

YAMA'S TEXACO
805 CALIFORNIA AVE
WAHIAWA, HI 96786

LUST **U003858604**
UST **N/A**

Click here for full text details

LUST
Facility Id: 9-203333
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-203333
Tank Status: Permanently Out of Use

---

32 SE 1/4-1/2 0.325 mi. 1715 ft.
Relative: Higher

WAHIAWA CHEVRON SS
1011 CALIFORNIA AVE
WAHIAWA, HI 96786

SHWS **U003222022**
LUST **N/A**
UST
Financial Assurance

Click here for full text details

LUST
Facility Id: 9-201228
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-201228
Tank Status: Permanently out of Use
Tank Status: Permanently Out of Use

---

33 SSW 1/4-1/2 0.327 mi. 1729 ft.
Relative: Higher

MAHALO WAHIAWA
119 N KAMEHAMEHA HWY
WAHIAWA, HI 96786

LUST **U001236337**
UST **N/A**
Financial Assurance

Click here for full text details

LUST
Facility Id: 9-201458
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-201458
Tank Status: Currently In Use
Tank Status: Permanently Out of Use

34 South 1/4-1/2 0.331 mi. 1748 ft.
Relative: Higher

C&CH WAHIAWA FIRE STATION
640 CALIFORNIA AVE
WAHIAWA, HI 96786

LUST **U003986424**
UST **N/A**

Click here for full text details

LUST
Facility Id: 9-200092
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-200092
Tank Status: Permanently Out of Use

---

35 SSW 1/4-1/2 0.413 mi. 2183 ft.
Relative: Lower

F & M FOOD MART CORP
10 S KAMEHAMEHA HWY
WAHIAWA, HI 96786

LUST **U003154917**
UST **N/A**
Financial Assurance

Click here for full text details

LUST
Facility Id: 9-201033
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-201033
Tank Status: Permanently Out of Use

---

36 SSW 1/4-1/2 0.454 mi. 2396 ft.
Relative: Lower

WAHIAWA UNION
58 S KAMEHAMEHA HWY
WAHIAWA, HI 96786

LUST **U003154887**
UST **N/A**
Financial Assurance

Click here for full text details

LUST
Facility Id: 9-200104
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-200104
Tank Status: Permanently Out of Use

---

37 South 1/4-1/2 0.497 mi. 2623 ft.
Relative: Lower

SERVICE MOTOR CO
105 S KAM HWY
WAHIAWA, HI 96786

RCRA-CESQG **1000432881**
LUST **HID981631385**
UST

Click here for full text details

RCRA-CESQG
EPA Id: HID981631385

SERVICE MOTOR CO (Continued) **1000432881**

LUST
Facility Id: 9-200881
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-200881
Tank Status: Permanently Out of Use

---

38 South 1/2-1 0.619 mi. 3267 ft.
Relative: Lower

SILVER CREST ELDERLY HOUSING
529 PINE ST
WAHIAWA, HI 96786

SHWS **1006819917**
N/A

Click here for full text details

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
HI	AIRS	List of Permitted Facilities	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	BROWNFIELDS	Brownfields Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	CDL	Clandestine Drug Lab Listing	Department of Health	08/04/2010	09/10/2010	10/22/2010
HI	DRYCLEANERS	Permitted Drycleaner Facility Listing	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	ENG CONTROLS	Engineering Control Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	Financial Assurance	Financial Assurance Information Listing	Department of Health	12/01/2014	12/19/2014	01/28/2015
HI	INST CONTROL	Sites with Institutional Controls	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	LUST	Leaking Underground Storage Tank Database	Department of Health	12/16/2014	12/19/2014	01/28/2015
HI	RGA HWS	Recovered Government Archive State Hazardous Waste Facilitie	Department of Health		07/01/2013	01/08/2014
HI	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Health		07/01/2013	01/17/2014
HI	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	Department of Health		07/01/2013	01/03/2014
HI	SHWS	Sites List	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	SPILLS	Release Notifications	Department of Health	12/02/2014	12/22/2014	01/28/2015
HI	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	03/10/2012	01/03/2013	02/11/2013
HI	SWF/LF	Permitted Landfills in the State of Hawaii	Department of Health	09/17/2012	04/03/2013	05/10/2013
HI	UIC	Underground Injection Wells Listing	Department of Health	02/07/2013	02/12/2013	04/09/2013
HI	UST	Underground Storage Tank Database	Department of Health	12/18/2014	12/19/2014	01/28/2015
HI	VCP	Voluntary Response Program Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	04/22/2013	03/03/2015	03/09/2015
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2011	02/26/2013	04/19/2013
US	CERCLIS	Comprehensive Environmental Response, Compensation, and Liab	EPA	10/25/2013	11/11/2013	02/13/2014
US	CERCLIS-NFRAP	CERCLIS No Further Remedial Action Planned	EPA	10/25/2013	11/11/2013	02/13/2014
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	07/01/2014	09/10/2014	10/20/2014
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	01/23/2015	02/13/2015	03/09/2015
US	CORRACTS	Corrective Action Report	EPA	12/09/2014	12/29/2014	01/29/2015
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DELISTED NPL	National Priority List Deletions	EPA	12/16/2014	01/08/2015	02/09/2015
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	07/31/2012	08/07/2012	09/18/2012
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EDR US Hist Auto Stat	EDR Exclusive Historic Gas Stations	EDR, Inc.			
US	EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	09/29/2014	09/30/2014	11/06/2014
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	07/21/2014	10/07/2014	10/20/2014
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
US	FEMA UST	Underground Storage Tank Listing	FEMA	01/01/2010	02/16/2010	04/12/2010
US	FINDS	Facility Index System/Facility Registry System	EPA	08/16/2014	09/10/2014	10/20/2014
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	06/06/2014	09/10/2014	09/18/2014
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	12/29/2014	12/30/2014	03/09/2015
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	01/23/2015	02/06/2015	03/09/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	02/01/2013	05/01/2013	11/01/2013

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	01/30/2015	02/05/2015	03/09/2015
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/10/2015	03/13/2015
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	01/28/2015	01/30/2015	03/13/2015
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	01/08/2015	01/08/2015	02/09/2015
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2005	12/08/2006	01/11/2007
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	02/01/2013	05/01/2013	01/27/2014
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	01/30/2015	02/05/2015	03/13/2015
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/13/2015	03/13/2015
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	01/29/2015	01/30/2015	03/13/2015
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	12/14/2014	02/13/2015	03/13/2015
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	09/29/2014	10/01/2014	11/06/2014
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	11/25/2014	11/26/2014	01/29/2015
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	02/18/2014	03/18/2014	04/24/2014
US	LUCIS	Land Use Control Information System	Department of the Navy	12/03/2014	12/12/2014	01/29/2015
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	12/29/2014	01/08/2015	01/29/2015
US	NPL	National Priority List	EPA	12/16/2014	01/08/2015	02/09/2015
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	07/01/2014	10/15/2014	11/17/2014
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	02/01/2011	10/19/2011	01/10/2012
US	PRP	Potentially Responsible Parties	EPA	10/25/2013	10/17/2014	10/20/2014
US	Proposed NPL	Proposed National Priority List Sites	EPA	12/16/2014	01/08/2015	02/09/2015
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	10/07/2014	10/08/2014	10/20/2014
US	RCRA NonGen / NLR	RCRA - Non Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RMP	Risk Management Plans	Environmental Protection Agency	08/01/2014	08/12/2014	11/06/2014
US	ROD	Records Of Decision	EPA	11/25/2013	12/12/2013	02/24/2014
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	03/07/2011	03/09/2011	05/02/2011
US	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2011	07/31/2013	09/13/2013
US	TSCA	Toxic Substances Control Act	EPA	12/31/2012	01/15/2015	01/29/2015
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	09/14/2010	10/07/2011	03/01/2012
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/16/2014	10/31/2014	11/17/2014
US	US AIRS MINOR	Air Facility System Data	EPA	10/16/2014	10/31/2014	11/17/2014

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	12/22/2014	12/22/2014	01/29/2015
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	11/19/2014	11/21/2014	01/29/2015
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	12/30/2014	12/31/2014	01/29/2015
US	Oil/Gas Pipelines	GeoData Digital Line Graphs from 1:100,000-Scale Maps	USGS			
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
US	USGS 7.5' Topographic Map	Scanned Digital USGS 7.5' Topographic Map (DRG)	USGS			

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

WAHIAWA TERRACE
337 PALM ST.
WAHIAWA, HI 96786

TARGET PROPERTY COORDINATES

Latitude (North):	21.5015 - 21˚ 30' 5.40''
Longitude (West):	158.0278 - 158˚ 1' 40.08''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	600703.4
UTM Y (Meters):	2377825.0
Elevation:	890 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	21158-E1 HALEIWA, HI
Most Recent Revision:	Not reported
South Map:	21158-D1 SCHOFIELD BARRACKS, HI
Most Recent Revision:	Not reported

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

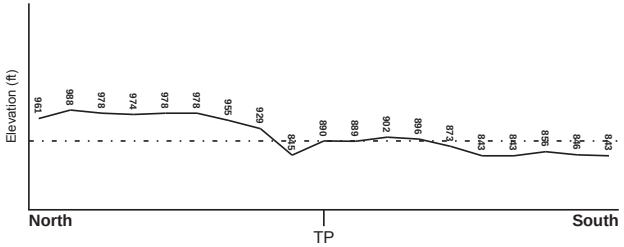
TOPOGRAPHIC INFORMATION

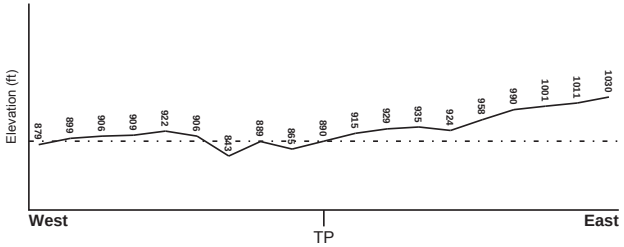
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 890 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
HONOLULU, HI	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 15003C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
HALEIWA	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

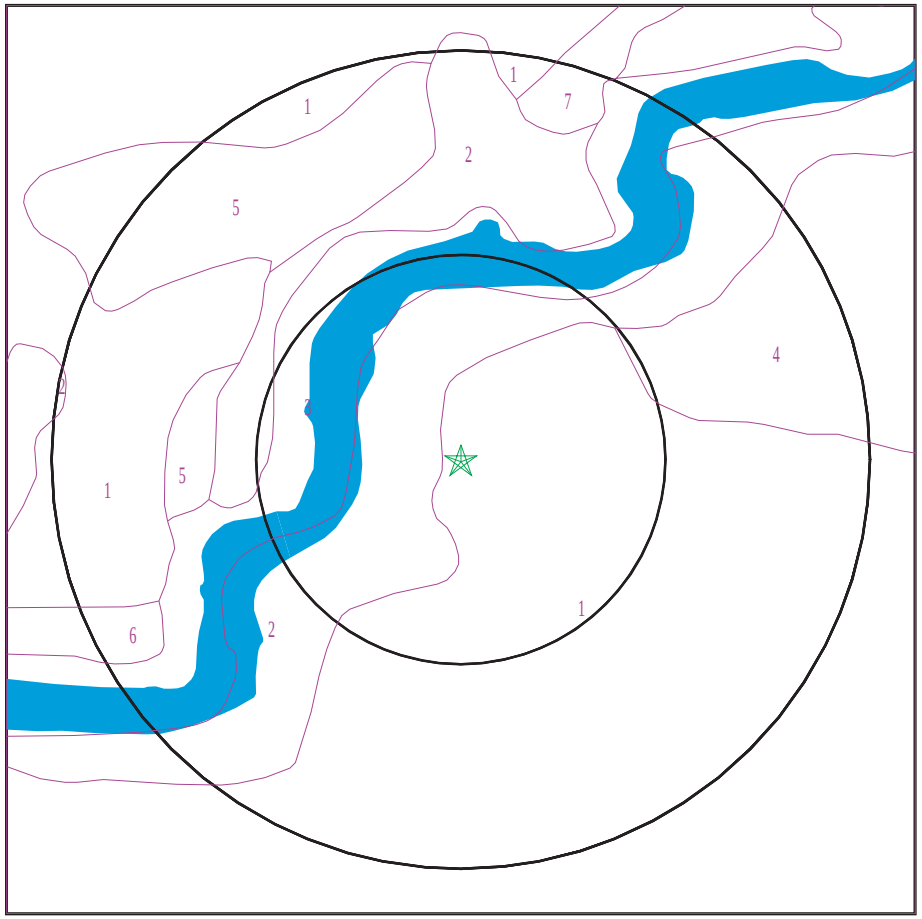
Era: -
System: -
Series: -
Code: N/A *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: -

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4237094.238s



★ Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME: Wahiawa Terrace ADDRESS: 337 Palm St. Wahiawa HI 96786 LAT/LONG: 21.5015 / 158.0278	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.238s DATE: March 17, 2015 5:49 pm

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DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Wahiawa

Soil Surface Texture: silty clay

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		Soil Reaction (pH)
1	0 inches	11 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	ML-K (proposed)	Max: 14.11 Min: 4.23	Max: 6 Min: 5.1
2	11 inches	59 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	ML-K (proposed)	Max: 14.11 Min: 1.41	Max: 7.3 Min: 5.6

Soil Map ID: 2

Soil Component Name: Helemano

Soil Surface Texture: silty clay

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		Soil Reaction (pH)
1	0 inches	9 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	ML-K (proposed)	Max: 42 Min: 14.11	Max: 7.3 Min: 5.6
2	9 inches	40 inches	paragravelly silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	ML-K (proposed)	Max: 42.34 Min: 4.23	Max: 7.3 Min: 5.6
3	40 inches	59 inches	very paragravelly silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	ML-K (proposed)	Max: 14 Min: 4.23	Max: 7.3 Min: 5.6

Soil Map ID: 3

Soil Component Name: Water > 40 acres

Soil Surface Texture: silty clay

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class:
Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

Soil Map ID: 4

Soil Component Name: Leilehua

Soil Surface Texture: silty clay

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	ML-K (proposed)	Max: 42 Min: 4.23	Max: 4.4 Min: 3.6
2	11 inches	74 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	ML-K (proposed)	Max: 4.23 Min: 0.42	Max: 4.4 Min: 3.6

Soil Map ID: 5

Soil Component Name: Wahiawa

Soil Surface Texture: silty clay

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	ML-K (proposed)	Max: 14.11 Min: 4.23	Max: 6 Min: 5.1
2	11 inches	59 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	ML-K (proposed)	Max: 14.11 Min: 1.41	Max: 7.3 Min: 5.6

Soil Map ID: 6

Soil Component Name: Wahiawa

Soil Surface Texture: silty clay

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	ML-K (proposed)	Max: 14.11 Min: 4.23	Max: 6 Min: 5.1
2	11 inches	59 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	ML-K (proposed)	Max: 14.11 Min: 1.41	Max: 7.3 Min: 5.6

Soil Map ID: 7

Soil Component Name: Kolekole

Soil Surface Texture: silty clay loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	ML-K (proposed)	Max: 42 Min: 4.23	Max: 5.5 Min: 4.5

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	11 inches	37 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	ML-K (proposed)	Max: 4.23 Min: 0.42	Max: 6 Min: 4.5
3	37 inches	59 inches	stony silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	ML-K (proposed)	Max: 1.41 Min: 0.01	Max: 5 Min: 4.5

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A2	USGS40000270954	1/2 - 1 Mile SSE
A7	USGS40000270953	1/2 - 1 Mile South
A9	USGS40000270951	1/2 - 1 Mile SSE
A10	USGS40000270952	1/2 - 1 Mile SSE
A11	USGS40000270950	1/2 - 1 Mile South
B13	USGS40000270955	1/2 - 1 Mile SW
C23	USGS40000270944	1/2 - 1 Mile South
C24	USGS40000270939	1/2 - 1 Mile South
C25	USGS40000270938	1/2 - 1 Mile South
C26	USGS40000270940	1/2 - 1 Mile South
C27	USGS40000270943	1/2 - 1 Mile South

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
C28	USGS40000270941	1/2 - 1 Mile South
C29	USGS40000270937	1/2 - 1 Mile South
30	USGS40000270942	1/2 - 1 Mile SSE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

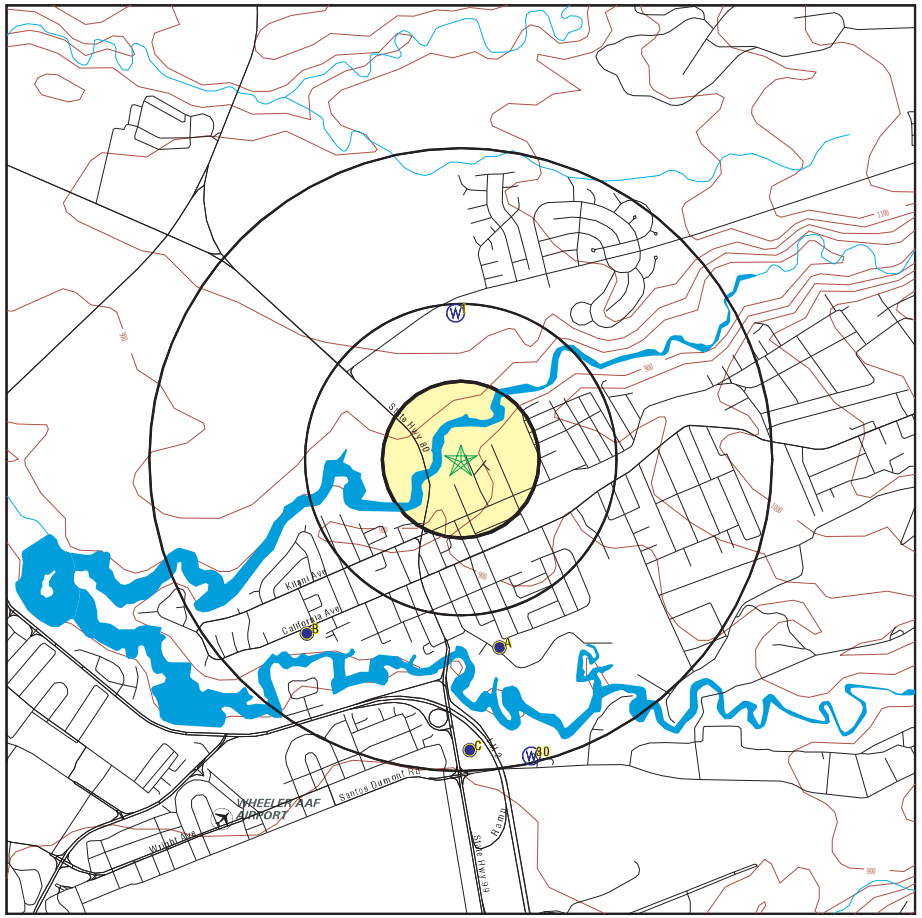
MAP ID	WELL ID	LOCATION FROM TP
A4	HI0000333	1/2 - 1 Mile SSE

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	HI8000000003662	1/4 - 1/2 Mile North
A3	HI8000000003625	1/2 - 1 Mile South
A5	HI8000000003626	1/2 - 1 Mile SSE
A6	HI8000000003627	1/2 - 1 Mile SSE
A8	HI8000000003628	1/2 - 1 Mile SSE
B12	HI8000000003630	1/2 - 1 Mile SW
B14	HI8000000003629	1/2 - 1 Mile SW
C15	HI8000000003611	1/2 - 1 Mile South
C16	HI8000000003608	1/2 - 1 Mile South
C17	HI8000000003609	1/2 - 1 Mile South
C18	HI8000000003610	1/2 - 1 Mile South
C19	HI8000000003606	1/2 - 1 Mile South
C20	HI8000000003607	1/2 - 1 Mile South
C21	HI8000000003602	1/2 - 1 Mile South
C22	HI8000000003603	1/2 - 1 Mile South

PHYSICAL SETTING SOURCE MAP - 4237094.238s



County Boundary
Major Roads
Contour Lines
Airports
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons
Groundwater Flow Direction
Indeterminate Groundwater Flow at Location
Groundwater Flow Varies at Location

SITE NAME: Wahiawa Terrace ADDRESS: 337 Palm St. Wahiawa HI 96786 LAT/LONG: 21.5015 / 158.0278	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.238s DATE: March 17, 2015 5:49 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
1 **North** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003662**
A2 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270954**
A3 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003625**
A4 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FRDS PWS**	**HI0000333**
A5 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003626**
A6 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003627**
A7 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270953**
A8 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003628**
A9 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270951**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
A10 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270952**
A11 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270950**
B12 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003630**
B13 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270955**
B14 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003629**
C15 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003611**
C16 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003608**
C17 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003609**
C18 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003610**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
C19 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003606**
C20 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003607**
C21 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003602**
C22 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003603**
C23 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270944**
C24 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270939**
C25 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270938**
C26 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270940**
C27 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270943**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
C28 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270941**
C29 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270937**
30 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270942**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for HONOLULU County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 96786

Number of sites tested: 3

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.700 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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EXHIBIT C

Section 106 Consultation &

Architectural Inventory Survey Information

DAVID Y. IGE
GOVERNOR OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

KEKOA KALUHIWA
FIRST DEPUTY

JEFFREY T. PEARSON
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

December 11, 2015

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
P.O. Box 17907
Honolulu, HI 96817

LOG: 2015.02939, 2015.03563
DOC: 1511JLP36
Architecture, Archaeology
History and Culture

Dear Mr. Ouansafi:

SUBJECT: **Chapter 6E-8 and National Historic Preservation Act Section (NHPA) Section 106 Consultation – Department of Housing and Urban Development (HUD) Repair and Rehabilitation Project Department of Human Services, Hawai‘i Public Housing Authority (HPHA) Wahiawa Terrace Homes Rehabilitation Project – 337 Palm Street Kamananui Ahupua‘a, Waialua District, Island of O‘ahu TMK: (1) 7-1-001:034**

Thank you for your initial submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services (DHS), Hawaii Public Housing Authority (HPHA) consultation with SHPD in accordance with 36 CFR 800.3 and Hawaii Revised Statutes (HRS), Chapter 6E. We received your another submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience.

The submittal indicates that the HPHA is requesting the State Historic Preservation Officer’s (SHPO) concurrence with a determination of “no effect” for the proposed HUD repair and rehabilitation improvement projects involving 43 existing public housing developments located throughout the State over the next fivd5 (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 consultation on their behalf.

This letter addresses Wahiawa Terrace Homes Rehabilitation Project, 337 Palm Street. The HPHA has identified the area of potential effects (APE) as the 2.75 acre area parcel owned by the State (HPHA) which is identified as TMK: (1) 7-1-001:034. DHS/HPHA have indicated at this stage of the planning process, they are unclear whether the subject 2.75-acre project area will require any ground disturbances.

Our records indicate that no archaeological inventory survey has been conducted within the subject parcel and that no historic properties have been identified. However, based on nearby studies potential exists to encounter subsurface traditional Hawaiian and/or historic properties within the subject parcel.

The SHPD has reviewed the undertaking at 337 Palm Street, and the SHPO’s determination is **no adverse effect** pursuant to NHPA Section 106 and **no historic properties affected** pursuant to HRS §6E-8 within the APE **provided the following conditions are met:**

- If ground disturbing activity is anticipated, DHS must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation;
- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;

- Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;
- Submit a TMK map showing the full extent of the project area within the affected parcel/s;
- Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Summary of land use history, such as previous intensive cultivation, grubbing or grading;
- Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions regarding archaeological resources or concerns please contact Susan Lebo at (808) 692-8019 or at Susan.A.Lebo@hawaii.gov. For any history and cultural concerns please contact Kaʻāhiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov. Please contact Jessica Puff at Jessica.L.Puff@hawaii.gov or (808) 692-8023 for any questions regarding architectural concerns or this letter.

Sincerely,

Susan A. Lebo

Signed for

Alan A. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

WAHIAWA TERRACE

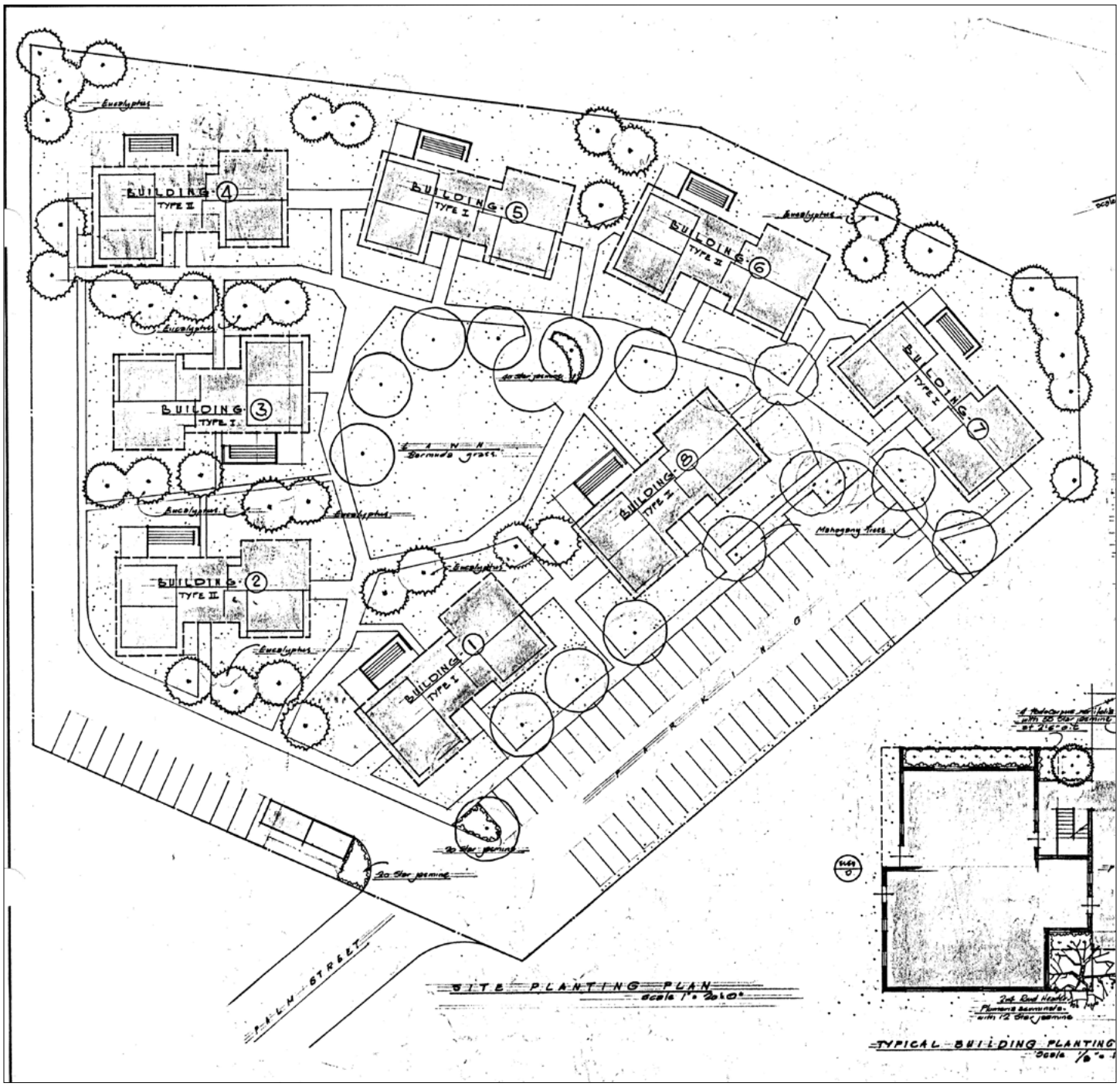
Project	Wahiawa Terrace
Architect	Wong & Wong
Built	1966, Rehabilitated in 1994, 2014-2015
National Register Eligibility	Eligible
Criteria	A and C
Significance	Association with history of the public housing in Hawaii. Architecturally significant in its high quality design and work of a master by the local architectural firm Wong & Wong.
Character Defining Features	"U" footprint buildings, two types of third floor designs, second and third floors are cantilevered from the first floor, canopies over the windows, and laundry drying areas in front of the buildings. Buildings are sited utilizing modified perimeter block plan.

Landscape Architect: George Walters

Description

Located at the north edge of Palm Street in Wahiawa, the Wahiawa Terrace public housing project is a little residential enclave unto itself, sitting on a 2.75 acre parcel acquired from the Galbraith Estate. Utilizing a modified perimeter block plan, eight, three-story, cmu buildings are sited around a grassy quadrangle, with openings between each building. Concrete sidewalks run between the buildings and access the central courtyard formed by the buildings, with automobile parking relegated to areas adjoining the outer perimeter formed by the buildings on two sides of the complex.

Overview of the Site

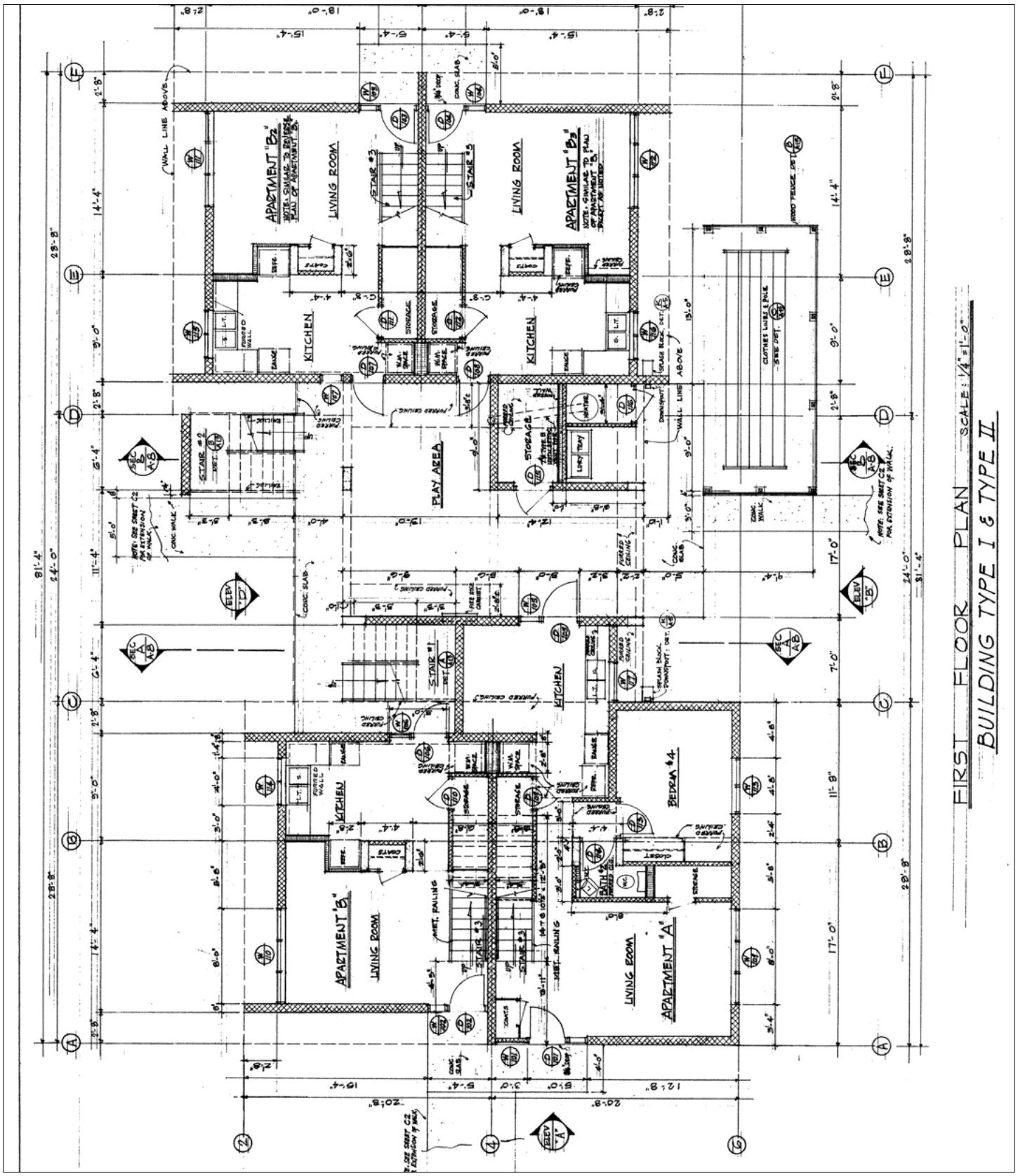


Site Plan
Howard M.Y. Wong, Robert T.W. Wong *(H.H.A. Low Rent Housing Project)*, Sheet C-7, 1965, Hawaii Housing Authority.

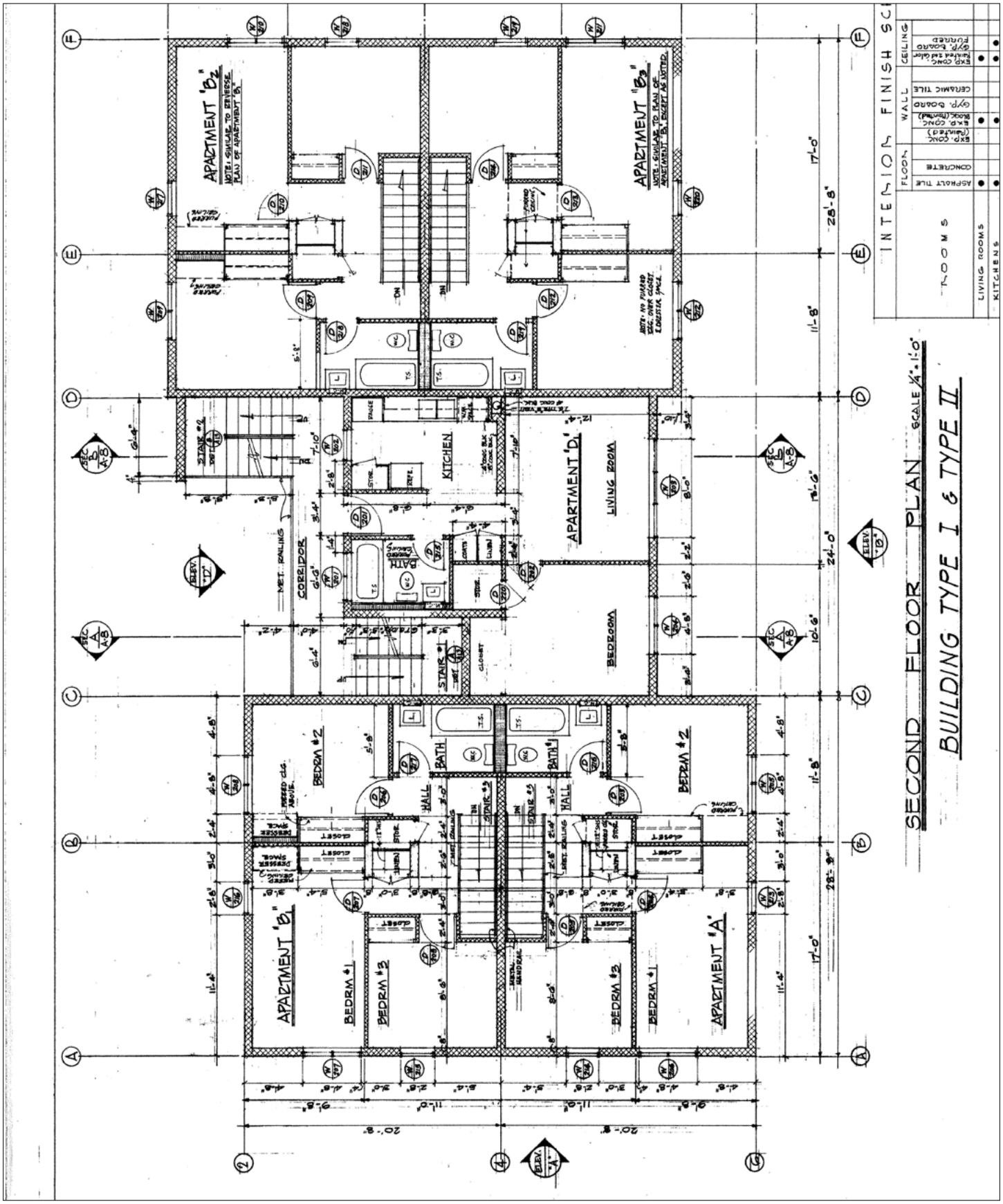
WAHIAWA TERRACE

The housing development is comprised of two building forms, both of which follow a shallow “U” footprint. All the buildings are similar in plan on the first two floors, but differ in the design on the third floors. Two sets of concrete dogleg steps with metal pipe railings are located in the center section of each building, and access the upper stories. The central part of the buildings is relatively open on the first story, allowing utilization as a covered, paved play area. In addition to the play area, there is a laundry room for the building as well as a storage room in this section at the ground level. At the right end of the building are two, two-bedroom apartments with entries on the right side of the building. The entries share a 5 feet x 10 feet 8 inches entry lanai, with a centered, single block wide cmu wall projecting 2 feet 8 inches out from the wall to provide privacy at the entry doors. These units both have second floors, with internal, straight run stairs with 15 concrete steps accessing the upper floor’s two-bedrooms and bath. On the left side are a three- and four-bedroom apartment. Again, these are entered from the side of the building and an internal stair leads to the second floor and its three-bedrooms and one bath for each unit. The stairs and entries are similar in design to those units on the right side of the building. In addition to the upper floor of the ground level units, there is also a one-bedroom unit in the center section of the building on the second story. It is accessed by a lateral running lanai/corridor which runs between the two sets of steps. Another two sets of dogleg steps lead from the second story to the third. On the third story in the Type I buildings, there is a centered one-bedroom unit, and at either end of the lateral running lanai/corridor is a two-bedroom unit. These units contain an enclosed laundry drying area in their rear corners. Originally a wood slat wall partially enclosed the drying area, but in 1994 the wood was replaced by decorative concrete blocks. On the third story of the Type II buildings there are two-bedroom units at either end of the building, but no central area apartment. Again, these units have corner drying areas. Five of the buildings utilize the Type I plan and three the Type II, with the Type II interspersed between the Type I. Overall the complex contains twelve one-bedroom units, sixteen two-bedroom, twenty four three-bedroom and eight four-bedroom units.

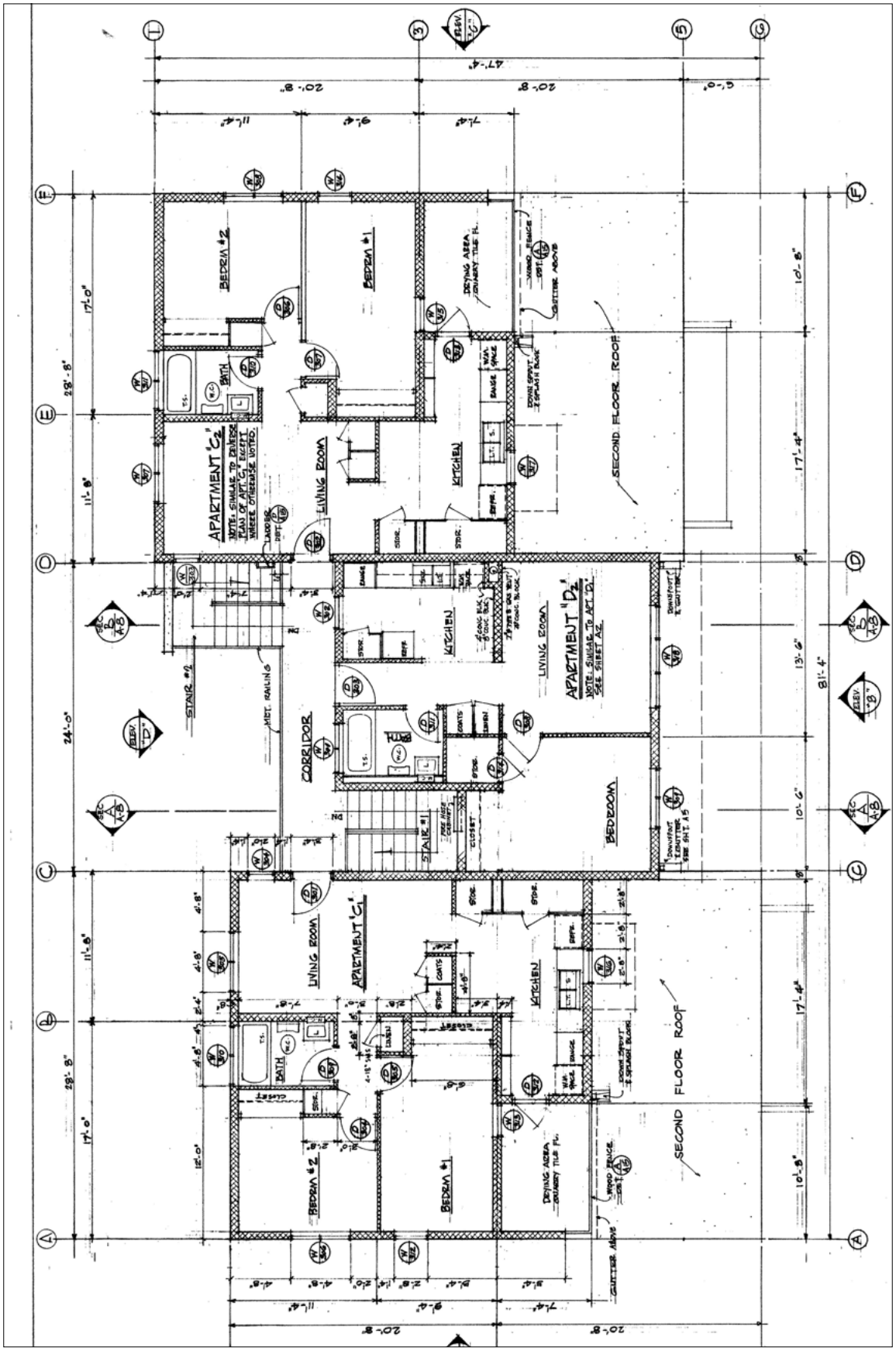
Type I and II Exterior Elevations, Third Floor Design Differ



Building Type I and II First Floor Plan
Howard M.Y. Wong, Robert T.W. Wong *First Floor Plan - Type I & II (H.H.A. Low Rent Housing Project)*, Sheet A-1, 1965, Hawaii Housing Authority.

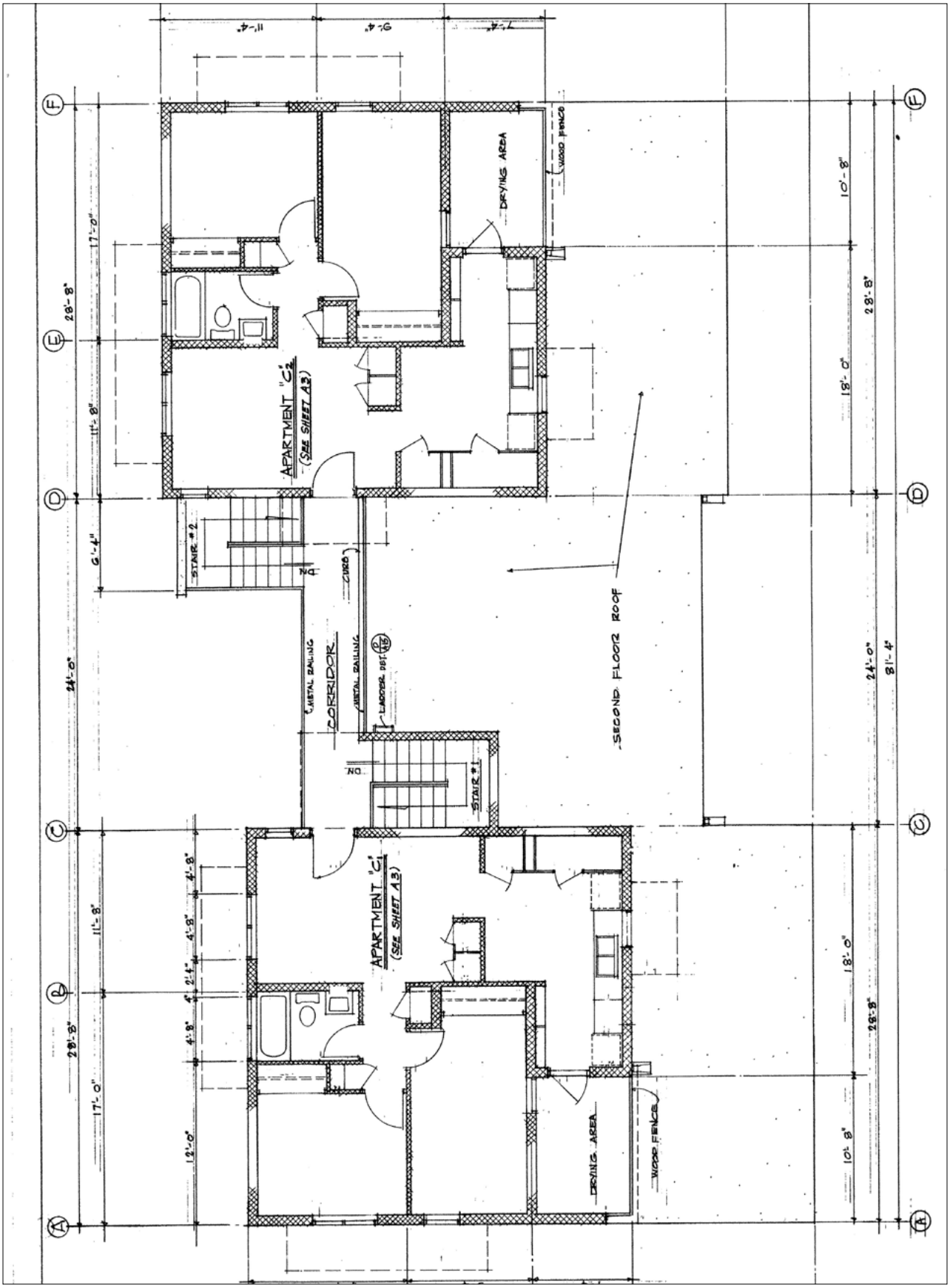


Building Type I and II Second Floor Plan
Howard M.Y. Wong, Robert T.W. Wong, *Second Floor Plan - Type I & II (H.H.A. Low Rent Housing Project)*, Sheet A-2, 1965, Hawaii Housing Authority.



Building Type I Third Floor Plan

Howard M.Y. Wong, Robert T.W. Wong, *Second Floor Plan - Type I & II (H.H.A. Low Rent Housing Project)*, Sheet A-2, 1965, Hawaii Housing Authority.



Building Type II Third Floor Plan
Howard M.Y. Wong, Robert T.W. Wong, *Second Floor Plan - Type I & II (H.H.A. Low Rent Housing Project)*, Sheet A-2, 1965, Hawaii Housing Authority.

Three- and Four-Bedroom Entrance

Interior Concrete Steps

The exterior design of the buildings is distinguished by its use of cantilevers. The second and third stories are cantilevered 2 feet 8 inches out from the first story, with wing walls helping to support the cantilever on the façade, as well as enframe each side of the first story. Also, cantilevered, reinforced concrete canopies are utilized over the windows and side entries. The window canopies have up-turned ends, while the entry canopies have down-turned ends.

On the interiors, all the units have been remodeled. In addition, the original floor-to-ceiling, wood slat windows have been replaced by aluminum awning windows in 1994 and the lower portions of the original window frames in-filled with cmu. Also, in that year all the interior and exterior doors were replaced.

None of the historic landscaping remains at the site.

Canopies above Windows

Renovated Kitchen

Laundry Drying Area

Each building has a pair of laundry drying areas in front of the building. These concrete pads with their T-shaped clothes line poles were originally enclosed by a wood slat fence, but in 1994 the wood fences were supplanted by decorative block walls.

History and Significance

Opening in October 1966, Wahiawa Terrace was the HHA's earliest known housing project in rural Oahu. Other projects planned at the time of the opening of this project were for Kaneohe and Waimanalo, which were built in the next few years.

Terrace Under Construction
(1965/66 HHA Annual Report)

Wahiawa Terrace is significant at a local level under criterion A for its associations with the history of public housing in Hawaii. It is also architecturally significant at the local level under criterion C for its high quality of design and as a work of a master, the architectural firm of Wong & Wong.

The housing complex follows a modified perimeter block plan, with the buildings sited on the periphery of the property and enclosing a central courtyard, which originally was beautifully landscaped and also contained a children's playground. The layout was not a true perimeter block plan, as there are spaces between the buildings, thus, the project does not reinforce the sense of a continuous streetscape, but this is hardly surprising given the project's suburban, rather than urban, context.

WAHIAWA TERRACE

The employment of the modified perimeter block plan and the design of the apartment buildings which gives each occupant a sense of privacy wall reflects the HHA's move away from the Zeilenbau plan and its institutional associations. Other HHA projects, notably Kahekili Terrace, Hui o Hanamaulu, and Puuwai Momi base their layout on a clustering of buildings to allow for open courtyards between them. However, these do so in a very limited fashion, which cannot be considered following in the perimeter block plan tradition, making Wahiawa Terrace the finest example of a HHA housing project of the 1960s to utilize this approach to apartment complex design which was so popular in Holland and Germany.
The use of the modified perimeter plan, coupled with an exceptional modern style design of the buildings with their bold, cantilevered canopies, cantilevered upper stories, and open central core, makes for a distinctive and engaging composition of high quality. The interplay of receding and advancing elements, as well as that of solid and void, results in a dynamic façade and highly engaging design. In addition, the imaginative placement of the apartments within the building moves the buildings' design beyond the realm of the ordinary. The overall sensibility and high level of the design of the complex and its buildings is sufficiently strong that the replacement of the windows and remodeling of the interiors has not compromised the historic integrity of this complex.

Wahiawa Terrace was designed by the well known Honolulu architectural firm of Wong & Wong. Howard and Robert Wong met while working in the shipyard at Pearl Harbor. After serving in the military during World War II, Howard M. Y. Wong studied architecture at Yale, while Robert T. W. Wong attended Cornell University's department of architecture. After graduation, both practiced in New York City, with Howard Wong working for Harrison & Abramovitz on the Opera House at Lincoln Center. After employment in William Wurster's office in San Francisco, Robert Wong returned to Hawaii in 1954 and joined the firm of Alfred E. Preis. Howard Wong returned to the islands in 1960, opened an office, and hired Robert. In 1963, they entered into partnership as Wong & Wong, which continued until 1989. They designed the former Chinese Consulate, as well as many houses and churches, including the Nuuanu Community Church and First Baptist Church at Pensacola and Kinau streets. Wahiawa Terrace is their only known commission from HHA.

Three projects were identified as adhering to the precepts of the perimeter block plan: Wahiawa Terrace, Kahekili Terrace, and Puuwai Momi. Wahiawa Terrace most closely adhered to this plan, modifying the plan only slightly by separating the apartment buildings to allow for the free flow of trade winds throughout the complex. In addition, the distinctive and high level of design of the individual apartment buildings was strongly considered. The distinctiveness and quality of design as shown in the breakup of massing and distinctive eyebrows and layout of the housing project became its primary character defining features, thus, although the interiors of the units had been remodeled and the original windows replaced with aluminum awning windows, Wahiawa Terrace is considered an excellent example of perimeter block plan public housing project adopted to Hawaii.

Wahiawa Terrace appears to meet the criteria for listing in the National Register of Historic Places as a historic district.

HAWAII PUBLIC HOUSING AUTHORITY

ENVIRONMENTAL REVIEW

KUPUNA HOME O`WAIALUA

Waialua, O`ahu

AMP 49
HPHA No. 1050

Prepared for:

State of Hawaii
Hawaii Public Housing Authority

Prepared by:

HHF PLANNERS
places for people

U.S. Department of Housing and Urban Development
451 Seventh Street, SW
Washington, DC 20410
www.hud.gov

espanol.hud.gov

Environmental Review for Activity/Project that is Categorically Excluded Subject to Section 58.5

Pursuant to 24 CFR 58.35(a)

Project Information

Project Name: Kupuna Home O‘Waialua (AMP 49)

Responsible Entity: Hawaii Public Housing Authority
1002 North School Street
Honolulu, HI 96817

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

State/Local Identifier: State of Hawai‘i

Preparer: Mr. Scott Ezer, Vice President
HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawai‘i 96813

Certifying Officer Name and Title: Mr. David Y. Ige
Governor, State of Hawai‘i

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

Consultant (if applicable): HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawai‘i 96813

Direct Comments to: Mr. Hakim Ouansafi, Executive Director
Hawaii Public Housing Authority
1002 North School Street
Honolulu, Hawai‘i 96817

Project Location: 67-088 Goodale Avenue
Waialua, O‘ahu Hawai‘i 96791

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]**:**

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a "major construction activity" and would involve one or a combination of several HUD designated categories of actions.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent;
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons;
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland;
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation;
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls);
7. Interior and exterior renovations and rehabilitation;
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site;
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Level of Environmental Review Determination:

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.5. Compliance with and completion of conformance determinations for other statute, executive order, or regulation has been completed and support the Categorical Exclusion.

Funding Information

Grant Number	HUD Program	Funding Amount
To be determined	Capital Fund	To be determined
To be determined	Economic Development Initiative Special Project Grant	To be determined
To be determined	Other Grants	To be determined

Estimated Total HUD Funded Amount:

To be determined by HUD using a formula and based upon federal budget.

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]**:**

Depends upon funds available.

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	*The project is not within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.*
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☒	*Hawai'i has no coastal barriers (http://www.fws.gov/CBRA/Maps/Mapper.html)*
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes ☐ No ☒	*As indicated in the Flood Insurance Rate Map Panel 15003C0105H, the project site is located in Zone X and is determined to have minimal flood hazard and is outside the 500-year flood zone. Based on the project description the project includes no activities that would require further evaluation under this section. The project does not require flood insurance or is excepted from flood insurance. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with Flood Insurance Requirements.*

STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5		
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes ☐ No ☒	*The State of Hawai'i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. EPA's Green Book for currently designated "nonattainment areas" as of June 2015. Planned repair and rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.*
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes ☐ No ☒	*Documentation from the Office of Planning determined that projects receiving federal funds from HUD's Public Housing Capital Fund do not require review for consistency with Hawai'i's CZM program.*
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☐ No ☒	*Based on the results of the EDR report and site visit, there are no known hazardous materials, contamination, or toxic chemicals, gasses or radioactive substances in the immediate vicinity which could affect the health or safety of occupants or conflict with intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gasses, etc.*
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes ☒ No ☐	*The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (USFWS) in their letter dated September 28, 2015 which is included in the Appendices, while project-specific mitigation measures are identified in the following section.*
Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes ☐ No ☒	*A field inspection identified an existing above-ground explosive or flammable material storage container in excess of 100 gallons. The liquid propane gas (LPG) tank is surrounded by a wood fence, approximately 50 feet away from the northwest side of Unit 38, and was installed by and is owned by the gas company. Repair and rehabilitation improvements for this project should not impact this fuel storage tank. Should*

		rehabilitation improvements increase the density of the project (e.g. increase the number of units and associated persons exposed to the hazard within the acceptable separation distance), mitigative measures would need to be implemented for the fuel tank in compliance with HUD requirements.
Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes ☐ No ☒	*The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. The project is located within the State Land Use Urban District. The existing development is located on urbanized property. No farmlands will be impacted by repair or rehabilitation improvements implemented.*
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes ☐ No ☒	*As indicated in the Flood Insurance Rate Map Panel 15003C0105H, the project site is located in Zone X and is determined to have minimal flood hazard and is outside the 500-year flood zone. The project is in compliance with Executive Order 11988.*
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes ☐ No ☒	*Kupuna Home O'Waialua is 38 years old and was first occupied in 1977. To be eligible for listing in the National Register of Historic Places (NRHP), a property must meet the National Register criteria for evaluation which involves examining its integrity, significance, and age (generally at least 50 years old). Due to its age, this housing project does not meet the eligibility criteria to be evaluated for the NRHP. In a letter to the State Historic Preservation Officer dated July 23, 2015, the HPHA determined that no historic properties would be affected by repair and rehabilitation improvements for this housing project. No comments or objections about this no effect determination were received.*
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes ☐ No ☒	*The housing project site is not situated along a highway or arterial roadway that has a high volume of vehicular traffic which may generate significant noise. Goodale Avenue, which runs along the western edge of the project site, connects to Farrington Highway approximately 0.25 miles to the south. Nahoa Street, a smaller side street, provides access to the north parking lot and vehicular traffic generated noise is expected to be considerably less. The HUD noise calculator for Goodale Avenue did not estimate*

		noise levels at the project site above 65 dBA and appear to be within HUD noise standards. Therefore, noise abatement should not be required for this housing project.
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes ☐ No ☒	*The housing project is located within the O'ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation.*
Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☐ No ☒	*There are no known wetlands within the housing project's property, and therefore, no wetlands will be adversely impacted by the project improvements (http://www.fws.gov/wetlands/data/mapper.HTML)*
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes ☐ No ☒	*There are no Wild and Scenic Rivers in Hawai'i, which excludes this project from mitigation or formal consultation requirements (http://www.rivers.gov/map.php) .*
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes ☐ No ☒	*Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, these improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects on minority populations and low-income populations. Improvements should benefit low-income and minority populations living within this housing project.*

Field Inspection (Date and completed by)**:** April 8, 2015,
Joseph Tamburello, Planner
HHF Planners

Summary of Findings and Conclusions:

Repair and rehabilitation improvements implemented for this existing housing project by HPHA should not result in significant environmental impacts based upon research data collected, a field inspection, consultation with the site manager and maintenance staff, consultation with pertinent resource agencies, and prior HPHA experience implementing repair and rehabilitation improvements. Therefore, repair and rehabilitation improvements would comply and be consistent with the statutes, executive orders, and regulations addressed. Furthermore, HPHA would evaluate improvements planned to ensure the work is consistent with the designated categories of actions described under the project description section. Compliance with these factors evaluated are further addressed in the attached Source Documentation Statutory Worksheet along with relevant technical reports/assessments.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Law, Authority, or Factor	Mitigation Measure
Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	*Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.* *Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.* *Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.* *Newell's shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.* *Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if*

	the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season. *<u>Hawaiian Waterbirds</u>: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo'i, impoundments or other vegetated water bodies.* *1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols.* *2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.* *3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.* *In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.* *<u>Additional Measures:</u> The following additional measures would be implemented:* *1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.*

Determination:

☐ This categorically excluded activity/project converts to **EXEMPT** per Section 58.34(a)(12), because it does not require any mitigation for compliance with any listed statutes or authorities, nor requires any formal permit or license; **Funds may be committed and drawn down after certification of this part** for this (now) EXEMPT project; OR

☒ This categorically excluded activity/project cannot convert to Exempt status because one or more statutes or authorities listed at Section 58.5 requires formal consultation or mitigation. Complete consultation/mitigation protocol requirements, **publish NOI/RROF and obtain "Authority to Use Grant Funds"** (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR

☐ This project is not categorically excluded OR, if originally categorically excluded, is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

Preparer Signature: Scott Ezer Date: 11-10-15

Name/Title/Organization: Mr. Scott Ezer, Vice President
HHF Planners

Responsible Entity Agency Official Signature:
David Y Ige Date: APR 28 2016

Name/Title: Mr. David Y. Ige, Governor

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

KUPUNA HOME O‘WAIALUA (HA # 1050)

TMK: (1) 6-7-016: 028

Hawai‘i Public Housing Authority (HPHA) Environmental Review

SOURCE DOCUMENTATION (SD) STATUTORY WORKSHEET

Site Visit Date: June 8, 2015
Prepared By: Glenn Tadaki

PROJECT DESCRIPTION

The Kupuna Home O‘Waialua elderly housing project is located in the Waialua community on the island of O‘ahu. Waialua is located between the communities of Mokulē‘ia to the west and Hale‘iwa to the east.

The housing project site is bordered by Goodale Avenue to the east and Nahoa Avenue to the north. This housing project is within HPHA’s Asset Management Project (AMP) 49 which includes two other housing projects.

Kupuna Home O‘Waialua was first occupied in 1977 and has a street address of 67-088 Goodale Avenue. The property consists of 3.27 acres and is identified by Tax Map Key (1) 6-7-016: 028. The housing project consists of 20 ground level, studio and one-bedroom duplex units. A single-story community center is provided for the use of the residents. The property is designated for “Urban” use by the State Land Use Commission and is zoned for “R-5 Residential” use by the City and County of Honolulu.

The project site is not located within a tsunami evacuation zone, and the entire site is located in Flood Zone X based upon the Flood Insurance Rate Map (Community Panel Numbers 15003C0105H, Revised November 2014. Zone X is an area determined to be outside the 0.2% annual chance floodplain.

The following figures in Exhibit A provide supporting information on this housing project:

Figure 1: Location Map
Figure 2: TMK Map
Figure 3: Site Map
Figure 4: Flood Map

COMPLIANCE FACTORS

I. AIRPORT CLEAR ZONES AND ACCIDENT POTENTIAL ZONES (24 CFR PART 51D)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The housing project does not lie within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: 24 CFR 51 (D).

Honolulu International Airport Master Plan - 2010 (August 1994), State Department of Transportation, Airports Division; and

*Hawai`i Airports and Flying Safety Guide (2012-13, Fifth Edition, Revision 1)* Hawai`i Department of Transportation, Airports Division.

HDOT website at: http://hidot.hawaii.gov/airports/files/2013/01/Airport-Safety-Guide-2012-2013-5rev1.pdf

II. COASTAL BARRIER RESOURCES (COASTAL BARRIER IMPROVEMENT ACT OF 1990 [16 USC 3501])

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai'i does not have any designated coastal barrier resource units.

SUPPORTING DOCUMENTATION:

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/cbra/maps/mapper.html (Date accessed: 6/30/15).

III. FLOOD INSURANCE (FLOOD DISASTER PROTECTION ACT OF 1973 AND NATIONAL FLOOD INSURANCE REFORM ACT OF 1994 [42 USC 4001-4128 AND 42 USC 5154a])

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program.

The project site is located in Zone X (area of minimal flood hazard) and is located outside the 500-year flood zone. A field inspection and information obtained from the Maintenance Supervisor confirmed no major flooding issues within the site. Based on its description, the Kupuna Home O'Waialua housing project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal any signs of previous flooding problems. An interview with the Maintenance Supervisor also determined that no major ponding or flooding issues have occurred on the project site.

Printed: Flood Insurance Rate Map, City and County of Honolulu, Community Panel Numbers 15003C0105H, Revised November 2014.

Hawai`i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 6/30/15)

IV. CLEAN AIR ACT (40 CFR PARTS 6, 51, 93)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai'i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. Environmental Protection Agency's Green Book for currently designated "nonattainment areas" as of June 2015. Planned rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.

SUPPORTING DOCUMENTATION:

Printed: *State of Hawai'i Annual Summary 2013 Air Quality Data*. State of Hawai'i, Department of Health, July 2014.

U.S. Environmental Protection Agency website at: http://epa.gov/airquality/greenbk/

V. COASTAL ZONE MANAGEMENT ACT (16 USC 1451, SECTIONS 307 (C), (D)

CONTACT:
Mr. John Nakagawa
Office of Planning
Department of Business, Economic Development & Tourism
State of Hawai'i
P.O. Box 2359
Honolulu, Hawai'i, 96804-2359

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai'i's Coastal Zone Management (CZM) program.

SUPPORTING DOCUMENTATION:

Contact: In an e-mail to the Office of Planning (OP) dated July 27, 2015, the HPHA determined that the use of HUD funds for the implementation of repair and rehabilitation improvements does not require review for consistency with Hawai'i's CZM program. The OP confirmed this determination in an e-mail dated July 28, 2015 and included in the Appendices.

Experience: As part of past environmental reviews in December 2010, a letter from the OP dated July 20, 2005 determined that their review for consistency with Hawai'i's CZM program was not required. A copy of this letter is included in the Appendices.

VI. CONTAMINATION AND TOXIC SUBSTANCES (24 CFR PART 50.3 & 58.5(I)(2))

SUPPORTING DOCUMENTS

X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Does Not Affect Program.

There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.

SUPPORTING DOCUMENTATION:

Field: A site inspection and interview with the Maintenance Supervisor revealed no presence of any toxic or radioactive materials on the project site that warrant any concern. A secure storage room in the Kupuna Home O'Waialua community center is used to store flammable and hazardous materials for the housing project. The storage room is in acceptable condition and labeled with signage.

Study: Environmental Data Resources, Inc. (EDR), conducted a search of available environmental records and prepared a Radius Map Report (Inquiry Number 4237094.234s, March 18, 2015). EDR reviewed more than 25 federal and statewide regulatory databases for information regarding the treatment, storage, disposal and release of toxic chemicals at the project site and within specific radii (generally 1 mile) of the site. A Detail Map within the EDR report documents those sites identified within a 0.25 mile radius of the project site. Some of the sites contain underground storage tanks (UST) that are currently in use or are permanently out of use. The EDR report in Exhibit B includes the results of their research findings.

The EDR report notes that an Underground Injection Control (UIC) Permit (No. UO-2018) was granted to the Housing Community Development Corporation of Hawai`i for two injection wells at Kupuna Home O'Waialua. It also notes that the UIC Permit expired in 2006 and the file was closed in 2012.

In the vicinity of the project site, the EDR report notes that one 7,800 gallon UST (unknown content), three gasoline USTs (total 35,800 gallons), and five diesel USTs (total 40,550 gallons) owned by the former Waialua Sugar Company are permanently out of use. The report also notes that cleanup for three leaking USTs was completed (two in 1997 and one in 2002) and that no further action was required.

The project site was not identified as a Formerly Used Defense Site (FUDS) by the U.S. Army Corps of Engineers and is not subject to any cleanup actions for Department of Defense-generated contamination.

VII. ENDANGERED SPECIES (50 CFR PART 402)

CONTACT:
Mr. Loyal Mehrhoff, Field Supervisor
Pacific Islands Administrator
Fish and Wildlife Services
U.S. Department of the Interior
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawai'i 96813
Tel. #: 792-9400

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Adverse Effect Subject to Mitigation

The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices.

SUPPORTING DOCUMENTATION:

Contact: A letter from the HPHA dated July 24, 2015 was submitted to the Pacific Island Administrator for the FWS determining that repair and rehabilitation improvements that may be implemented using HUD funds for this housing project would have no likelihood of effect on any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination along with proposed minimization and avoidance measures was received from the FWS in a letter dated September 28, 2015 which is included in the Appendices. This housing project is subject to the following minimization and avoidance measures.

Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.

Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.

Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.

Newell's shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If

nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.

Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.

Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo'i, impoundments or other vegetated water bodies.

1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols.
2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.
3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.

In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.

Additional Measures: The following additional measures would be implemented:

1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.

.Experience: The FWS was previously consulted as part of environmental reviews that were completed in 2005 (39 housing projects) and 2010 (70 housing projects) which supported the determination that repair and rehabilitation improvements would either: 1) have no likelihood of effect for certain housing projects; or 2) not likely adversely affect federally listed species or critical habitat for certain housing projects subject to mitigative measures. A summary of these consultation efforts follows.

2005 Consultation: In a letter dated July 15, 2005, the Housing and Community Development Corporation of Hawai'i (predecessor to the HPHA), determined that the implementation of minor repair and rehabilitation improvements for 39 housing projects

would not have an adverse effect on federally-listed species or critical habitat. In a letter dated August 11, 2005, the FWS concurred with the HCDCH determination.

2010 Consultation: In a letter dated May 17, 2010, the HPHA informed the FWS that HUD funds would be used to immediately implement repair and rehabilitation improvements for six housing projects on O'ahu and the island of Hawai`i. In a subsequent letter dated May 21, 2010, the FWS was informed that HPHA would be using HUD funds to implement minor repair and rehabilitation improvements for 64 projects throughout the State. In both letters, the HPHA determined that the repair and rehabilitation improvements were not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat. Based on further consultation and a meeting with FWS staff on June 24, 2010, the HPHA determined that repair and rehabilitation improvements for most of their housing projects would not likely adversely affect any listed or proposed species, or existing or proposed designated habitat, subject to various mitigative measures for certain housing projects.

VIII. EXPLOSIVE AND FLAMMABLE OPERATIONS (24 CFR PART 51C)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact Subject to Conditions and Mitigation, if Applicable

A field inspection identified an existing above-ground explosive or flammable material storage container in excess of 100 gallons. The liquid propane gas (LPG) tank is surrounded by a wood fence, approximately 50 feet away from the northwest side of Unit 38 in Building 20, and was installed by and is owned by the gas company. Repair and rehabilitation improvements for this project should not impact this fuel storage tank. Should rehabilitation improvements increase the density of the project (e.g. increase the number of units and associated persons exposed to the hazard within the acceptable separation distance), mitigative measures would need to be implemented for the fuel tank in compliance with HUD requirements.

Under CFR Title 24, Part 51, Subpart C, increasing the residential density and number of people under a rehabilitation project using HUD funding would be considered a "HUD-assisted project." Consequently, the existing fuel storage tank would be subject to standards under this regulation for establishing acceptable separation distances, or the application of the standards can be eliminated or modified if other conditions apply or mitigative measures are provided as identified below. HPHA would need to evaluate site conditions, comply with regulatory requirements, and determine the appropriate measure to implement.

1. The nature of the topography shields the proposed project form the hazard.
2. An existing permanent fire resistant structure of adequate size and strength will shield the proposed project from the hazard.

3. A barrier is constructed surrounding the hazard, at the site of the project, or in between the potential hazard and the proposed project.
4. The structure and outdoor areas used by people are designed to withstand blast overpressure and thermal radiation anticipated from the potential hazard (e.g., the project is of masonry and steel or reinforced concrete and steel construction).

SUPPORTING DOCUMENTATION:

Field: There is a 500 gallon above-ground fuel storage tank located approximately 50 feet away from the northwest side of Unit 38 in Building 20. The LPG tank was installed by and is owned by the gas company.

Printed: 24 CFR, Part 51, Subpart C.

Per CFR Title 24 Part 51.201 (Definitions), rehabilitation and modernization improvements that do not increase the density and number of people being exposed to hazardous operations do not meet the definition of a "HUD-assisted project," and are not subject to acceptable separation distance requirements under this regulation. Increasing the density (e.g. increase the number of units and associated persons exposed to the hazard within the acceptable separation distance) under a rehabilitation project using HUD funding would be considered a "HUD-assisted project." Consequently, the existing fuel storage tank would be subject to standards under this regulation for establishing acceptable separation distances, or the application of the standards can be eliminated or modified if other conditions apply or mitigative measures are provided as identified below. HPHA would need to evaluate site conditions, comply with regulatory requirements, and determine the appropriate measure to implement.

1. The nature of the topography shields the proposed project form the hazard.
2. An existing permanent fire resistant structure of adequate size and strength will shield the proposed project from the hazard.
3. A barrier is constructed surrounding the hazard, at the site of the project, or in between the potential hazard and the proposed project.
4. The structure and outdoor areas used by people are designed to withstand blast overpressure and thermal radiation anticipated from the potential hazard (e.g., the project is of masonry and steel or reinforced concrete and steel construction).

IX. FARMLANDS PROTECTION (7 CFR PART 658)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. Since the property consists of an existing housing development within an urbanized area, no farmlands would be impacted by the implementation of repair and rehabilitation improvements.

Printed: The property is designated for "Urban" use by the State Land Use Commission and is zoned for "R-5 Residential" use by the City and County of Honolulu.

Hawai`i Office of Planning website at: http://planning.hawaii.gov/gis/
(Date accessed: 6/30/2015)

X. FLOODPLAIN MANAGEMENT (EXECUTIVE ORDER 11988, 24 CFR PART 55)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program

The project site is located in Zone X (area of minimal flood hazard) and is located outside the 500-year flood zone. A field inspection and information obtained from the Maintenance Supervisor confirmed no major flooding issues within the site.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal any signs of previous flooding problems. An interview with the Maintenance Supervisor also determined that no major ponding or flooding issues have occurred on the project site.

Printed: City and County of Honolulu, Flood Insurance Rate Map, Community Panel Numbers 15003C0105H, Revised November 2014.

Hawai`i Department of Land and Natural Resources website at:
http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 6/30/15).

XI. HISTORIC PRESERVATION (NATIONAL HISTORIC PRESERVATION ACT OF 1966; SECTIONS 106 AND 110; 36 CFR, PART 800)

CONTACT:

Ms. Suzanne Case, Chairperson
Department of Land and Natural Resources (DLNR)
State of Hawai'i
1151 Punchbowl Street
Honolulu, Hawai'i 96813
Tel. #: 587-0400

SUPPORTING DOCUMENTS

X	Field
X	Contact
X	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Effect on Historic Properties

Kupuna Home O'Waialua is 38 years old and was initially occupied in 1977. To be eligible for listing in the National Register of Historic Places (NRHP), a property must meet the National Register criteria for evaluation which involves examining its integrity, significance, and age (generally at least 50 years old). Due to its age, this housing project does not meet the eligibility criteria to be evaluated for the NRHP. In a letter to the State Historic Preservation Officer (SHPO) dated July 23, 2015, the HPHA determined that no historic properties would be affected (no effect) by repair and rehabilitation improvements for this housing project. No comments or objections about this no effect determination were received.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the Kupuna Home O'Waialua housing project did not locate any existing or potential archaeological sites (e.g., heiau) or cultural features on the property. The project site has undergone extensive ground-altering activities since it was initially developed and improved with buildings, driveways, parking lots, sidewalks, and other related improvements. An interview with the Maintenance Supervisor indicates that no known sites or features are present on the property.

Contact: A letter from the HPHA dated July 23, 2015, which is included in the Appendix, was submitted to the State Historic Preservation Officer [SHPO] (Chair of State Board of Land and Natural Resources) as part of Section 106 consultation determining that no historic properties would be affected (no effect) by repair and rehabilitation improvements that may be implemented using HUD funds for this housing project. The SHPO did not submit any comments or objections on the "no effect" determination for this housing project, which included follow-up e-mails with the State Historic Preservation Division regarding a response. On September 28, 2015, notice of HPHA's determination was also distributed to several native Hawaiian organizations and the various County Planning Departments. No concerns or opposition to this determination was received.

Printed: A review of the U.S. National Parks Service website for the National Register of Historic Places did not identify any historic properties within the limits of this housing project. A similar review of the State DLNR website for the State Register of Historic Places revealed that there are no historic properties within the project site.

National Register: U.S. National Park Service website at: http://www.nps.gov/nr/research/ (Date accessed: 7/2/15).

State Register: Hawai`i Department of Land and Natural Resources website at: http://dlnr.hawaii.gov/shpd/state-register/ (Date accessed: 7/2/15).

Experience: In letter to the SHPO dated April 19, 2011, the HPHA determined that minor repair and rehabilitation improvement at 57 public housing projects throughout Hawai'i (including Kupuna Home O'Waialua) would have "no effect" on historic properties. The SHPO had no comments or objections on the "no effect" determination.

XII. NOISE ABATEMENT CONTROL (24 CFR PART 51B)

SUPPORTING DOCUMENTS

X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Within HUD Noise Standards

The housing project site is not situated along a highway or arterial roadway that has a high volume of vehicular traffic which may generate significant noise. Goodale Avenue, which runs along the western edge of the project site, connects to Farrington Highway approximately 0.25 miles to the south. Nahoa Street, a smaller side street, provides access to the north parking lot and vehicular traffic generated noise is expected to be considerably less. The HUD noise calculator for Goodale Avenue did not estimate noise levels at the project site above 65 dBA and appear to be within HUD noise standards. Therefore, noise abatement should not be required for this housing project.

SUPPORTING DOCUMENTATION:

Field: There were no significant noise generating sources identified within the project site during the site inspection. Kupuna Home O'Waialua is situated in a rural area of O'ahu, surrounded by agricultural land and low-density residential homes and other open spaces. Furthermore, an interview with the Maintenance Supervisor did not identify any loud noise-producing sources in the area. As a result, notable noise sources are predominantly associated with vehicular traffic along adjacent roadways. Traffic noise did not appear significant during the site visit.

Study: The HUD day/night noise level calculator was used to estimate approximate traffic noise levels at the project site. Goodale Avenue, the most frequented road adjacent to the project site, has an estimated 7,600 vehicle trips a day, based upon the State Department of Transportation traffic data (2013). Despite the relatively close distance of the road center line to the project site (35 feet), the estimated noise levels at the project site using the HUD calculator were about 57 dBA. Therefore, traffic noise levels at the site should not exceed 65 dBA and appear to be within HUD noise standards. Rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

XIII. SOLE SOURCE AQUIFER (40 CFR PART 149)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact on Sole Source Aquifer.

The housing project is located within the O'ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation. However, if exceptional circumstances require compliance steps with any of these authorities, such compliance must be established and documented prior to approving the site-specific loan or grant.

SUPPORTING DOCUMENTATION:

Printed: This determination was based upon review of the Sole Source Aquifer Memorandum of 4/30/90 (Sections II.B.1 and II.B.2) and consideration of the type of rehabilitation related improvements that would be conducted for this project.

XIV. WETLANDS PROTECTION (EXECUTIVE ORDER 11990)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the property did not identify the presence of any wetlands.

Printed: U.S Fish and Wildlife Service website at: http://www.fws.gov/wetlands/data/mapper.html (Date accessed 6/30/2015).

XV. WILD AND SCENIC RIVERS ACT (16 USC 1271, SECTION 7 (B), (C))

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no Wild and Scenic Rivers in Hawai'i, which excludes this project from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: National Wild and Scenic Rivers System website at: http://www.rivers.gov/index.php (Date accessed: 6/30/2015).

XVI. ENVIRONMENTAL JUSTICE (EXECUTIVE ORDER NO. 12898)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact on Requirements.

Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, repair and rehabilitation improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations. Repair and rehabilitation improvements should benefit low-income and minority populations living within this housing project.

SUPPORTING DOCUMENTATION:

Printed: Executive Order 12898.

U.S. Department of Housing and Urban Development website at: https://www.hudexchange.info/environmental-review/environmental-justice/

EXHIBIT A

Location Map, TMK Map, Site Map, Flood Map, and Site Photos

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

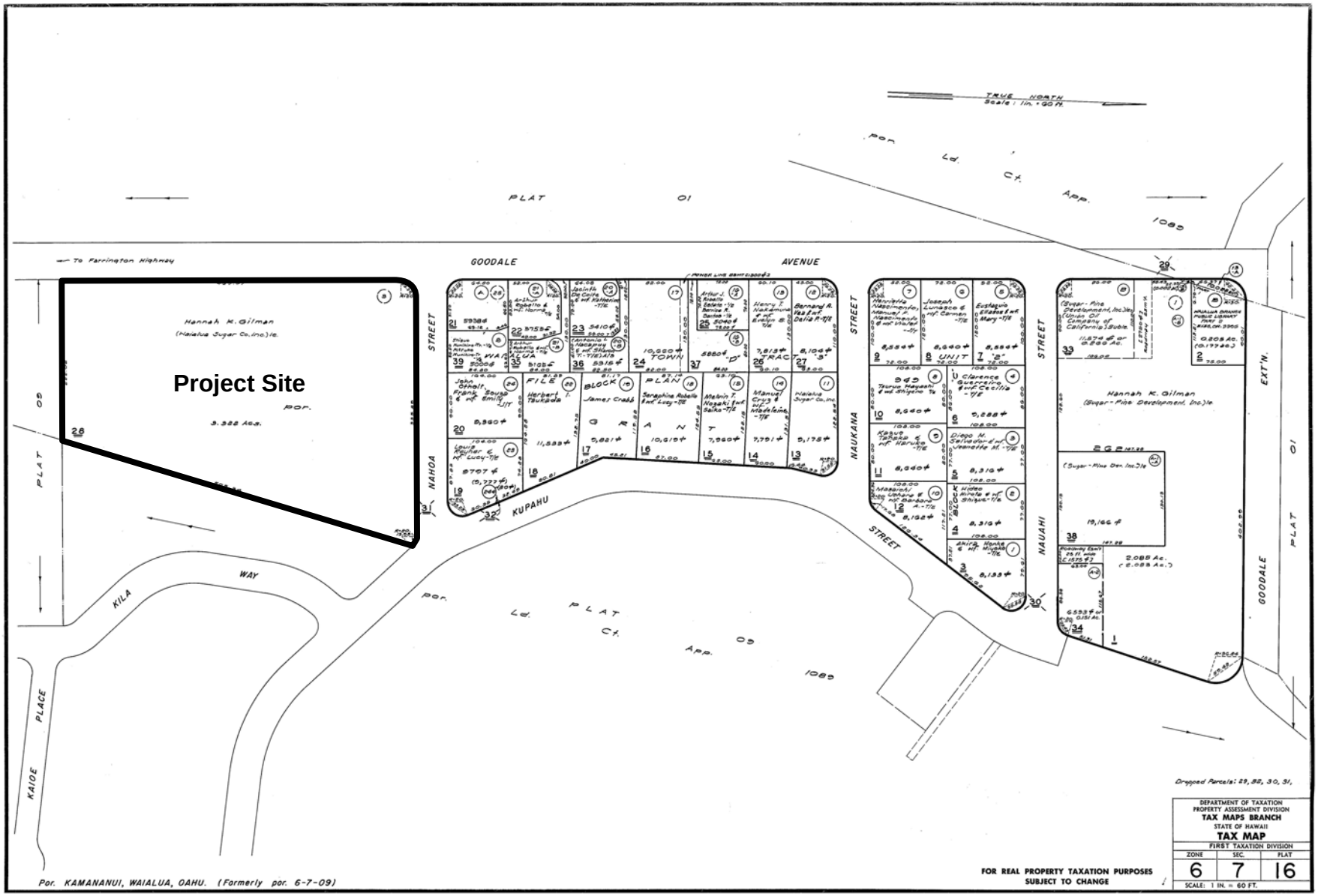
HPHA No. 1050 - Kupuna Home O'Waialua (AMP 49)

Figure 1 - Project Location Map

Waialua, O'ahu

2,000 FT

HHF PLANNERS
places for people

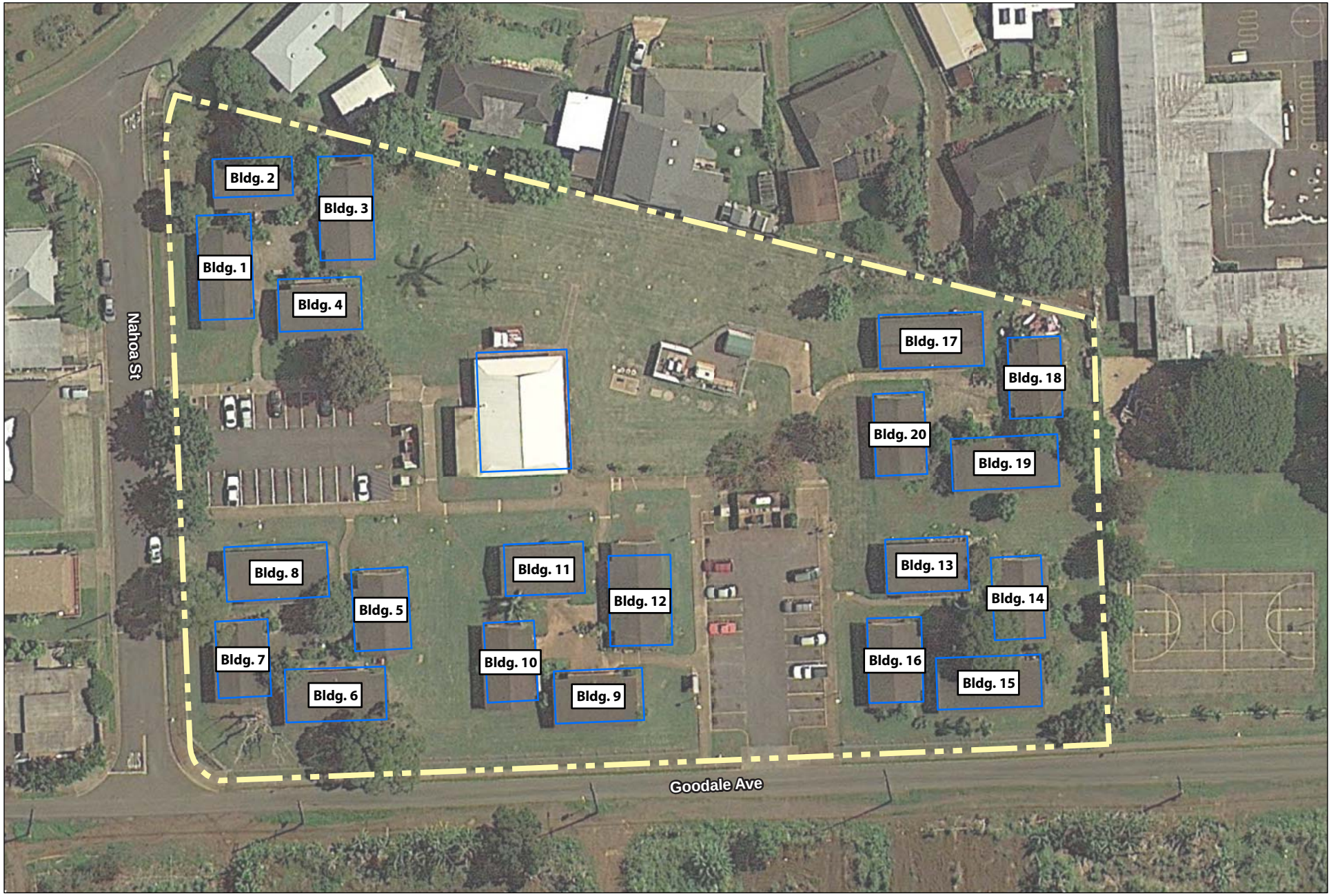


HPHA No. 1050 - Kupuna Home O'Waialua (AMP 49)

Figure 2 - TMK Map

Waialua, O'ahu

HHF PLANNERS
places for people



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

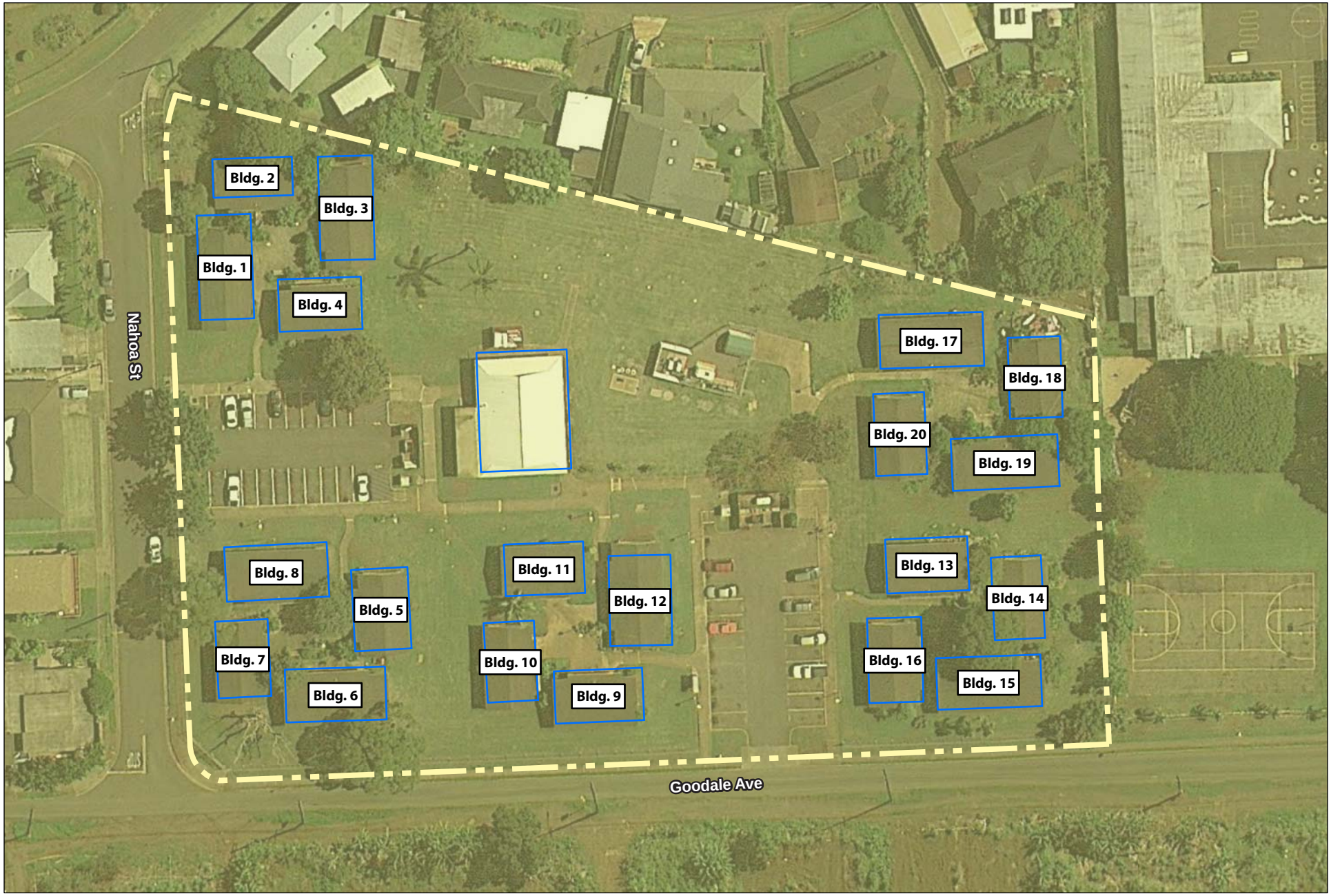
HPHA No. 1050 - Kupuna Home O'Waialua (AMP 49)

Figure 3 - Site Map

Waialua, O'ahu

50 FEET

HHF PLANNERS
places for people



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

LEGEND

Zone X - Outside the 0.2% Annual Chance of Flood

HPHA No. 1050 - Kupuna Home O'Waialua (AMP 49)

Figure 4 - Flood Map

Waialua, O'ahu

50 FEET

HHF PLANNERS
places for people

KUPUNA HOME O‘WAIALUA
SITE PHOTOS

Project sign; Nahoa Street entrance

View along Kupahu Street, facing north

View across Goodale Ave -- rural neighborhood context

Project’s western boundary, facing north

Project’s southern boundary, facing east

Project’s eastern boundary, Building 17

KUPUNA HOME O‘WAIALUA
SITE PHOTOS

Project’s east boundary, facing south

Sewer lift station

Sewer lift station equipment, adjacent neighbor, beyond.

500 gallon tank at east end of Goodale Ave parking lot

Trash pickup area at Goodale Ave parking lot

Hazardous material storage

EXHIBIT B

EDR Radius Map Report

Kupuna Home Owaialua E
67-088 Goodale Ave.
Waialua, HI 96791

Inquiry Number: 4237094.234s
March 18, 2015

EDR Summary Radius Map Report

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

FORM-NULL-PVC

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

67-088 GOODALE AVE.
HONOLULU County, HI 96791

COORDINATES

Latitude (North):	21.5702000 - 21˚ 34' 12.72''
Longitude (West):	158.1223000 - 158˚ 7' 20.28''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	590871.4
UTM Y (Meters):	2385371.0
Elevation:	33 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	USGS 7.5 min quad index

Target Property:	W
Source:	USGS 7.5 min quad index

MAPPED SITES SUMMARY

Target Property Address:
67-088 GOODALE AVE.
, HI 96791

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
1	KUPUNA HOME O WAIALU	67-088 GOODALE AVE	UIC		TP
2		67267 GOODALE AVE	EDR US Hist Auto Stat	Lower	466, NNW
A3	WAIALUA SUGAR COMPAN	KEALOHANUI ST/GOODAL	LUST, UST	Lower	758, ENE
A4	WAIALUA SUGAR COMPAN	KEALOHANUI ST/GOODAL	LUST, UST, Financial Assurance	Lower	758, ENE
A5	WAIALUA SUGAR COMPAN	KEALOHANUI ST/GOODAL	LUST, UST	Lower	761, ENE
A6	WAIALUA SUGAR COMPAN	KEALOHANUI ST/GOODAL	LUST, UST	Lower	761, ENE
A7	WAIALUA SUGAR COMPAN	KEALOHANUI ST/GOODAL	UST	Lower	761, ENE
B8	AIM WAIALUA	67-218 GOODALE AVE	LUST, UST, Financial Assurance	Higher	1135, North
B9	ALOHA GAS WAIALUA ST	67 218 GOODALE AVE	RCRA NonGen / NLR	Higher	1135, North
B10		67218 GOODALE AVE	EDR US Hist Auto Stat	Higher	1150, North
11	WAIALUA SUGAR MILL S	67-106 KEALOHANUI ST	SHWS, ENG CONTROLS, INST CONTROL, VCP	Higher	1309, North
12	WAIALUA SERVICE	67-016 FARRINGTON HW	LUST, UST, SPILLS, Financial Assurance	Lower	1775, SSE
13	G.W. RICKER BATTERY	WAIALUA	LUST, UST	Lower	2041, NW
14	MOUNT KAALA NATURAL	68-350 FARRINGTON HW	SHWS, SPILLS	Higher	4104, West

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 7 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
KUPUNA HOME O WAIALU 67-088 GOODALE AVE HALEIWA WAIALUA, HI	UIC	N/A

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

State- and tribal - equivalent CERCLIS

SHWS: A review of the SHWS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 2 SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WAIALUA SUGAR MILL S	***67-106 KEALOHANUI ST***	***N 1/8 - 1/4 (0.248 mi.)***	***11***	***9***
MOUNT KAALA NATURAL	***68-350 FARRINGTON HW***	***W 1/2 - 1 (0.777 mi.)***	***14***	***10***

State and tribal leaking storage tank lists

LUST: A review of the LUST list, as provided by EDR, and dated 03/02/2015 has revealed that there are 7 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AIM WAIALUA Facility Status: Site Cleanup Completed (NFA)	***67-218 GOODALE AVE***	***N 1/8 - 1/4 (0.215 mi.)***	***B8***	***8***

Lower Elevation	Address	Direction / Distance	Map ID	Page
WAIALUA SUGAR COMPAN Facility Status: Site Cleanup Completed (NFA)	***KEALOHANUI ST/GOODAL***	***ENE 1/8 - 1/4 (0.144 mi.)***	***A3***	***7***

EXECUTIVE SUMMARY

Lower Elevation	Address	Direction / Distance	Map ID	Page
WAIALUA SUGAR COMPAN Facility Status: Site Cleanup Completed (NFA)	***KEALOHANUI ST/GOODAL***	***ENE 1/8 - 1/4 (0.144 mi.)***	***A4***	***7***
WAIALUA SUGAR COMPAN Facility Status: Site Cleanup Completed (NFA)	***KEALOHANUI ST/GOODAL***	***ENE 1/8 - 1/4 (0.144 mi.)***	***A5***	***8***
WAIALUA SUGAR COMPAN Facility Status: Case Tansferred to HEER (VRP)	***KEALOHANUI ST/GOODAL***	***ENE 1/8 - 1/4 (0.144 mi.)***	***A6***	***8***
WAIALUA SERVICE Facility Status: Site Cleanup Completed (NFA)	***67-016 FARRINGTON HW***	***SSE 1/4 - 1/2 (0.336 mi.)***	***12***	***9***
G.W. RICKER BATTERY Facility Status: Site Cleanup Completed (NFA)	***WAIALUA***	***NW 1/4 - 1/2 (0.387 mi.)***	***13***	***10***

State and tribal registered storage tank lists

UST: A review of the UST list, as provided by EDR, and dated 03/02/2015 has revealed that there are 6 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AIM WAIALUA	***67-218 GOODALE AVE***	***N 1/8 - 1/4 (0.215 mi.)***	***B8***	***8***

Lower Elevation	Address	Direction / Distance	Map ID	Page
WAIALUA SUGAR COMPAN	***KEALOHANUI ST/GOODAL***	***ENE 1/8 - 1/4 (0.144 mi.)***	***A3***	***7***
WAIALUA SUGAR COMPAN	***KEALOHANUI ST/GOODAL***	***ENE 1/8 - 1/4 (0.144 mi.)***	***A4***	***7***
WAIALUA SUGAR COMPAN	***KEALOHANUI ST/GOODAL***	***ENE 1/8 - 1/4 (0.144 mi.)***	***A5***	***8***
WAIALUA SUGAR COMPAN	***KEALOHANUI ST/GOODAL***	***ENE 1/8 - 1/4 (0.144 mi.)***	***A6***	***8***
WAIALUA SUGAR COMPAN	KEALOHANUI ST/GOODAL	ENE 1/8 - 1/4 (0.144 mi.)	A7	8

State and tribal institutional control / engineering control registries

ENG CONTROLS: A review of the ENG CONTROLS list, as provided by EDR, and dated 12/02/2014 has revealed that there is 1 ENG CONTROLS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WAIALUA SUGAR MILL S	***67-106 KEALOHANUI ST***	***N 1/8 - 1/4 (0.248 mi.)***	***11***	***9***

INST CONTROL: A review of the INST CONTROL list, as provided by EDR, and dated 12/02/2014 has revealed that there is 1 INST CONTROL site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WAIALUA SUGAR MILL S	***67-106 KEALOHANUI ST***	***N 1/8 - 1/4 (0.248 mi.)***	***11***	***9***

EXECUTIVE SUMMARY

State and tribal voluntary cleanup sites

VCP: A review of the VCP list, as provided by EDR, and dated 12/02/2014 has revealed that there is 1 VCP site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WAIALUA SUGAR MILL S	***67-106 KEALOHANUI ST***	***N 1/8 - 1/4 (0.248 mi.)***	***11***	***9***

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

RCRA NonGen / NLR: A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 12/09/2014 has revealed that there is 1 RCRA NonGen / NLR site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ALOHA GAS WAIALUA ST	67 218 GOODALE AVE	N 1/8 - 1/4 (0.215 mi.)	B9	9

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Auto Stat: A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there are 2 EDR US Hist Auto Stat sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	67218 GOODALE AVE	N 1/8 - 1/4 (0.218 mi.)	B10	9

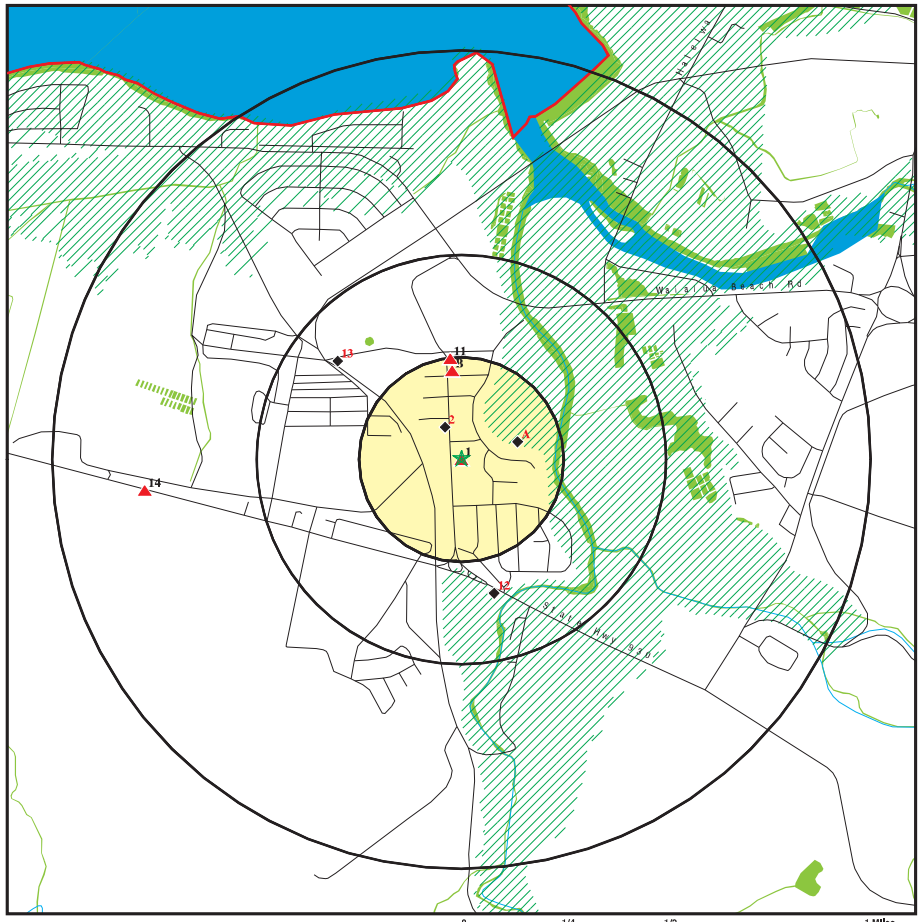
Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	67267 GOODALE AVE	NNW 0 - 1/8 (0.088 mi.)	2	7

ORPHAN SUMMARY

Count: 1 records.

City	EDR ID	Site Name	Site Address	Zip	Database(s)
WAIALUA	1015730978	WAIALUA SUGAR MILL	67 202 KUPAHU STREET	96791	CERCLIS, RCRA NonGen / NLR

OVERVIEW MAP - 4237094.234S



0 1/4 1/2 1 Miles

- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Kupuna Home Owaialua E ADDRESS: 67-088 Goodale Ave. Walalua HI 96791 LAT/LONG: 21.5702 / 158.1223	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.234s DATE: March 18, 2015 8:33 am

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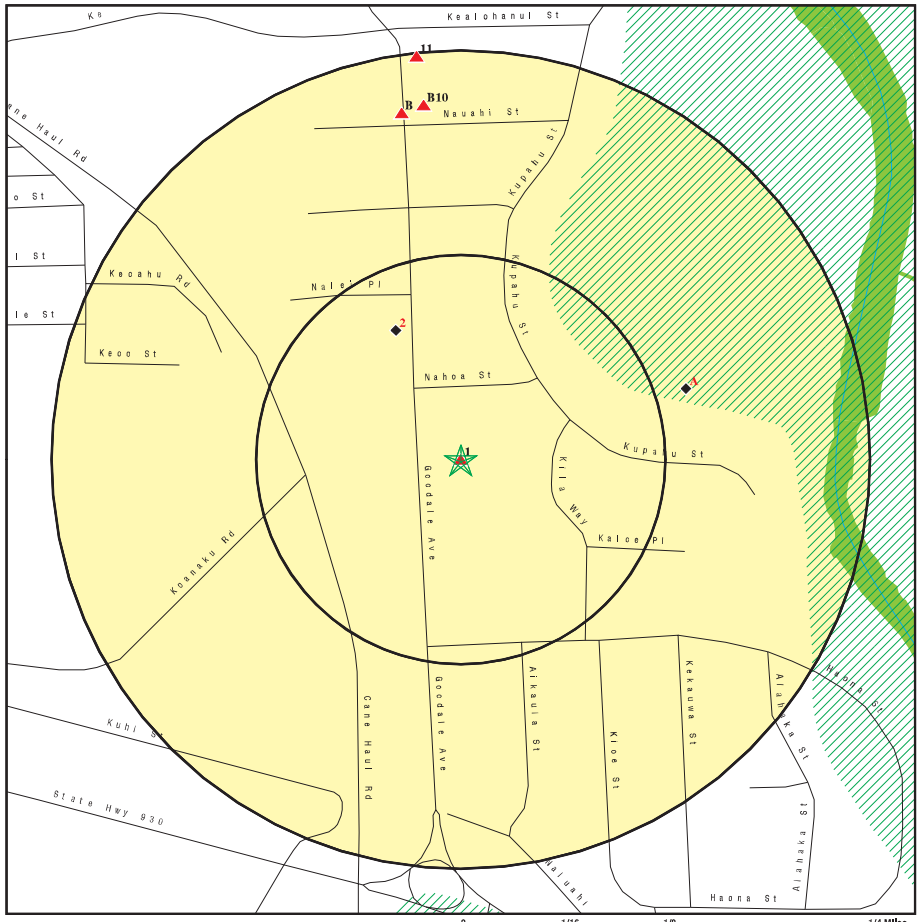
DETAIL MAP - 4237094.234S



0 1/16 1/8 1/4 Miles

- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Kupuna Home Owaialua E ADDRESS: 67-088 Goodale Ave. Walalua HI 96791 LAT/LONG: 21.5702 / 158.1223	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.234s DATE: March 18, 2015 8:33 am

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
SHWS	1.000		0	1	0	1	NR	2
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	5	2	NR	NR	7
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250		0	6	NR	NR	NR	6

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		0	1	0	NR	NR	1
INST CONTROL	0.500		0	1	0	NR	NR	1
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	1	0	NR	NR	1
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	1	NR	NR	NR	1
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
UIC	TP	1	NR	NR	NR	NR	NR	1
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		1	1	NR	NR	NR	2
EDR US Hist Cleaners	0.250		0	0	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
RGA HWS	TP		NR	NR	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
1 **Target Property** **Actual:** **33 ft.**	**KUPUNA HOME O WAIALUA STP** **67-088 GOODALE AVE** **HALEIWA WAIALUA, HI** **UIC** Click here for full text details Facility Id/Lat Long Min Coord: 3-3407.01.1-2	**UIC**	**S109953136** **N/A**
2 **NNW** **< 1/8** **0.088 mi.** **466 ft.** **Relative:** **Lower**	**67267 GOODALE AVE** **WAIALUA, HI 96791** Click here for full text details	**EDR US Hist Auto Stat**	**1015597052** **N/A**
A3 **ENE** **1/8-1/4** **0.144 mi.** **758 ft.** **Relative:** **Lower**	**WAIALUA SUGAR COMPANY, INC.** **KEALOHANUI ST/GOODALE AVE / TANK 7** **WAIALUA, HI 96791** Click here for full text details **LUST** Facility Status: Site Cleanup Completed (NFA) Facility Id: 9-202402 **UST** Tank Status: Permanently Out of Use Facility Id: 9-202402	**LUST** **UST**	**U003541856** **N/A**
A4 **ENE** **1/8-1/4** **0.144 mi.** **758 ft.** **Relative:** **Lower**	**WAIALUA SUGAR COMPANY, INC.** **KEALOHANUI ST/GOODALE AVETANK 7 & 8** **WAIALUA, HI 96791** Click here for full text details **LUST** Facility Status: Site Cleanup Completed (NFA) Facility Id: 9-201010 **UST** Tank Status: Permanently Out of Use Facility Id: 9-201010	**LUST** **UST** **Financial Assurance**	**U003541830** **N/A**

A5
ENE
1/8-1/4
0.144 mi.
761 ft.

Relative: Lower

WAIALUA SUGAR COMPANY, INC.
KEALOHANUI ST/GOODALE AVE / TANKS 2, 3, 4
WAIALUA, HI 96791

LUST **U001236383**
UST **N/A**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-201688

UST
Tank Status: Permanently Out of Use
Facility Id: 9-201688

A6
ENE
1/8-1/4
0.144 mi.
761 ft.

Relative: Lower

WAIALUA SUGAR COMPANY, INC.
KEALOHANUI ST/GOODALE AVE / TANK 1 & 2
WAIALUA, HI 96791

LUST **U001236396**
UST **N/A**

Click here for full text details

LUST
Facility Status: Case Tansferred to HEER (VRP)
Facility Id: 9-201728

UST
Tank Status: Permanently Out of Use
Facility Id: 9-201728

A7
ENE
1/8-1/4
0.144 mi.
761 ft.

Relative: Lower

WAIALUA SUGAR COMPANY, INC.
KEALOHANUI ST/GOODALE AVE / TANK 5
WAIALUA, HI 96791

UST **U001236538**
N/A

Click here for full text details

UST
Tank Status: Permanently Out of Use
Facility Id: 9-202400

B8
North
1/8-1/4
0.215 mi.
1135 ft.

Relative: Higher

AIM WAIALUA
67-218 GOODALE AVE
WAIALUA, HI 96791

LUST **U003155038**
UST **N/A**
Financial Assurance

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-202999

UST
Tank Status: Permanently Out of Use

AIM WAIALUA (Continued) **U003155038**

Tank Status: Currently In Use
Facility Id: 9-202999

B9
North
1/8-1/4
0.215 mi.
1135 ft.

Relative: Higher

ALOHA GAS WAIALUA STA
67 218 GOODALE AVE
WAIALUA, HI 96791

RCRA NonGen / NLR **1000978858**
HI0001005719

Click here for full text details

RCRA NonGen / NLR
EPA Id: HI0001005719

B10
North
1/8-1/4
0.218 mi.
1150 ft.

Relative: Higher

67218 GOODALE AVE
WAIALUA, HI 96791

EDR US Hist Auto Stat **1015596958**
N/A

Click here for full text details

11
North
1/8-1/4
0.248 mi.
1309 ft.

Relative: Higher

WAIALUA SUGAR MILL SETTLING PONDS
67-106 KEALOHANUI ST
WAIALUA, HI 96791

SHWS **S110061850**
ENG CONTROLS **N/A**
INST CONTROL
VCP

Click here for full text details

12
SSE
1/4-1/2
0.336 mi.
1775 ft.

Relative: Lower

WAIALUA SERVICE
67-016 FARRINGTON HWY
WAIALUA, HI 96791

LUST **U003222054**
UST **N/A**
SPILLS
Financial Assurance

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-201918

UST
Tank Status: Permanently Out of Use
Tank Status: Currently in Use
Facility Id: 9-201918

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
13 NW 1/4-1/2 0.387 mi. 2041 ft. Relative: Lower	**G.W. RICKER BATTERY** **WAIALUA** **WAIALUA, HI 96791**	**LUST** **UST**	**U003155046** **N/A**

Click here for full text details

LUST
Facility Status: Site Cleanup Completed (NFA)
Facility Id: 9-203149

UST
Tank Status: Permanently Out of Use
Facility Id: 9-203149

14 West 1/2-1 0.777 mi. 4104 ft. Relative: Higher	**MOUNT KAALA NATURAL AREA RESERVE** **68-350 FARRINGTON HWY** **WAIALUA, HI 96791**	**SHWS** **SPILLS**	**S106819190** **N/A**

Click here for full text details

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
HI	AIRS	List of Permitted Facilities	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	BROWNFIELDS	Brownfields Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	CDL	Clandestine Drug Lab Listing	Department of Health	08/04/2010	09/10/2010	10/22/2010
HI	DRYCLEANERS	Permitted Drycleaner Facility Listing	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	ENG CONTROLS	Engineering Control Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	Financial Assurance	Financial Assurance Information Listing	Department of Health	12/01/2014	12/19/2014	01/28/2015
HI	INST CONTROL	Sites with Institutional Controls	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	LUST	Leaking Underground Storage Tank Database	Department of Health	03/02/2015	03/04/2015	03/17/2015
HI	RGA HWS	Recovered Government Archive State Hazardous Waste Facilitie	Department of Health		07/01/2013	01/08/2014
HI	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Health		07/01/2013	01/17/2014
HI	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	Department of Health		07/01/2013	01/03/2014
HI	SHWS	Sites List	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	SPILLS	Release Notifications	Department of Health	12/02/2014	12/22/2014	01/28/2015
HI	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	03/10/2012	01/03/2013	02/11/2013
HI	SWF/LF	Permitted Landfills in the State of Hawaii	Department of Health	09/17/2012	04/03/2013	05/10/2013
HI	UIC	Underground Injection Wells Listing	Department of Health	02/07/2013	02/12/2013	04/09/2013
HI	UST	Underground Storage Tank Database	Department of Health	03/02/2015	03/04/2015	03/17/2015
HI	VCP	Voluntary Response Program Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	04/22/2013	03/03/2015	03/09/2015
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2011	02/26/2013	04/19/2013
US	CERCLIS	Comprehensive Environmental Response, Compensation, and Liab	EPA	10/25/2013	11/11/2013	02/13/2014
US	CERCLIS-NFRAP	CERCLIS No Further Remedial Action Planned	EPA	10/25/2013	11/11/2013	02/13/2014
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	07/01/2014	09/10/2014	10/20/2014
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	01/23/2015	02/13/2015	03/09/2015
US	CORRACTS	Corrective Action Report	EPA	12/09/2014	12/29/2014	01/29/2015
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DELISTED NPL	National Priority List Deletions	EPA	12/16/2014	01/08/2015	02/09/2015
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	07/31/2012	08/07/2012	09/18/2012
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EDR US Hist Auto Stat	EDR Exclusive Historic Gas Stations	EDR, Inc.			
US	EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	09/29/2014	09/30/2014	11/06/2014
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	07/21/2014	10/07/2014	10/20/2014
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
US	FEMA UST	Underground Storage Tank Listing	FEMA	01/01/2010	02/16/2010	04/12/2010
US	FINDS	Facility Index System/Facility Registry System	EPA	08/16/2014	09/10/2014	10/20/2014
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	06/06/2014	09/10/2014	09/18/2014
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	12/29/2014	12/30/2014	03/09/2015
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	01/23/2015	02/06/2015	03/09/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	02/01/2013	05/01/2013	11/01/2013

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	01/30/2015	02/05/2015	03/09/2015
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/10/2015	03/13/2015
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	01/28/2015	01/30/2015	03/13/2015
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	01/08/2015	01/08/2015	02/09/2015
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2005	12/08/2006	01/11/2007
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	02/01/2013	05/01/2013	01/27/2014
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	01/30/2015	02/05/2015	03/13/2015
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/13/2015	03/13/2015
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	01/29/2015	01/30/2015	03/13/2015
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	12/14/2014	02/13/2015	03/13/2015
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	09/29/2014	10/01/2014	11/06/2014
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	11/25/2014	11/26/2014	01/29/2015
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	02/18/2014	03/18/2014	04/24/2014
US	LUCIS	Land Use Control Information System	Department of the Navy	12/03/2014	12/12/2014	01/29/2015
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	12/29/2014	01/08/2015	01/29/2015
US	NPL	National Priority List	EPA	12/16/2014	01/08/2015	02/09/2015
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	07/01/2014	10/15/2014	11/17/2014
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	02/01/2011	10/19/2011	01/10/2012
US	PRP	Potentially Responsible Parties	EPA	10/25/2013	10/17/2014	10/20/2014
US	Proposed NPL	Proposed National Priority List Sites	EPA	12/16/2014	01/08/2015	02/09/2015
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	10/07/2014	10/08/2014	10/20/2014
US	RCRA NonGen / NLR	RCRA - Non Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RMP	Risk Management Plans	Environmental Protection Agency	08/01/2014	08/12/2014	11/06/2014
US	ROD	Records Of Decision	EPA	11/25/2013	12/12/2013	02/24/2014
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	03/07/2011	03/09/2011	05/02/2011
US	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2011	07/31/2013	09/13/2013
US	TSCA	Toxic Substances Control Act	EPA	12/31/2012	01/15/2015	01/29/2015
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	09/14/2010	10/07/2011	03/01/2012
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/16/2014	10/31/2014	11/17/2014
US	US AIRS MINOR	Air Facility System Data	EPA	10/16/2014	10/31/2014	11/17/2014

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	12/22/2014	12/22/2014	01/29/2015
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	11/19/2014	11/21/2014	01/29/2015
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	12/30/2014	12/31/2014	01/29/2015
US	Oil/Gas Pipelines	GeoData Digital Line Graphs from 1:100,000-Scale Maps	USGS			
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
US	USGS 7.5' Topographic Map	Scanned Digital USGS 7.5' Topographic Map (DRG)	USGS			

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

KUPUNA HOME OWAIALUA E
67-088 GOODALE AVE.
WAIALUA, HI 96791

TARGET PROPERTY COORDINATES

Latitude (North):	21.5702 - 21˚ 34' 12.72''
Longitude (West):	158.1223 - 158˚ 7' 20.28''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	590871.4
UTM Y (Meters):	2385371.0
Elevation:	33 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	21158-E1 HALEIWA, HI
Most Recent Revision:	Not reported
West Map:	21158-E2 KAENA, HI
Most Recent Revision:	Not reported

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

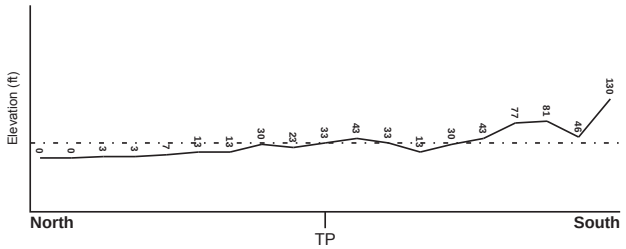
TOPOGRAPHIC INFORMATION

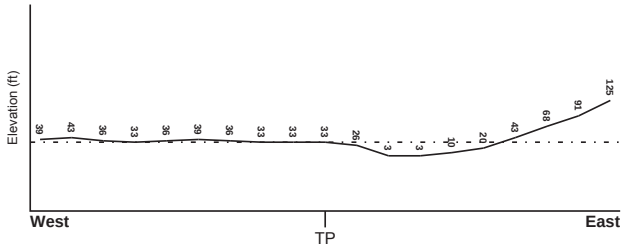
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General East

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 33 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
HONOLULU, HI	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 15003C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
NOT AVAILABLE	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

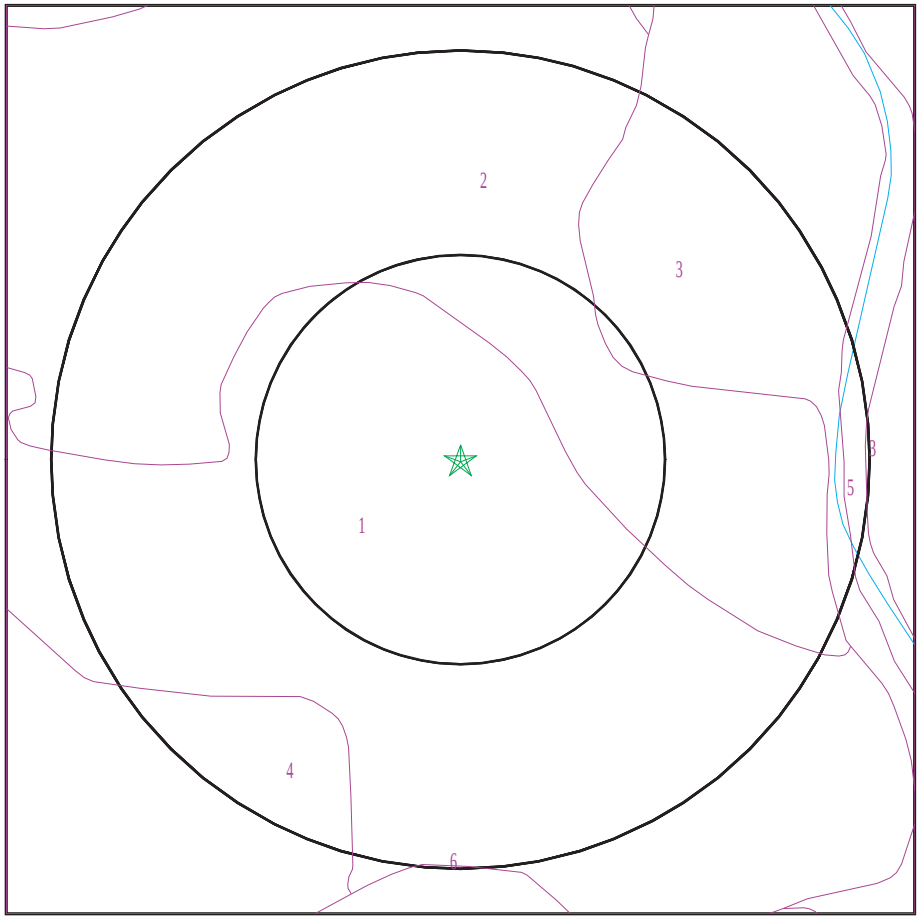
Era: -
System: -
Series: -
Code: N/A *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: -

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4237094.234s



★ Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME: Kupuna Home Owaialua E ADDRESS: 67-088 Goodale Ave. Walalua HI 96791 LAT/LONG: 21.5702 / 158.1223	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.234s DATE: March 18, 2015 8:33 am

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Waialua

Soil Surface Texture: silty clay

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		Soil Reaction (pH)
1	0 inches	11 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	MH-K (proposed)	Max: 14.11 Min: 1.41	Max: 7.3 Min: 6.1
2	11 inches	59 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	MH-K (proposed)	Max: 4.23 Min: 1.41	Max: 7.3 Min: 6.1

Soil Map ID: 2

Soil Component Name: Mamala

Soil Surface Texture: stony silty clay loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 48 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches	stony silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	MH-K (proposed)	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6
2	7 inches	18 inches	stony silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	MH-K (proposed)	Max: 14 Min: 4.23	Max: 7.8 Min: 7.4
3	18 inches	29 inches	bedrock	Not reported	Not reported	Max: 0.42 Min: 0.02	Max: Min:

Soil Map ID: 3

Soil Component Name: Haleiwa

Soil Surface Texture: silty clay

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	16 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Elastic silt.	Max: 14 Min: 4.23	Max: 6.5 Min: 6.1
2	16 inches	64 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Elastic silt.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6

Soil Map ID: 4

Soil Component Name: Waipahu

Soil Surface Texture: silty clay

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14.11 Min: 4.23	Max: 6.5 Min: 6.1

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	11 inches	70 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4.23 Min: 0.42	Max: 6.5 Min: 6.1

Soil Map ID: 5

Soil Component Name: Water > 40 acres

Soil Surface Texture: silty clay

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class:
Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

Soil Map ID: 6

Soil Component Name: Kawaihapai

Soil Surface Texture: clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	22 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 42.34 Min: 4.23	Max: 7.3 Min: 6.6
2	22 inches	31 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.14 Min: 14.11	Max: 7.3 Min: 6.6
3	31 inches	53 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.14 Min: 14.11	Max: 7.3 Min: 6.6

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
B3	USGS40000271098	1/4 - 1/2 Mile ENE
A4	USGS40000271076	1/4 - 1/2 Mile South
C6	USGS40000271115	1/4 - 1/2 Mile NW
C7	USGS40000271116	1/4 - 1/2 Mile NW
C8	USGS40000271114	1/4 - 1/2 Mile NW
C9	USGS40000271112	1/4 - 1/2 Mile NW
C10	USGS40000271113	1/4 - 1/2 Mile NW
C11	USGS40000271120	1/4 - 1/2 Mile NW
C12	USGS40000271121	1/4 - 1/2 Mile NW
C13	USGS40000271119	1/4 - 1/2 Mile NW
C14	USGS40000271117	1/4 - 1/2 Mile NW
C15	USGS40000271118	1/4 - 1/2 Mile NW
A25	USGS40000271077	1/4 - 1/2 Mile SSW
D26	USGS40000271078	1/4 - 1/2 Mile SW
E29	USGS40000271075	1/4 - 1/2 Mile SSE
F35	USGS40000271063	1/4 - 1/2 Mile South
F36	USGS40000271062	1/4 - 1/2 Mile South
F37	USGS40000271061	1/4 - 1/2 Mile South
F38	USGS40000271066	1/4 - 1/2 Mile South
F39	USGS40000271065	1/4 - 1/2 Mile South
F40	USGS40000271064	1/4 - 1/2 Mile South
G42	USGS40000271067	1/4 - 1/2 Mile SSW
H43	USGS40000271154	1/2 - 1 Mile NW
J46	USGS40000271092	1/2 - 1 Mile East
H47	USGS40000271163	1/2 - 1 Mile NW
I49	USGS40000271149	1/2 - 1 Mile ENE
H50	USGS40000271167	1/2 - 1 Mile NW
K53	USGS40000271170	1/2 - 1 Mile NW
L55	USGS40000271070	1/2 - 1 Mile SE
L56	USGS40000271069	1/2 - 1 Mile SE
L57	USGS40000271068	1/2 - 1 Mile SE
L58	USGS40000271073	1/2 - 1 Mile SE
L59	USGS40000271072	1/2 - 1 Mile SE
L60	USGS40000271071	1/2 - 1 Mile SE
K66	USGS40000271180	1/2 - 1 Mile NW
K67	USGS40000271181	1/2 - 1 Mile NW
K68	USGS40000271177	1/2 - 1 Mile NW
M72	USGS40000271105	1/2 - 1 Mile ENE
K74	USGS40000271183	1/2 - 1 Mile NW
O85	USGS40000271041	1/2 - 1 Mile South
O88	USGS40000271030	1/2 - 1 Mile South
O89	USGS40000271031	1/2 - 1 Mile South
O90	USGS40000271032	1/2 - 1 Mile South
O91	USGS40000271029	1/2 - 1 Mile South
O92	USGS40000271026	1/2 - 1 Mile South
O93	USGS40000271027	1/2 - 1 Mile South
O94	USGS40000271028	1/2 - 1 Mile South
O95	USGS40000271033	1/2 - 1 Mile South
O96	USGS40000271038	1/2 - 1 Mile South
O97	USGS40000271039	1/2 - 1 Mile South
O98	USGS40000271040	1/2 - 1 Mile South
O99	USGS40000271037	1/2 - 1 Mile South

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
O100	USGS40000271034	1/2 - 1 Mile South
O101	USGS40000271035	1/2 - 1 Mile South
O102	USGS40000271036	1/2 - 1 Mile South
P108	USGS40000271162	1/2 - 1 Mile ENE
111	USGS40000271025	1/2 - 1 Mile South
P112	USGS40000271161	1/2 - 1 Mile ENE
Q115	USGS40000271085	1/2 - 1 Mile West
R116	USGS40000271203	1/2 - 1 Mile NNE
S118	USGS40000271188	1/2 - 1 Mile NE
T121	USGS40000271023	1/2 - 1 Mile SSE
U123	USGS40000271187	1/2 - 1 Mile NE
T124	USGS40000271024	1/2 - 1 Mile SSE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
L69	HI0000311	1/2 - 1 Mile SE

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

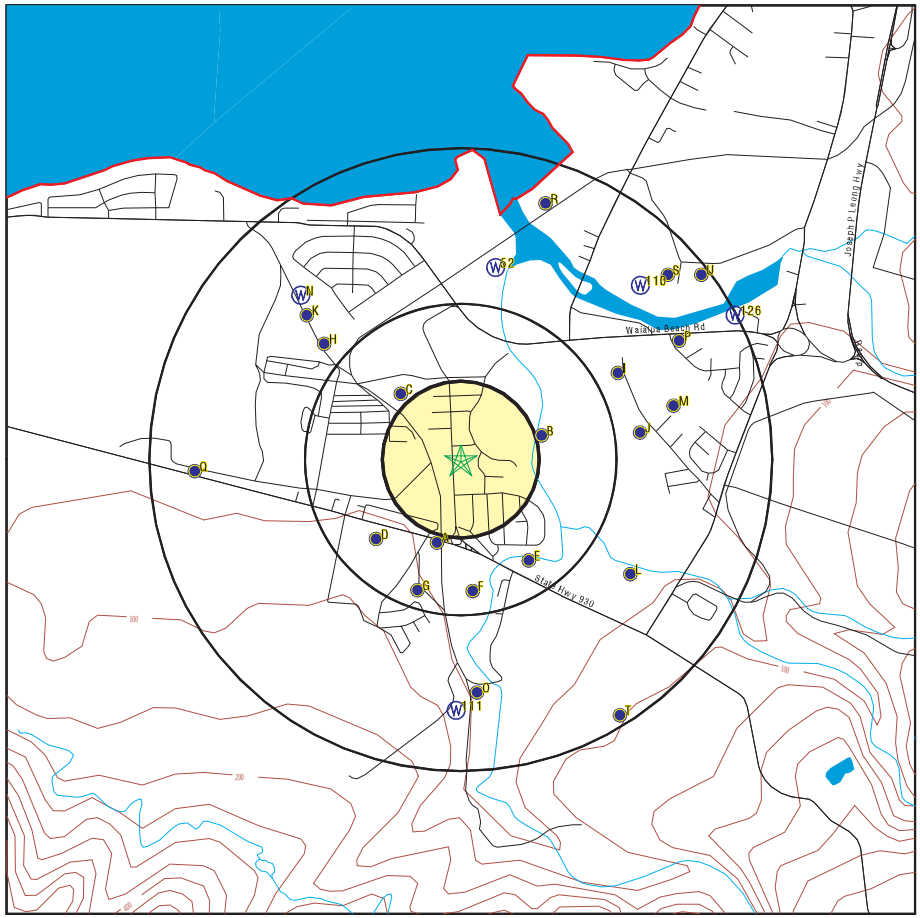
MAP ID	WELL ID	LOCATION FROM TP
A1	HI8000000003797	1/4 - 1/2 Mile South
B2	HI8000000003814	1/4 - 1/2 Mile ENE
A5	HI8000000003796	1/4 - 1/2 Mile SSW
C16	HI8000000003840	1/4 - 1/2 Mile NW
C17	HI8000000003841	1/4 - 1/2 Mile NW
C18	HI8000000003838	1/4 - 1/2 Mile NW
C19	HI8000000003839	1/4 - 1/2 Mile NW
C20	HI8000000003842	1/4 - 1/2 Mile NW
C21	HI8000000003845	1/4 - 1/2 Mile NW
C22	HI8000000003846	1/4 - 1/2 Mile NW
C23	HI8000000003843	1/4 - 1/2 Mile NW
C24	HI8000000003844	1/4 - 1/2 Mile NW
D27	HI8000000003798	1/4 - 1/2 Mile SW
E28	HI8000000003795	1/4 - 1/2 Mile SE
F30	HI8000000003788	1/4 - 1/2 Mile South
F31	HI8000000003784	1/4 - 1/2 Mile South
F32	HI8000000003783	1/4 - 1/2 Mile South
F33	HI8000000003786	1/4 - 1/2 Mile South
F34	HI8000000003785	1/4 - 1/2 Mile South
G41	HI8000000003787	1/4 - 1/2 Mile SSW
H44	HI8000000003876	1/2 - 1 Mile NW
I45	HI8000000003850	1/2 - 1 Mile ENE
J48	HI8000000003817	1/2 - 1 Mile East
K51	HI8000000003886	1/2 - 1 Mile NW
52	HI8000000003913	1/2 - 1 Mile North

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
L54	HI8000000003793	1/2 - 1 Mile ESE
L61	HI8000000003791	1/2 - 1 Mile ESE
L62	HI8000000003792	1/2 - 1 Mile ESE
L63	HI8000000003789	1/2 - 1 Mile ESE
L64	HI8000000003790	1/2 - 1 Mile ESE
K65	HI8000000003889	1/2 - 1 Mile NW
K70	HI8000000003892	1/2 - 1 Mile NW
K71	HI8000000003897	1/2 - 1 Mile NW
M73	HI8000000003828	1/2 - 1 Mile ENE
N75	HI8000000003898	1/2 - 1 Mile NW
O76	HI8000000003759	1/2 - 1 Mile South
O77	HI8000000003760	1/2 - 1 Mile South
O78	HI8000000003757	1/2 - 1 Mile South
O79	HI8000000003758	1/2 - 1 Mile South
O80	HI8000000003761	1/2 - 1 Mile South
O81	HI8000000003764	1/2 - 1 Mile South
O82	HI8000000003765	1/2 - 1 Mile South
O83	HI8000000003762	1/2 - 1 Mile South
O84	HI8000000003763	1/2 - 1 Mile South
N86	HI8000000003901	1/2 - 1 Mile NW
N87	HI8000000003903	1/2 - 1 Mile NW
O103	HI8000000003751	1/2 - 1 Mile South
O104	HI8000000003750	1/2 - 1 Mile South
O105	HI8000000003752	1/2 - 1 Mile South
O106	HI8000000003754	1/2 - 1 Mile South
O107	HI8000000003753	1/2 - 1 Mile South
O109	HI8000000003748	1/2 - 1 Mile South
110	HI8000000003904	1/2 - 1 Mile NE
P113	HI8000000003880	1/2 - 1 Mile ENE
Q114	HI8000000003806	1/2 - 1 Mile West
R117	HI8000000003927	1/2 - 1 Mile NNE
S119	HI8000000003909	1/2 - 1 Mile NE
T120	HI8000000003746	1/2 - 1 Mile SSE
T122	HI8000000003747	1/2 - 1 Mile SSE
U125	HI8000000003910	1/2 - 1 Mile NE
126	HI8000000003893	1/2 - 1 Mile ENE

PHYSICAL SETTING SOURCE MAP - 4237094.234s



County Boundary
Major Roads
Contour Lines
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons
Groundwater Flow Direction
Indeterminate Groundwater Flow at Location
Groundwater Flow Varies at Location

SITE NAME: Kupuna Home Owaialua E ADDRESS: 67-088 Goodale Ave. Waialua HI 96791 LAT/LONG: 21.5702 / 158.1223	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.234s DATE: March 18, 2015 8:33 am

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
A1 **South** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003797**
B2 **ENE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003814**
B3 **ENE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000271098**
A4 **South** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000271076**
A5 **SSW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003796**
C6 **NW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000271115**
C7 **NW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000271116**
C8 **NW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000271114**
C9 **NW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000271112**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
C10 **NW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000271113**
C11 **NW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000271120**
C12 **NW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000271121**
C13 **NW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000271119**
C14 **NW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000271117**
C15 **NW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000271118**
C16 **NW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003840**
C17 **NW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003841**
C18 **NW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003838**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
C19 **NW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003839**
C20 **NW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003842**
C21 **NW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003845**
C22 **NW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003846**
C23 **NW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003843**
C24 **NW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003844**
A25 **SSW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000271077**
D26 **SW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000271078**
D27 **SW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003798**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
E28 **SE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003795**
E29 **SSE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000271075**
F30 **South** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003788**
F31 **South** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003784**
F32 **South** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003783**
F33 **South** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003786**
F34 **South** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003785**
F35 **South** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000271063**
F36 **South** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000271062**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
F37 **South** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000271061**
F38 **South** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000271066**
F39 **South** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000271065**
F40 **South** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000271064**
G41 **SSW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003787**
G42 **SSW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000271067**
H43 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000271154**
H44 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003876**
I45 **ENE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003850**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
J46 **East** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000271092**
H47 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000271163**
J48 **East** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003817**
I49 **ENE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000271149**
H50 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000271167**
K51 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003886**
52 **North** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003913**
K53 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000271170**
L54 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003793**

Map ID Direction Distance Elevation		Database	EDR ID Number
L55 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000271070**
L56 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000271069**
L57 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000271068**
L58 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000271073**
L59 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000271072**
L60 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000271071**
L61 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003791**
L62 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003792**
L63 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003789**

Map ID Direction Distance Elevation		Database	EDR ID Number
L64 **ESE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003790**
K65 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003889**
K66 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000271180**
K67 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000271181**
K68 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000271177**
L69 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FRDS PWS**	**HI0000311**
K70 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003892**
K71 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003897**
M72 **ENE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000271105**

Map ID Direction Distance Elevation		Database	EDR ID Number
M73 **ENE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003828**
K74 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000271183**
N75 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003898**
O76 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003759**
O77 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003760**
O78 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003757**
O79 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003758**
O80 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003761**
O81 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003764**

Map ID Direction Distance Elevation		Database	EDR ID Number
O82 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003765**
O83 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003762**
O84 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003763**
O85 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000271041**
N86 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003901**
N87 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003903**
O88 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000271030**
O89 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000271031**
O90 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000271032**

Map ID Direction Distance Elevation		Database	EDR ID Number
O91 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000271029**
O92 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000271026**
O93 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000271027**
O94 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000271028**
O95 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000271033**
O96 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000271038**
O97 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000271039**
O98 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000271040**
O99 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000271037**

Map ID Direction Distance Elevation		Database	EDR ID Number
O100 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000271034**
O101 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000271035**
O102 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000271036**
O103 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003751**
O104 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003750**
O105 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003752**
O106 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003754**
O107 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003753**
P108 **ENE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000271162**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
O109 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003748**
110 **NE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003904**
111 **South** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000271025**
P112 **ENE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000271161**
P113 **ENE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003880**
Q114 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003806**
Q115 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000271085**
R116 **NNE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000271203**
R117 **NNE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003927**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
S118 **NE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000271188**
S119 **NE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003909**
T120 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003746**
T121 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000271023**
T122 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003747**
U123 **NE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000271187**
T124 **SSE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000271024**
U125 **NE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003910**
126 **ENE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003893**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for HONOLULU County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 96791

Number of sites tested: 1

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	Not Reported	Not Reported	Not Reported	Not Reported
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	0.000 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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HAWAII PUBLIC HOUSING AUTHORITY

ENVIRONMENTAL REVIEW

KAUHALE NANI

Wahiawā, O`ahu

AMP 49
HPHA No. 1056

Prepared for:

State of Hawaii
Hawaii Public Housing Authority

Prepared by:

HHF PLANNERS
places for people

U.S. Department of Housing and Urban Development
451 Seventh Street, SW
Washington, DC 20410
www.hud.gov

espanol.hud.gov

Environmental Review for Activity/Project that is Categorically Excluded Subject to Section 58.5

Pursuant to 24 CFR 58.35(a)

Project Information

Project Name: Kauhale Nani (AMP 49)

Responsible Entity: Hawaii Public Housing Authority
1002 North School Street
Honolulu, HI 96817

Grant Recipient (if different than Responsible Entity)**:**
Same as Responsible Entity

State/Local Identifier: State of Hawaiʻi

Preparer: Mr. Scott Ezer, Vice President
HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaiʻi 96813

Certifying Officer Name and Title: Mr. David Y. Ige
Governor, State of Hawaiʻi

Grant Recipient (if different than Responsible Entity)**:**
Same as Responsible Entity

Consultant (if applicable)**:** HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaiʻi 96813

Direct Comments to: Mr. Hakim Ouansafi, Executive Director
Hawaii Public Housing Authority
1002 North School Street
Honolulu, Hawaiʻi 96817

Project Location: 310 N. Cane Street
Wahiawa, Hawaiʻi 96786

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]**:**

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a "major construction activity" and would involve one or a combination of several HUD designated categories of actions.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent;
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons;
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland;
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation;
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls);
7. Interior and exterior renovations and rehabilitation;
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site;
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Level of Environmental Review Determination:

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.5. Compliance with and completion of conformance determinations for other statute, executive order, or regulation has been completed and support the Categorical Exclusion.

Funding Information

Grant Number	HUD Program	Funding Amount
To be determined	Capital Fund	To be determined
To be determined	Economic Development Initiative Special Project Grant	To be determined
To be determined	Other Grants	To be determined

Estimated Total HUD Funded Amount:

To be determined by HUD using a formula and based upon federal budget.

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]**:**

Depends upon funds available.

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	*The project is not within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.*
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☒	*The State of Hawai'i does not have any designated coastal barrier resource units. (http://www.fws.gov/CBRA/Maps/Mapper.html)*
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes ☐ No ☒	*As indicated in the Flood Insurance Rate Map Panel 15003C0120F and 15003140F, the project site is located in Zone D (area of undetermined flood hazard). A field inspection and information obtained from the Maintenance Supervisor confirmed no major flooding issues within the site. Based on its description, the Kauhale Nani housing project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.*

STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5		
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes ☐ No ☒	*The State of Hawai'i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. EPA's Green Book for currently designated "nonattainment areas" as of June 2015. Planned repair and rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.*
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes ☐ No ☒	*Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai'i's Coastal Zone Management (CZM) program.*
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☐ No ☒	*There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.*
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes ☒ No ☐	*The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (USFWS) in their letter dated September 28, 2015 which is included in the Appendices, while project-specific mitigation measures are identified in the following section.*
Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes ☐ No ☒	*A field inspection identified an existing above-ground liquid propane gas tank of approximately 1,000 gallons which is surrounded by a six-foot high chain link fence. The tank is approximately 30 feet away from the south side of Building 6, and was installed by and is owned by the gas company. Repair and rehabilitation improvements for this project should not impact*

		this fuel storage tank. Should rehabilitation improvements increase the density of the project (e.g. increase the number of units and associated persons exposed to the hazard within the acceptable separation distance), mitigative measures would need to be implemented for the fuel tank in compliance with HUD requirements.
Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes ☐ No ☒	*The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.*
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes ☐ No ☒	*The project site is located in Zone D (area of undetermined flood hazard). A field inspection and information obtained from the Maintenance Supervisor confirmed no major flooding issues within the site. The project is in compliance with Executive Order 11988.*
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes ☐ No ☒	*Kauhale Nani is 35 years old and was first occupied in 1980. To be eligible for listing in the National Register of Historic Places (NRHP), a property must meet the National Register criteria for evaluation which involves examining its integrity, significance, and age (generally at least 50 years old). Due to its age, this housing project does not meet the eligibility criteria to be evaluated for the NRHP. In a letter to the State Historic Preservation Officer dated July 23, 2015, the HPHA determined that no historic properties would be affected by repair and rehabilitation improvements for this housing project. No comments or objections about this no effect determination were received.*
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes ☐ No ☒	*The project site is not situated along a highway or arterial roadway with a high volume of vehicular traffic that may generate significant noise. Kamehameha Highway is a major State roadway (Route 99) that begins near Joint Base Pearl Harbor-Hickam and ends near Haleiwa. The highway becomes Route 80 as it enters Wahiawā and transitions back to Route 99 at the north edge of town. Kamehameha Highway provides access to vehicles entering and leaving Wahiawā. Kilani Avenue (Route 7041), a major City and County*

		collector road, provides access to the project site via a connection to N. Cane Street which dead ends about 950 feet from the intersection. The HUD noise level calculator estimated noise levels at the project site to be 47.4 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes ☐ No ☒	*The housing project is located within the O'ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation.*
Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☐ No ☒	*There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.* *(http://www.fws.gov/wetlands/data/mapper.HTML)*
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes ☐ No ☒	*There are no Wild and Scenic Rivers in Hawai'i, which excludes this project from mitigation or formal consultation requirements (http://www.rivers.gov/map.php)*
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes ☐ No ☒	*Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, these improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects on minority populations and low-income populations. Improvements should benefit low-income and minority populations living within this housing project.*

Field Inspection (Date and completed by)**:** June 8, 2015
Glenn Tadaki, Planner
HHF Planners

Summary of Findings and Conclusions:

Repair and rehabilitation improvements implemented for this existing housing project by HPHA should not result in significant environmental impacts based upon research data collected, a field inspection, consultation with the site manager and maintenance staff, consultation with pertinent resource agencies, and prior HPHA experience implementing repair and rehabilitation improvements. Therefore, repair and rehabilitation improvements would comply and be consistent with the statutes, executive orders, and regulations addressed. Furthermore, HPHA would evaluate improvements planned to ensure the work is consistent with the designated categories of actions described under the project description section. Compliance with these factors evaluated are further addressed in the attached Source Documentation Statutory Worksheet along with relevant technical reports/assessments.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Law, Authority, or Factor	Mitigation Measure
Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	*Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.* *Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.* *Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.* *Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.* *Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo'i, impoundments or other vegetated water bodies.* *1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols.* *2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.* *3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including*

	human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area. *In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.* *Additional Measures: The following additional measures would be implemented:* *1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.*

Determination:

☐ This categorically excluded activity/project converts to **EXEMPT** per Section 58.34(a)(12), because it does not require any mitigation for compliance with any listed statutes or authorities, nor requires any formal permit or license; **Funds may be committed and drawn down after certification of this part** for this (now) EXEMPT project; OR

☒ This categorically excluded activity/project cannot convert to Exempt status because one or more statutes or authorities listed at Section 58.5 requires formal consultation or mitigation. Complete consultation/mitigation protocol requirements, **publish NOI/RROF and obtain "Authority to Use Grant Funds"** (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR

☐ This project is not categorically excluded OR, if originally categorically excluded, is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

Preparer Signature: Scott Ezer Date: 11-10-15

Name/Title/Organization: Mr. Scott Ezer, Vice President
HHF Planners

Responsible Entity Agency Official Signature:

David Y. Ige Date: APR 28 2016

Name/Title: Mr. David Y. Ige, Governor

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

KAUHALE NANI (HA # 1056)

TMK: (1) 7-4-007: 014

Hawai‘i Public Housing Authority (HPHA) Environmental Review

SOURCE DOCUMENTATION (SD) STATUTORY WORKSHEET

Site Visit Date: June 8, 2015
Prepared By: Glenn Tadaki

The Kauhale Nani housing project is located within the Wahiawā community on the island of O‘ahu. Wahiawā is situated in Central Oah‘u and lies to the east of Schofield Barracks, a U.S. Army military installation.

The project site is south of, and adjacent to the Wahiawā Police Station, and approximately 360 feet to the north of the Wahiawā District Park. Kauhale Nani within HPHA’s Asset Management Project (AMP) 49 which includes two other housing projects.

Kauhale Nani was first occupied in 1980 and has a street address of 310 North Cane Street. This housing project covers 3.46 acres, and is identified by Tax Map Key (1) 7-4-007: 014. The housing project consists of nine single- and two-story townhouses totaling 50 units with one, two, or three bedrooms per unit. The property is designated for “Urban” use by the State Land Use Commission and is zoned for “A-2 Medium Density Apartment” use by the City and County of Honolulu.

The project site is not located within a tsunami evacuation zone, and the entire site is located in Flood Zone D based upon the Flood Insurance Rate Map (Community Panel Numbers 15003C0120F and 15003C0140F, Revised November 2014). Zone D is an unstudied area where flood hazards are undetermined, but flooding is possible.

The following figures in Exhibit A provide supporting information on this housing project:

Figure 1: Location Map
Figure 2: TMK Map
Figure 3: Site Map
Figure 4: Flood Map

COMPLIANCE FACTORS

I. AIRPORT CLEAR ZONES AND ACCIDENT POTENTIAL ZONES (24 CFR PART 51D)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The housing project does not lie within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: 24 CFR 51 (D).

Honolulu International Airport Master Plan - 2010 (August 1994), State Department of Transportation, Airports Division; and

*Hawai`i Airports and Flying Safety Guide (2012-13, Fifth Edition, Revision 1)* Hawai`i Department of Transportation, Airports Division.

HDOT website at: http://hidot.hawaii.gov/airports/files/2013/01/Airport-Safety-Guide-2012-2013-5rev1.pdf

II. COASTAL BARRIER RESOURCES (COASTAL BARRIER IMPROVEMENT ACT OF 1990 [16 USC 3501])

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i does not have any designated coastal barrier resource units.

SUPPORTING DOCUMENTATION:

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/cbra/maps/mapper.html (Date accessed: 6/30/15).

III. FLOOD INSURANCE (FLOOD DISASTER PROTECTION ACT OF 1973 AND NATIONAL FLOOD INSURANCE REFORM ACT OF 1994 [42 USC 4001-4128 AND 42 USC 5154a])

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program.

As indicated in Flood Insurance Rate Map Panel 15003C0120F and 15003C0140F, the project site is located in Zone D (area of undetermined flood hazard). A field inspection and information obtained from the Maintenance Supervisor confirmed no major flooding issues within the site. Based on its description, the Kauhale Nani housing project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal any signs of previous flooding problems. An interview with the Maintenance Supervisor also determined that no major ponding or flooding issues have occurred on the project site.

Printed: Flood Insurance Rate Map, City and County of Honolulu, Community Panel Numbers 15003C0120F and 15003C0140F, Revised November 2014.

Hawai`i Department of Land and Natural Resources website at: http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 6/30/15)

IV. CLEAN AIR ACT (40 CFR PARTS 6, 51, 93)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. Environmental Protection Agency's Green Book for currently designated "nonattainment areas" as of June 2015. Planned rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.

SUPPORTING DOCUMENTATION:

Printed: *State of Hawai‘i Annual Summary 2013 Air Quality Data*. State of Hawai'i, Department of Health, July 2014.

U.S. Environmental Protection Agency website at: http://epa.gov/airquality/greenbk/

V. COASTAL ZONE MANAGEMENT ACT (16 USC 1451, SECTIONS 307 (C), (D)

CONTACT:
Mr. John Nakagawa
Office of Planning
Department of Business, Economic Development & Tourism
State of Hawai‘i
P.O. Box 2359
Honolulu, Hawai'i, 96804-2359

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai‘i's Coastal Zone Management (CZM) program.

SUPPORTING DOCUMENTATION:

Contact: In an e-mail to the Office of Planning (OP) dated July 27, 2015, the HPHA determined that the use of HUD funds for the implementation of repair and rehabilitation improvements does not require review for consistency with Hawai‘i's CZM program. The OP confirmed this determination in an e-mail dated July 28, 2015 and included in the Appendices.

Experience: As part of past environmental reviews in December 2010, a letter from the OP dated July 20, 2005 determined that their review for consistency with Hawai‘i's CZM program was not required. A copy of this letter is included in the Appendices.

VI. CONTAMINATION AND TOXIC SUBSTANCES (24 CFR PART 50.3 & 58.5(I)(2))

SUPPORTING DOCUMENTS

X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Project Not Affected.

There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.

SUPPORTING DOCUMENTATION:

Field: A site inspection and interview with the Maintenance Supervisor revealed no presence of any toxic or radioactive materials on the project site that warrant any concern. A secure storage room in the Kauhale Nani community center is used to store flammable and hazardous materials for the housing project. The storage room is in acceptable condition and labeled with signage.

Study: Environmental Data Resources, Inc. (EDR), conducted a search of available environmental records and prepared a Radius Map Report (Inquiry Number 4237094.230s, March 17, 2015). EDR reviewed more than 25 federal and statewide regulatory databases for information regarding the treatment, storage, disposal and release of toxic chemicals at the project site and within specific radii (generally 1 mile) of the site. A Detail Map within the EDR report documents those sites identified within a 0.25 mile radius of the project site. Some of the sites contain underground storage tanks (UST) that are currently in use or are permanently out of use. The EDR report in Exhibit B includes the results of their research findings.

In the vicinity of the project site, the EDR report notes that cleanup for a leaking UST at the adjacent Wahiawā Police Station on 330 N. Cane Street was completed in 1999 and that one 12,000 gallon gasoline UST is presently in use, while four gasoline USTs (total 9,000 gallons) are permanently out of use. The nearby Wahiawā Industrial Center on 401 N. Cane Street is currently classified as a non-generator because it does not generate hazardous waste. No violations were found when the industrial center was formerly classified as a large quantity generator. The report also notes that two gasoline USTs (total 2,550 gallons) at 911 Palm Place and one gasoline UST (1,000 gallons) at 930 Palm Place are permanently out of use. In addition, the report notes that cleanup for a leaking UST at Hawaiian Telcom's Wahiawā Central Office at 252 Koa Street was completed in 2004 and that one 4,000 gallon diesel UST is currently in use, one 4,000 gallon diesel UST is temporarily out of use, and six diesel USTs (total 32,000 gallons) are permanently out of use.

The project site was not identified as a Formerly Used Defense Site (FUDS) by the U.S. Army Corps of Engineers and is not subject to any cleanup actions for Department of Defense-generated contamination.

VII. ENDANGERED SPECIES (50 CFR PART 402)

CONTACT:
Mr. Loyal Mehrhoff, Field Supervisor
Pacific Islands Administrator
Fish and Wildlife Services
U.S. Department of the Interior
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawai'i 96813
Tel. #: 792-9400

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Adverse Effect Subject to Mitigation

The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices.

SUPPORTING DOCUMENTATION:

Contact: A letter from the HPHA dated July 24, 2015 was submitted to the Pacific Island Administrator for the FWS determining that repair and rehabilitation improvements that may be implemented using HUD funds for this housing project would have no likelihood of effect on any listed species or proposed species, or existing or proposed designated critical habitat subject to certain measures. Concurrence with this determination along with proposed minimization and avoidance measures was received from the FWS in a letter dated September 28, 2015 which is included in the Appendices. This housing project is subject to the following measures.

Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.

Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.

Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.

Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and

maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.

Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo‘i, impoundments or other vegetated water bodies.

1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols.
2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.
3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.

In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.

Additional Measures: The following additional measures would be implemented:

1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.

Experience: The FWS was previously consulted as part of environmental reviews that were completed in 2005 (39 housing projects) and 2010 (70 housing projects) which supported the determination that repair and rehabilitation improvements would either: 1) have no likelihood of effect for certain housing projects; or 2) not likely adversely affect federally listed species or critical habitat for certain housing projects subject to mitigative measures. A summary of these consultation efforts follows.

2005 Consultation: In a letter dated July 15, 2005, the Housing and Community Development Corporation of Hawai‘i (predecessor to the HPHA), determined that the implementation of minor repair and rehabilitation improvements for 39 housing projects would not have an adverse effect on federally-listed species or critical habitat. In a letter dated August 11, 2005, the FWS concurred with the HCDCH determination.

2010 Consultation: In a letter dated May 17, 2010, the HPHA informed the FWS that HUD funds would be used to immediately implement repair and rehabilitation improvements for six housing projects on O‘ahu and the island of Hawai`i. In a subsequent letter dated May 21, 2010, the FWS was informed that HPHA would be using HUD funds to implement minor repair and rehabilitation improvements for 64 projects throughout the State. In both letters, the HPHA determined that the repair and rehabilitation improvements were not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat. Based on further consultation and a

meeting with FWS staff on June 24, 2010, the HPHA determined that repair and rehabilitation improvements for most of their housing projects would not likely adversely affect any listed or proposed species, or existing or proposed designated habitat, subject to various mitigative measures for certain housing projects.

VIII. EXPLOSIVE AND FLAMMABLE OPERATIONS (24 CFR PART 51C)

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact Subject to Conditions and Mitigation, if Applicable.

A field inspection identified an existing above-ground explosive or flammable material storage container in excess of 100 gallons. The liquid propane gas (LPG) tank is approximately 1,000 gallons and is surrounded by a six-foot high chain link fence. The tank is about 30 feet away from the south side of Building 6, and was installed by and is owned by the gas company. Repair and rehabilitation improvements for this project should not impact this fuel storage tank. Should rehabilitation improvements increase the density of the project (e.g. increase the number of units and associated persons exposed to the hazard within the acceptable separation distance), mitigative measures would need to be implemented for the fuel tank in compliance with HUD requirements.

Under CFR Title 24, Part 51, Subpart C, increasing the residential density and number of people under a rehabilitation project using HUD funding would be considered a “HUD-assisted project.” Consequently, the existing fuel storage tank would be subject to standards under this regulation for establishing acceptable separation distances, or the application of the standards can be eliminated or modified if other conditions apply or mitigative measures are provided as identified below. HPHA would need to evaluate site conditions, comply with regulatory requirements, and determine the appropriate measure to implement.

1. The nature of the topography shields the proposed project form the hazard.
2. An existing permanent fire resistant structure of adequate size and strength will shield the proposed project from the hazard.
3. A barrier is constructed surrounding the hazard, at the site of the project, or in between the potential hazard and the proposed project.
4. The structure and outdoor areas used by people are designed to withstand blast overpressure and thermal radiation anticipated from the potential hazard (e.g., the project is of masonry and steel or reinforced concrete and steel construction).

SUPPORTING DOCUMENTATION:

Field: There is approximately 1,000 gallon above-ground fuel storage tank located about 30 feet away from the south side of Building 6. The LPG tank was installed by and is owned by the gas company.

Printed: 24 CFR, Part 51, Subpart C.

Per CFR Title 24 Part 51.201 (Definitions), rehabilitation and modernization improvements that do not increase the density and number of people being exposed to hazardous operations do not meet the definition of a "HUD-assisted project," and are not subject to acceptable separation distance requirements under this regulation. Increasing the density (e.g. increase the number of units and associated persons exposed to the hazard within the acceptable separation distance) under a rehabilitation project using HUD funding would be considered a "HUD-assisted project." Consequently, the existing fuel storage tank would be subject to standards under this regulation for establishing acceptable separation distances, or the application of the standards can be eliminated or modified if other conditions apply or mitigative measures are provided as identified below. HPHA would need to evaluate site conditions, comply with regulatory requirements, and determine the appropriate measure to implement.

1. The nature of the topography shields the proposed project form the hazard.
2. An existing permanent fire resistant structure of adequate size and strength will shield the proposed project from the hazard.
3. A barrier is constructed surrounding the hazard, at the site of the project, or in between the potential hazard and the proposed project.
4. The structure and outdoor areas used by people are designed to withstand blast overpressure and thermal radiation anticipated from the potential hazard (e.g., the project is of masonry and steel or reinforced concrete and steel construction).

IX. FARMLANDS PROTECTION (7 CFR PART 658)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. Since the property consists of an existing housing development within an

urbanized area, no farmlands would be impacted by the implementation of repair and rehabilitation improvements.

Printed: The property is designated for "Urban" use by the State Land Use Commission and is zoned for "A-2 Medium Density Apartment" use by the City and County of Honolulu.

Hawai`i Office of Planning website at: http://planning.hawaii.gov/gis/
(Date accessed: 6/30/2015)

X. FLOODPLAIN MANAGEMENT (EXECUTIVE ORDER 11988, 24 CFR PART 55)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program.

The project site is located in Zone D (area of undetermined flood hazard). A field inspection and information obtained from the Maintenance Supervisor confirmed no major flooding issues within the site. The project is in compliance with Executive Order 11988.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal any signs of previous flooding problems. An interview with the Maintenance Supervisor also determined that no major ponding or flooding issues have occurred on the project site.

Printed: City and County of Honolulu, Flood Insurance Rate Map, Hawai'i Community Panel Numbers 15003C0120F and 15003C0140F, Revised November 2014

Hawai`i Department of Land and Natural Resources website at:
http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 6/30/15)

XI. HISTORIC PRESERVATION (NATIONAL HISTORIC PRESERVATION ACT OF 1966; SECTIONS 106 AND 110; 36 CFR, PART 800)

CONTACT:

Ms. Suzanne Case, Chairperson
Department of Land and Natural Resources (DLNR)
State of Hawai'i
1151 Punchbowl Street
Honolulu, Hawai'i 96813
Tel. #: 587-0400

SUPPORTING DOCUMENTS

X	Field
X	Contact
X	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Effect on Historic Properties

Kauhale Nani is 35 years old and was constructed in 1980. To be eligible for listing in the National Register of Historic Places (NRHP), a property must meet the National Register criteria for evaluation which involves examining its integrity, significance, and age (generally at least 50 years old). Due to its age, this housing project does not meet the eligibility criteria to be evaluated for the NRHP. In a letter to the State Historic Preservation Officer (SHPO) dated July 23, 2015, the HPHA determined that no historic properties would be affected (no effect) by repair and rehabilitation improvements for this housing project. No comments or objections about this no effect determination were received.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the Kauhale Nani housing project did not locate any existing or potential archaeological sites (e.g., heiau) or cultural features on the property. The project site has undergone extensive ground-altering activities since it was initially developed and improved with buildings, driveways, parking lots, sidewalks, and other related improvements. An interview with the Maintenance Supervisor indicates that no known sites or features are present on the property.

Contact: A letter from the HPHA dated July 23, 2015, which is included in the Appendix, was submitted to the State Historic Preservation Officer [SHPO] (Chair of State Board of Land and Natural Resources) as part of Section 106 consultation determining that no historic properties would be affected (no effect) by repair and rehabilitation improvements that may be implemented using HUD funds for this housing project. The SHPO did not submit any comments or objections on the "no effect" determination for this housing project, which included follow-up e-mails with the State Historic Preservation Division regarding a response. On September 28, 2015, notice of HPHA's determination was also distributed to several native Hawaiian organizations and the various County Planning Departments. No concerns or opposition to this determination was received.

Printed: A review of the U.S. National Parks Service website for the National Register of Historic Places did not identify any historic properties within the limits of this housing project. A similar review of the State DLNR website for the State Register of Historic Places revealed that there are no historic properties within the project site.

National Register: U.S. National Park Service website at:
http://www.nps.gov/nr/research/ (Date accessed: 7/2/15).

State Register: Hawai`i Department of Land and Natural Resources website at:
http://dlnr.hawaii.gov/shpd/state-register/ (Date accessed: 7/2/15).

Experience: In letter to the SHPO dated April 19, 2011, the HPHA determined that minor repair and rehabilitation improvement at 57 public housing projects throughout Hawai'i (including Kauhale Nani) would have "no effect" on historic properties. The SHPO had no comments or objections on the "no effect" determination.

XII. NOISE ABATEMENT CONTROL (24 CFR PART 51B)

SUPPORTING DOCUMENTS

X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Within HUD Noise Standards.

The project site is not situated along a highway or arterial roadway with a high volume of vehicular traffic that may generate significant noise. Kamehameha Highway is a major State roadway (Route 99) that begins near Joint Base Pearl Harbor-Hickam and ends near Haleiwa. The highway becomes Route 80 as it enters Wahiawā and transitions back to Route 99 at the north edge of town. Kamehameha Highway provides access to vehicles entering and leaving Wahiawā. Kilani Avenue (Route 7041), a major City and County collector road, provides access to the project site via a connection to N. Cane Street which dead ends about 950 feet from the intersection. The HUD noise level calculator estimated noise levels at the project site to be 47.4 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

SUPPORTING DOCUMENTATION:

Field: N. Cane Street is located near the commercial core of Wahiawā. It provides access to Kauhale Nani and dead ends about 950 feet north from its intersection with Kilani Avenue. Because it results in a dead end, the traffic volume along N. Cane Street is light and noise generated by traffic along Kilani Avenue is minimal due to the distance between the street and the housing project. Intervening buildings between Kilani Avenue and the housing project also help dampen any ambient traffic noise to insignificant levels. No significant noise generating sources were identified at the project site during the site inspection and an interview with the Maintenance Supervisor did not identify any loud noise producing sources in the area. Noise sources are predominantly associated with vehicular traffic along adjacent roadways and voices from surrounding activities.

Study: Land uses in the vicinity of the project site primarily consist of commercial and light industrial enterprises. The HUD day/night noise level calculator was used to estimate approximate traffic noise levels at the project site. Kilani Avenue is a major City and County roadway that is generally aligned in an easterly to westerly direction. It serves as one of two collector roads serving Wahiawā and accommodates vehicle traffic entering and leaving the town. Kilani Avenue handles about 13,272 vehicles a day based upon State Department of Transportation 2013 traffic data. Given the distance between the project site and the center line of this roadway (about 375 feet), the estimated noise levels at the project site using the HUD calculator was 47.4 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

XIII. SOLE SOURCE AQUIFER (40 CFR PART 149)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact on Sole Source Aquifer.

The housing project is located within the O'ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation. However, if exceptional circumstances require compliance steps with any of these authorities, such compliance must be established and documented prior to approving the site-specific loan or grant.

SUPPORTING DOCUMENTATION:

Printed: This determination was based upon review of the Sole Source Aquifer Memorandum of 4/30/90 (Sections II.B.1 and II.B.2) and consideration of the type of rehabilitation related improvements that would be conducted for this project.

XIV. WETLANDS PROTECTION (EXECUTIVE ORDER 11990)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the property did not identify the presence of any wetlands.

Printed: U.S Fish and Wildlife Service website at: http://www.fws.gov/wetlands/data/mapper.html (Date accessed 6/30/2015).

XV. WILD AND SCENIC RIVERS ACT (16 USC 1271, SECTION 7 (B), (C))

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no Wild and Scenic Rivers in Hawai‘i, which excludes this project from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: National Wild and Scenic Rivers System website at: http://www.rivers.gov/index.php (Date accessed: 6/30/2015).

XVI. ENVIRONMENTAL JUSTICE (EXECUTIVE ORDER NO. 12898)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact on Requirements.

Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, repair and rehabilitation improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations. Repair and rehabilitation improvements should benefit low-income and minority populations living within this housing project.

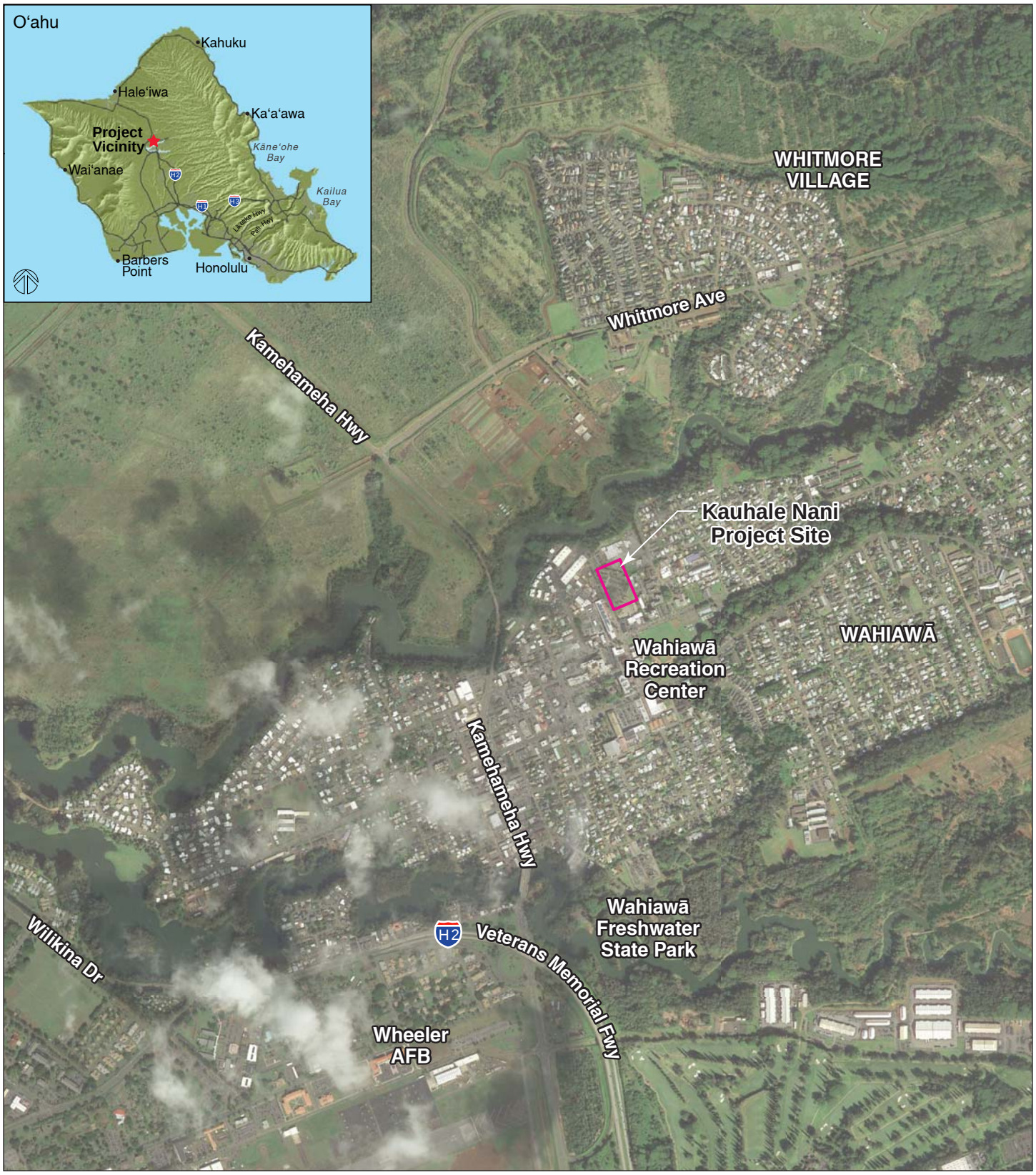
SUPPORTING DOCUMENTATION:

Printed: Executive Order 12898.

U.S. Department of Housing and Urban Development website at: https://www.hudexchange.info/environmental-review/environmental-justice/

EXHIBIT A

Location Map, TMK Map, Site Map, Flood Map, and Site Photos



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

HPHA No. 1056 - Kauhale Nani (AMP 49)

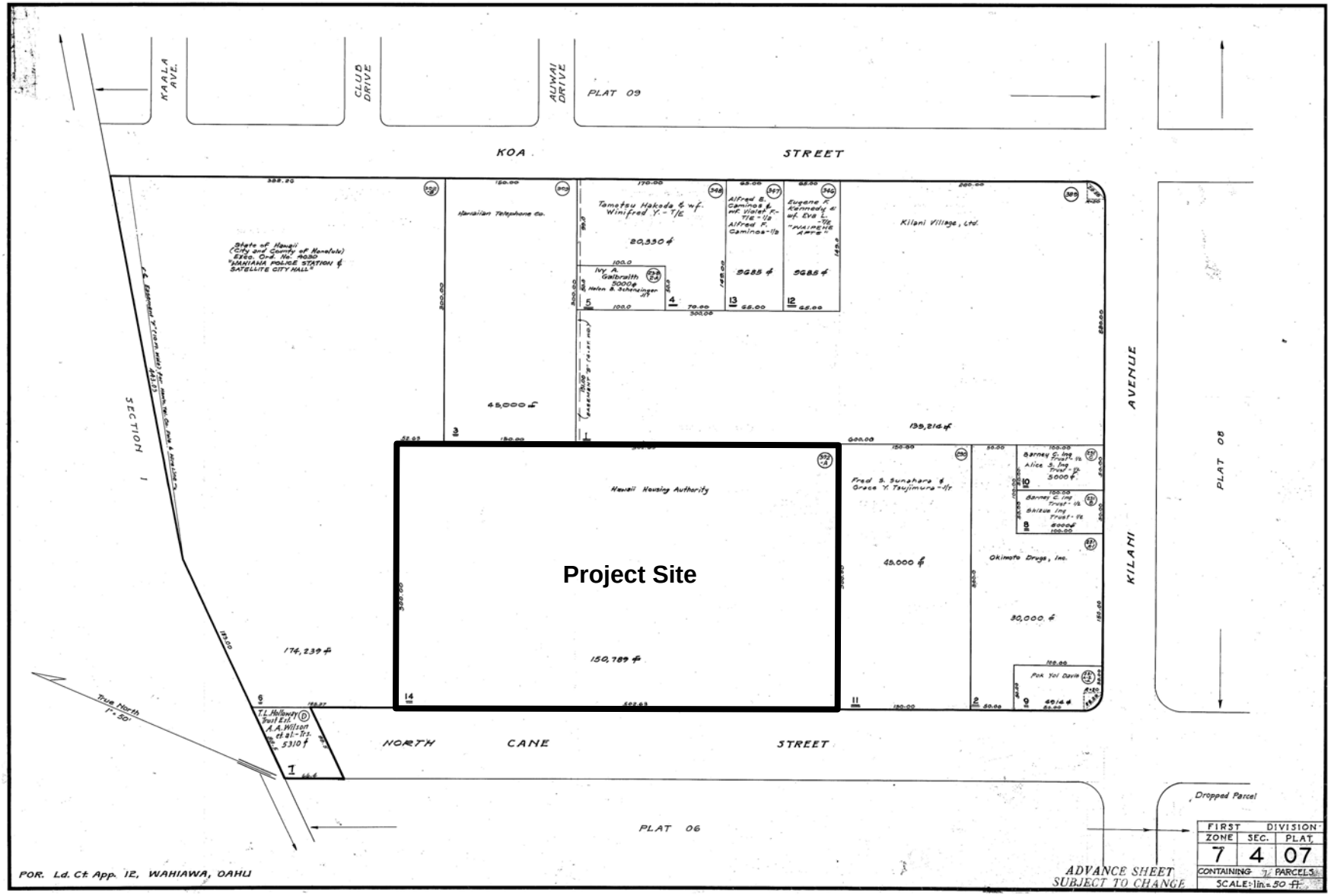
Figure 1 - Project Location Map

3/3/2014

Wahiawā, O'ahu

2,000 FT

HHF PLANNERS
places for people

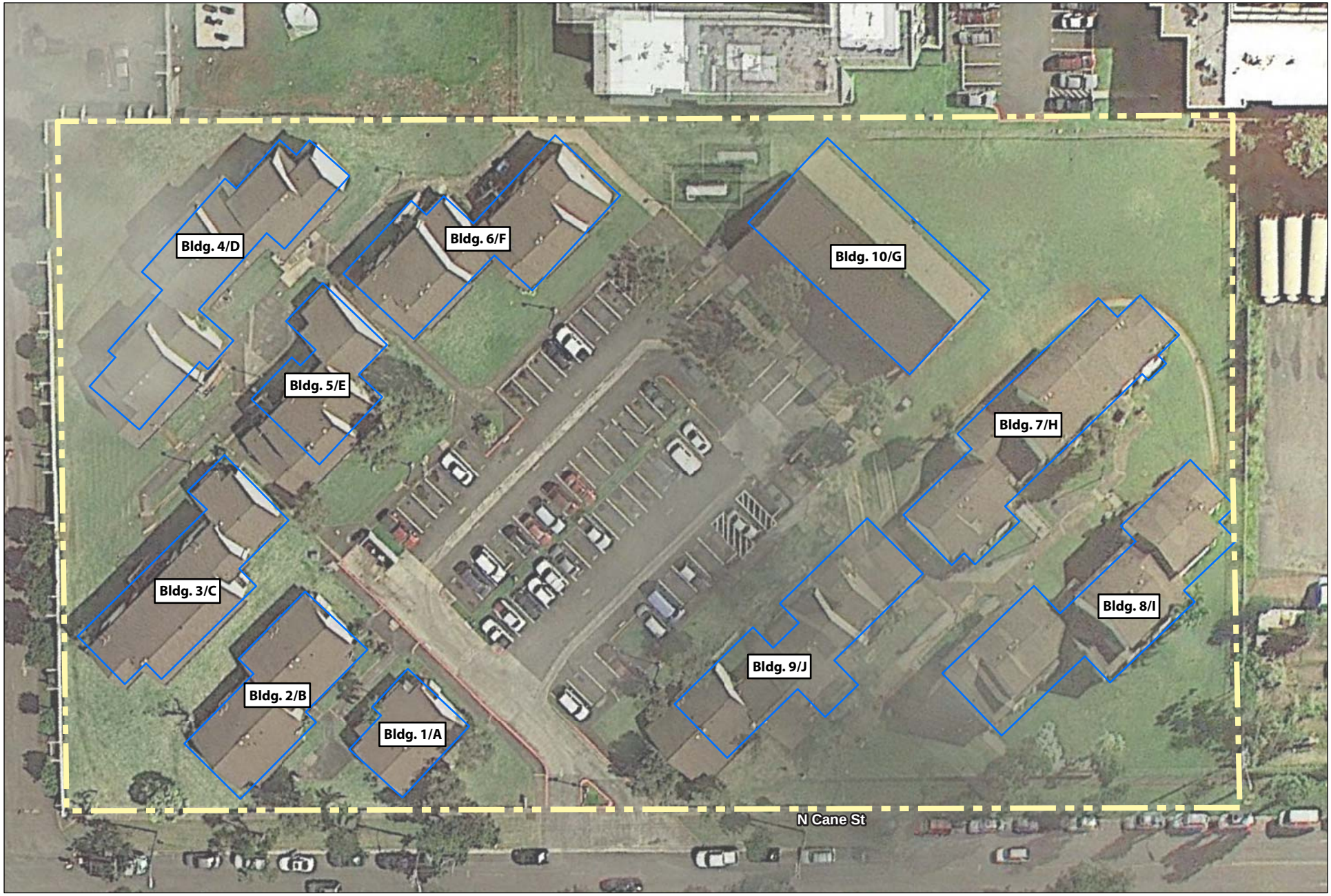


HPHA No. 1056 - Kauhale Nani (AMP 49)

Figure 2 - TMK Map

Wahiawā, O'ahu

HHF PLANNERS
places for people



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

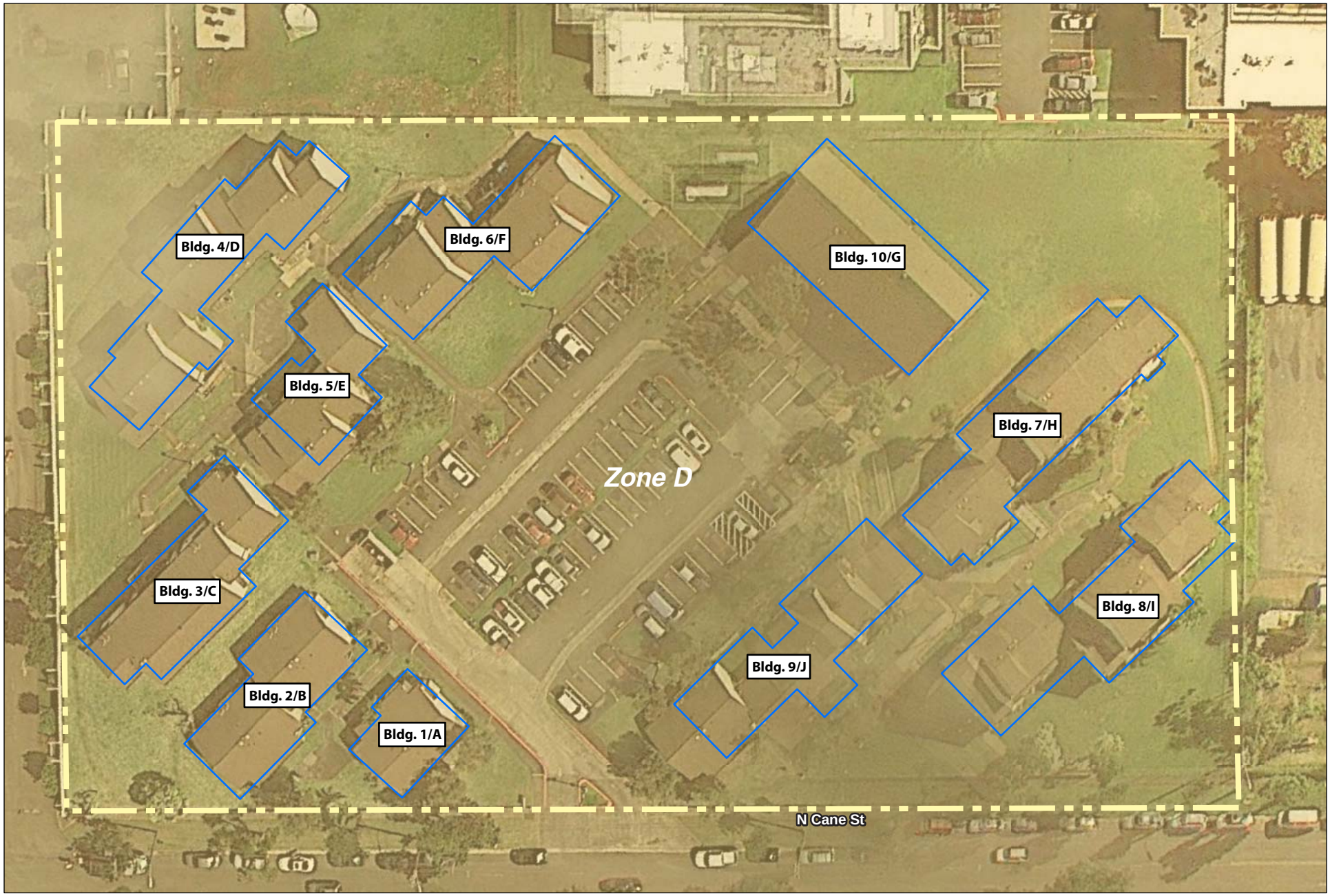
HPHA No. 1056 - Kauhale Nani (AMP 49)

Figure 3 - Site Map

Wahiawā, O'ahu

40 FEET

HHF PLANNERS
places for people



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

LEGEND

Zone D - Unstudied Area

HPHA No. 1056 - Kauhale Nani (AMP 49)

Figure 4 - Flood Map

Wahiawā, O'ahu

40 FEET

HHF PLANNERS
places for people

KAUHALE NANI
SITE PHOTOS

Project sign, large landscaped yard frontage

View of street frontage at project entry, facing north

View of project's housing units from main entry/driveway

Centralized parking area surrounded by this project's housing units

Project's northern boundary at Building 3/C, facing east

Project's eastern boundary, facing south

KAUHALE NANI
SITE PHOTOS

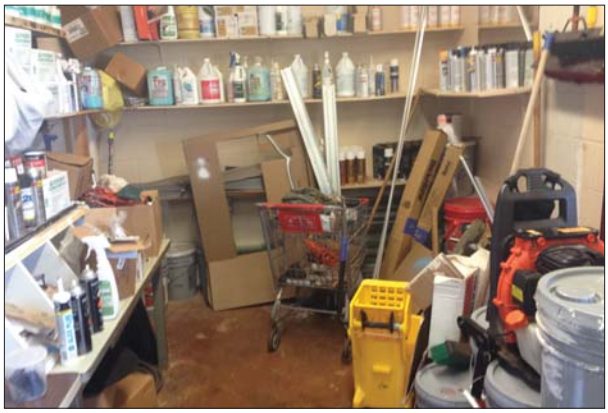
Project's southern boundary, facing east. Busses and builidngs on adjacent properties.

Open space surrounding Buildings 7, 8 & 9, facing west

Drainage culvert directs runoff away from housing

Project's eastern boundary. Building 6/F and 4/D on left, neighbor beyond chainlink fence.

1,000 gallon gas tank, Building 10/G behind



Storage Area

EXHIBIT B

EDR Radius Map Report

Kauhale Nani
310 North Cane St.
Wahiawa, HI 96786

Inquiry Number: 4237094.230s
March 17, 2015

EDR Summary Radius Map Report

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

FORM-NULL-PVC

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

310 NORTH CANE ST.
HONOLULU County, HI 96786

COORDINATES

Latitude (North):	21.5015000 - 21˚ 30' 5.40''
Longitude (West):	158.0254000 - 158˚ 1' 31.44''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	600952.0
UTM Y (Meters):	2377826.5
Elevation:	919 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	USGS 7.5 min quad index

Target Property:	S
Source:	USGS 7.5 min quad index

MAPPED SITES SUMMARY

Target Property Address:
310 NORTH CANE ST.
, HI 96786

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
Reg	WHEELER AIR FORCE BA		DOD	Same	4510, SSW
Reg	SCHOFIELD BARRACKS M		DOD	Same	3358, SE
A1	WAHIAWA INDUSTRIAL C	401 N CANE	RCRA NonGen / NLR	Lower	188, SW
A2	WAHIAWA POLICE STATI	330 N CANE ST	LUST, UST, Financial Assurance	Lower	248, SSW
B3	KIHARA ELECTRIC, INC	930 PALM PL	UST	Lower	437, West
B4		920 PALM PL	EDR US Hist Auto Stat	Lower	451, West
B5		918 PALM PL	EDR US Hist Auto Stat	Lower	458, West
B6	T-N-H PLUMBING, INC.	911 PALM PL	UST, Financial Assurance	Lower	532, WSW
7		232 KOA ST	EDR US Hist Auto Stat	Higher	579, East
C8		207 N CANE BAY 4	EDR US Hist Auto Stat	Lower	588, South
C9		207 N CANE ST	EDR US Hist Auto Stat	Lower	589, South
10		322 PALM ST	EDR US Hist Auto Stat	Lower	648, WSW
11	WAHIAWA CENTRAL OFFI	252 KOA ST	LUST, UST, Financial Assurance	Higher	649, ENE
D12	MAHALO KILANI MART	935 KILANI AVE	UST, Financial Assurance	Lower	755, SSW
D13	PIONEER CONTRACTING	930 KILANI AVE	RCRA-CESQG, FINDS	Lower	758, SSW
D14	PIONEER CONTRACTING	930 KILANI AVE	UST	Lower	758, SSW
D15		202 PALM ST	EDR US Hist Auto Stat	Lower	840, SSW
16		961 CENTER ST	EDR US Hist Auto Stat	Higher	965, South
E17	NCTAMSPAC CENTER STR	500 CENTER ST	SHWS, SPILLS, ENG CONTROLS	Lower	1102, South
E18	NAVAL COMPUTER AND T	500 CENTER STREET	NPL, CERCLIS, US ENG CONTROLS, US INST CONTROL,...	Lower	1102, South
E19	NCTAMS EASTPAC - WAH	500 CENTER ST	RCRA-SQG	Lower	1102, South
20	PIONEER HOME SUPPLY	235 KELLOG ST	UST	Higher	1217, East
F21	UNOCAL SS NO 3128	966 CALIFORNIA AVE	RCRA-SQG, FINDS	Higher	1222, South
F22	MID PAC PETROLEUM LL	966 CALIFORNIA AVE	SHWS, LUST, UST, Financial Assurance	Higher	1222, South
F23		966 CALIFORNIA AVE	EDR US Hist Auto Stat	Higher	1222, South
G24	WAHIAWA CHEVRON SS	1011 CALIFORNIA AVE	RCRA-CESQG, FINDS	Higher	1270, SSE
G25		1011 CALIFORNIA AVE	EDR US Hist Auto Stat	Higher	1270, SSE
G26	WAHIAWA CHEVRON SS	1011 CALIFORNIA AVE	SHWS, LUST, UST, Financial Assurance	Higher	1270, SSE
F27	HOWARD CONSTRUCTION,	1001 CALIFORNIA AVE	UST	Higher	1281, SSE
28	ACE TRANSMISSION	720 KILANI AVE	LUST, UST, Financial Assurance	Lower	1340, SW
29	WAHIAWA CIVIC CENTER	910 CALIFORNIA AVE	LUST, UST	Higher	1372, South
30	U.S. POSTAL SERVICE	115 LEHUA ST	LUST, UST, Financial Assurance	Lower	1468, SSW
31	YAMA'S TEXACO	805 CALIFORNIA AVE	LUST, UST	Lower	1605, SSW
32	C&CH WAHIAWA FIRE ST	640 CALIFORNIA AVE	LUST, UST	Lower	1959, SSW
33	IMM WAHIAWA	150 N. KAMEHAMEHA HW	LUST, UST, Financial Assurance	Lower	2030, SW
34	MAHALO WAHIAWA	119 N KAMEHAMEHA HWY	LUST, UST, Financial Assurance	Lower	2194, SW
35	F & M FOOD MART CORP	10 S KAMEHAMEHA HWY	LUST, UST, Financial Assurance	Lower	2551, SW
36	SILVER CREST ELDERLY	529 PINE ST	SHWS	Lower	3281, South

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: A review of the NPL list, as provided by EDR, and dated 12/16/2014 has revealed that there is 1 NPL site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
NAVAL COMPUTER AND T	***500 CENTER STREET***	***S 1/8 - 1/4 (0.209 mi.)***	***E18***	***11***

Federal CERCLIS list

CERCLIS: A review of the CERCLIS list, as provided by EDR, and dated 10/25/2013 has revealed that there is 1 CERCLIS site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
NAVAL COMPUTER AND T	***500 CENTER STREET***	***S 1/8 - 1/4 (0.209 mi.)***	***E18***	***11***

Federal RCRA generators list

RCRA-SQG: A review of the RCRA-SQG list, as provided by EDR, and dated 12/09/2014 has revealed that there are 2 RCRA-SQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
UNOCAL SS NO 3128	***966 CALIFORNIA AVE***	***S 1/8 - 1/4 (0.231 mi.)***	***F21***	***11***

Lower Elevation	Address	Direction / Distance	Map ID	Page
NCTAMS EASTPAC - WAH	500 CENTER ST	S 1/8 - 1/4 (0.209 mi.)	E19	11

EXECUTIVE SUMMARY

RCRA-CESQG: A review of the RCRA-CESQG list, as provided by EDR, and dated 12/09/2014 has revealed that there are 2 RCRA-CESQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WAHIAWA CHEVRON SS	***1011 CALIFORNIA AVE***	***SSE 1/8 - 1/4 (0.241 mi.)***	***G24***	***12***

Lower Elevation	Address	Direction / Distance	Map ID	Page
PIONEER CONTRACTING	***930 KILANI AVE***	***SSW 1/8 - 1/4 (0.144 mi.)***	***D13***	***10***

Federal institutional controls / engineering controls registries

US ENG CONTROLS: A review of the US ENG CONTROLS list, as provided by EDR, and dated 09/18/2014 has revealed that there is 1 US ENG CONTROLS site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
NAVAL COMPUTER AND T	***500 CENTER STREET***	***S 1/8 - 1/4 (0.209 mi.)***	***E18***	***11***

US INST CONTROL: A review of the US INST CONTROL list, as provided by EDR, and dated 09/18/2014 has revealed that there is 1 US INST CONTROL site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
NAVAL COMPUTER AND T	***500 CENTER STREET***	***S 1/8 - 1/4 (0.209 mi.)***	***E18***	***11***

State- and tribal - equivalent CERCLIS

SHWS: A review of the SHWS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 4 SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MID PAC PETROLEUM LL	***966 CALIFORNIA AVE***	***S 1/8 - 1/4 (0.231 mi.)***	***F22***	***11***
WAHIAWA CHEVRON SS	***1011 CALIFORNIA AVE***	***SSE 1/8 - 1/4 (0.241 mi.)***	***G26***	***12***

Lower Elevation	Address	Direction / Distance	Map ID	Page
NCTAMSPAC CENTER STR	***500 CENTER ST***	***S 1/8 - 1/4 (0.209 mi.)***	***E17***	***10***
SILVER CREST ELDERLY	529 PINE ST	S 1/2 - 1 (0.621 mi.)	36	15

State and tribal leaking storage tank lists

LUST: A review of the LUST list, as provided by EDR, and dated 12/16/2014 has revealed that there are 12 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WAHIAWA CENTRAL OFFI	***252 KOA ST***	***ENE 0 - 1/8 (0.123 mi.)***	***11***	***9***
Facility Status: Site Cleanup Completed (NFA)				
MID PAC PETROLEUM LL	***966 CALIFORNIA AVE***	***S 1/8 - 1/4 (0.231 mi.)***	***F22***	***11***
Facility Status: Site Cleanup Completed (NFA)				
WAHIAWA CHEVRON SS	***1011 CALIFORNIA AVE***	***SSE 1/8 - 1/4 (0.241 mi.)***	***G26***	***12***
Facility Status: Site Cleanup Completed (NFA)				
WAHIAWA CIVIC CENTER	***910 CALIFORNIA AVE***	***S 1/4 - 1/2 (0.260 mi.)***	***29***	***13***
Facility Status: Site Cleanup Completed (NFA)				

Lower Elevation	Address	Direction / Distance	Map ID	Page
WAHIAWA POLICE STATI	***330 N CANE ST***	***SSW 0 - 1/8 (0.047 mi.)***	***A2***	***7***
Facility Status: Site Cleanup Completed (NFA)				
ACE TRANSMISSION	***720 KILANI AVE***	***SW 1/4 - 1/2 (0.254 mi.)***	***28***	***13***
Facility Status: Site Cleanup Completed (NFA)				
U.S. POSTAL SERVICE	***115 LEHUA ST***	***SSW 1/4 - 1/2 (0.278 mi.)***	***30***	***13***
Facility Status: Site Cleanup Completed (NFA)				
YAMA'S TEXACO	***805 CALIFORNIA AVE***	***SSW 1/4 - 1/2 (0.304 mi.)***	***31***	***14***
Facility Status: Site Cleanup Completed (NFA)				
C&CH WAHIAWA FIRE ST	***640 CALIFORNIA AVE***	***SSW 1/4 - 1/2 (0.371 mi.)***	***32***	***14***
Facility Status: Site Cleanup Completed (NFA)				
IMM WAHIAWA	***150 N. KAMEHAMEHA HW***	***SW 1/4 - 1/2 (0.384 mi.)***	***33***	***14***
Facility Status: Site Cleanup Completed (NFA)				
Facility Status: Exposure Prevention Management Plan				
MAHALO WAHIAWA	***119 N KAMEHAMEHA HWY***	***SW 1/4 - 1/2 (0.416 mi.)***	***34***	***15***
Facility Status: Site Cleanup Completed (NFA)				
F & M FOOD MART CORP	***10 S KAMEHAMEHA HWY***	***SW 1/4 - 1/2 (0.483 mi.)***	***35***	***15***
Facility Status: Site Cleanup Completed (NFA)				

State and tribal registered storage tank lists

UST: A review of the UST list, as provided by EDR, and dated 12/18/2014 has revealed that there are 10 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WAHIAWA CENTRAL OFFI	***252 KOA ST***	***ENE 0 - 1/8 (0.123 mi.)***	***11***	***9***
PIONEER HOME SUPPLY	235 KELLOG ST	E 1/8 - 1/4 (0.230 mi.)	20	11
MID PAC PETROLEUM LL	***966 CALIFORNIA AVE***	***S 1/8 - 1/4 (0.231 mi.)***	***F22***	***11***
WAHIAWA CHEVRON SS	***1011 CALIFORNIA AVE***	***SSE 1/8 - 1/4 (0.241 mi.)***	***G26***	***12***
HOWARD CONSTRUCTION,	1001 CALIFORNIA AVE	SSE 1/8 - 1/4 (0.243 mi.)	F27	13

Lower Elevation	Address	Direction / Distance	Map ID	Page
WAHIAWA POLICE STATI	***330 N CANE ST***	***SSW 0 - 1/8 (0.047 mi.)***	***A2***	***7***

Lower Elevation	Address	Direction / Distance	Map ID	Page
KIHARA ELECTRIC, INC	930 PALM PL	W 0 - 1/8 (0.083 mi.)	B3	7
T-N-H PLUMBING, INC.	***911 PALM PL***	***WSW 0 - 1/8 (0.101 mi.)***	***B6***	***8***
MAHALO KILANI MART	***935 KILANI AVE***	***SSW 1/8 - 1/4 (0.143 mi.)***	***D12***	***9***
PIONEER CONTRACTING	930 KILANI AVE	SSW 1/8 - 1/4 (0.144 mi.)	D14	10

State and tribal institutional control / engineering control registries

ENG CONTROLS: A review of the ENG CONTROLS list, as provided by EDR, and dated 12/02/2014 has revealed that there is 1 ENG CONTROLS site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
NCTAMSPAC CENTER STR	***500 CENTER ST***	***S 1/8 - 1/4 (0.209 mi.)***	***E17***	***10***

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

RCRA NonGen / NLR: A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 12/09/2014 has revealed that there is 1 RCRA NonGen / NLR site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
WAHIAWA INDUSTRIAL C	401 N CANE	SW 0 - 1/8 (0.036 mi.)	A1	7

DOD: A review of the DOD list, as provided by EDR, and dated 12/31/2005 has revealed that there are 2 DOD sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WHEELER AIR FORCE BA		SSW 1/2 - 1 (0.854 mi.)	0	7
SCHOFIELD BARRACKS M		SE 1/2 - 1 (0.636 mi.)	0	7

ROD: A review of the ROD list, as provided by EDR, and dated 11/25/2013 has revealed that there is 1 ROD site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
NAVAL COMPUTER AND T	***500 CENTER STREET***	***S 1/8 - 1/4 (0.209 mi.)***	***E18***	***11***

EXECUTIVE SUMMARY

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Auto Stat: A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there are 10 EDR US Hist Auto Stat sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	232 KOA ST	E 0 - 1/8 (0.110 mi.)	7	8
Not reported	961 CENTER ST	S 1/8 - 1/4 (0.183 mi.)	16	10
Not reported	966 CALIFORNIA AVE	S 1/8 - 1/4 (0.231 mi.)	F23	12
Not reported	1011 CALIFORNIA AVE	SSE 1/8 - 1/4 (0.241 mi.)	G25	12

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	920 PALM PL	W 0 - 1/8 (0.085 mi.)	B4	8
Not reported	918 PALM PL	W 0 - 1/8 (0.087 mi.)	B5	8
Not reported	207 N CANE BAY 4	S 0 - 1/8 (0.111 mi.)	C8	8
Not reported	207 N CANE ST	S 0 - 1/8 (0.112 mi.)	C9	9
Not reported	322 PALM ST	WSW 0 - 1/8 (0.123 mi.)	10	9
Not reported	202 PALM ST	SSW 1/8 - 1/4 (0.159 mi.)	D15	10

ORPHAN SUMMARY

Count: 2 records.

City	EDR ID	Site Name	Site Address	Zip	Database(s)
WAHIAWA	1006819278	KAUKONAHUA BRIDGE	KAUKONAHUA STREAM RD & WILIKIN	96786	SHWS, SPILLS
WAHIAWA	S117391490	WHITMORE VILLAGE	WHITMORE AVE	96786	SHWS, ENG CONTROLS, INST CON

OVERVIEW MAP - 4237094.230S

- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Kauhale Nani ADDRESS: 310 North Cane St. Wahlawa HI 96786 LAT/LONG: 21.5015 / 158.0254	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.230s DATE: March 17, 2015 5:42 pm

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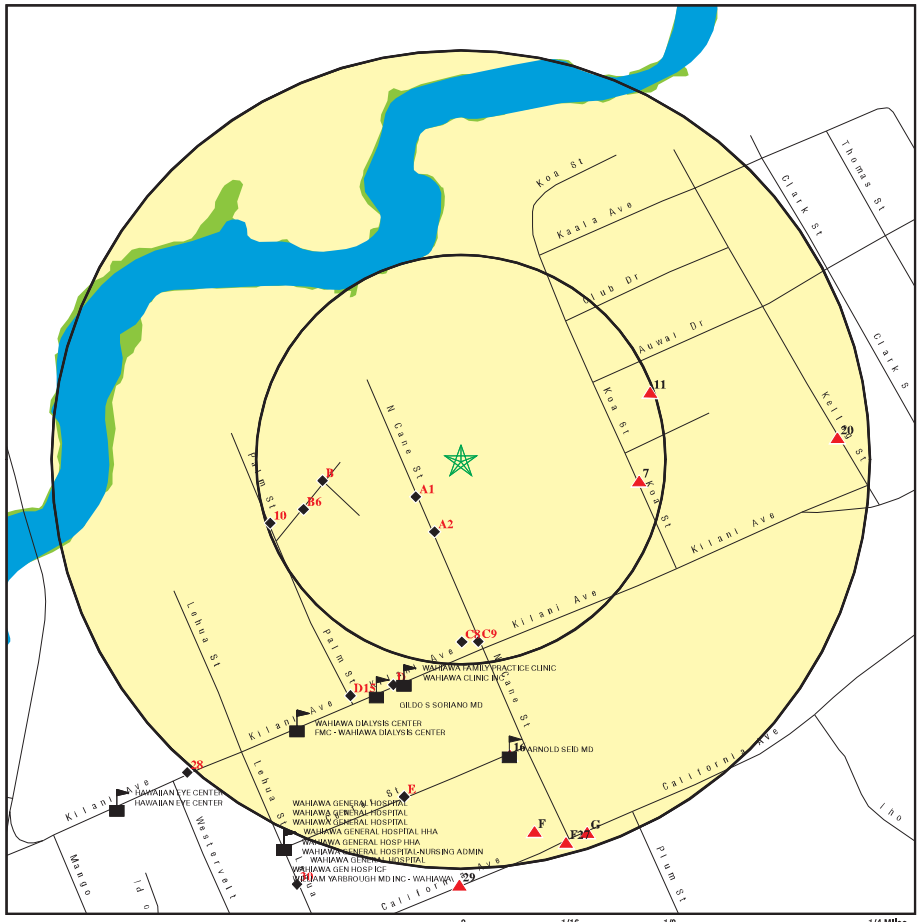
DETAIL MAP - 4237094.230S



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Kauhale Nani ADDRESS: 310 North Cane St. Wahlawa HI 96786 LAT/LONG: 21.5015 / 158.0254	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.230s DATE: March 17, 2015 5:43 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	1	0	0	NR	1
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	1	0	NR	NR	1
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	2	NR	NR	NR	2
RCRA-CESQG	0.250		0	2	NR	NR	NR	2
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	1	0	NR	NR	1
US INST CONTROL	0.500		0	1	0	NR	NR	1
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
SHWS	1.000		0	3	0	1	NR	4
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		2	2	8	NR	NR	12
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250		4	6	NR	NR	NR	10

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		0	1	0	NR	NR	1
INST CONTROL	0.500		0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		1	0	NR	NR	NR	1
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	2	NR	2
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	1	0	0	NR	1
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		6	4	NR	NR	NR	10
EDR US Hist Cleaners	0.250		0	0	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
RGA HWS	TP		NR	NR	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
DOD Region SSW 1/2-1 4510 ft.	**WHEELER AIR FORCE BASE** **WHEELER AIR FORCE BASE (County), HI** Click here for full text details	**DOD**	**CUSA147733 N/A**
DOD Region SE 1/2-1 3358 ft.	**SCHOFIELD BARRACKS MILITARY RESERVATION** **SCHOFIELD BARRACKS MILITA (County), HI** Click here for full text details	**DOD**	**CUSA147731 N/A**
A1 SW < 1/8 0.036 mi. 188 ft. Relative: Lower	**WAHIAWA INDUSTRIAL CENTER** **401 N CANE** **WAHIAWA, HI 96786** Click here for full text details **RCRA NonGen / NLR** EPA Id: HIP000049908	**RCRA NonGen / NLR**	**1010316415 HIP000049908**
A2 SSW < 1/8 0.047 mi. 248 ft. Relative: Lower	**WAHIAWA POLICE STATION** **330 N CANE ST** **WAHIAWA, HI 96786** Click here for full text details **LUST** Facility Id: 9-200111 Facility Status: Site Cleanup Completed (NFA) **UST** Facility Id: 9-200111 Tank Status: Permanently Out of Use Tank Status: Currently In Use	**LUST** **UST** **Financial Assurance**	**U004154611 N/A**
B3 West < 1/8 0.083 mi. 437 ft. Relative: Lower	**KIHARA ELECTRIC, INC.** **930 PALM PL** **SCHOFIELD BARRACKS, HI 96786** Click here for full text details **UST** Facility Id: 9-200735 Tank Status: Permanently Out of Use	**UST**	**U003541823 N/A**

B4
West
< 1/8
0.085 mi.
451 ft.
Relative: Lower

920 PALM PL
WAHIAWA, HI 96786

EDR US Hist Auto Stat **1015675150**
N/A

Click here for full text details

B5
West
< 1/8
0.087 mi.
458 ft.
Relative: Lower

918 PALM PL
WAHIAWA, HI 96786

EDR US Hist Auto Stat **1015674419**
N/A

Click here for full text details

B6
WSW
< 1/8
0.101 mi.
532 ft.
Relative: Lower

T-N-H PLUMBING, INC.
911 PALM PL
SCHOFIELD BARRACKS, HI 96786

UST **U001236229**
Financial Assurance **N/A**

Click here for full text details

UST
Facility Id: 9-200940
Tank Status: Permanently Out of Use

7
East
< 1/8
0.110 mi.
579 ft.
Relative: Higher

232 KOA ST
WAHIAWA, HI 96786

EDR US Hist Auto Stat **1015347028**
N/A

Click here for full text details

C8
South
< 1/8
0.111 mi.
588 ft.
Relative: Lower

207 N CANE BAY 4
WAHIAWA, HI 96786

EDR US Hist Auto Stat **1015315148**
N/A

Click here for full text details

C9
South
< 1/8
0.112 mi.
589 ft.
Relative: Lower

207 N CANE ST
WAHIAWA, HI 96786

EDR US Hist Auto Stat **1015315149**
N/A

Click here for full text details

10
WSW
< 1/8
0.123 mi.
648 ft.
Relative: Lower

322 PALM ST
WAHIAWA, HI 96786

EDR US Hist Auto Stat **1015424129**
N/A

Click here for full text details

11
ENE
< 1/8
0.123 mi.
649 ft.
Relative: Higher

WAHIAWA CENTRAL OFFICE
252 KOA ST
WAHIAWA, HI 96786

LUST **U001236167**
UST **N/A**
Financial Assurance

Click here for full text details

LUST
Facility Id: 9-200532
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-200532
Tank Status: Temporarily Out of Use
Tank Status: Permanently Out of Use
Tank Status: Currently In Use

D12
SSW
1/8-1/4
0.143 mi.
755 ft.
Relative: Lower

MAHALO KILANI MART
935 KILANI AVE
WAHIAWA, HI 96786

UST **U001236292**
Financial Assurance **N/A**

Click here for full text details

UST
Facility Id: 9-201202
Tank Status: Currently In Use
Tank Status: Permanently Out of Use

D13
SSW
1/8-1/4
0.144 mi.
758 ft.

Relative: Lower

PIONEER CONTRACTING CO LTD
930 KILANI AVE
WAHIAWA, HI 96786

RCRA-CESQG
FINDS

1000906737
HI0000440222

Click here for full text details

RCRA-CESQG
EPA Id: HI0000440222

D14
SSW
1/8-1/4
0.144 mi.
758 ft.

Relative: Lower

PIONEER CONTRACTING CO LTD
930 KILANI AVE
SCHOFIELD BARRACKS, HI 96786

UST

U001236216
N/A

Click here for full text details

UST
Facility Id: 9-200903
Tank Status: Permanently Out of Use

D15
SSW
1/8-1/4
0.159 mi.
840 ft.

Relative: Lower

202 PALM ST
WAHIAWA, HI 96786

EDR US Hist Auto Stat

1015307528
N/A

Click here for full text details

16
South
1/8-1/4
0.183 mi.
965 ft.

Relative: Higher

961 CENTER ST
WAHIAWA, HI 96786

EDR US Hist Auto Stat

1015684879
N/A

Click here for full text details

E17
South
1/8-1/4
0.209 mi.
1102 ft.

Relative: Lower

NCTAMSPAC CENTER STREET
500 CENTER ST
WAHIAWA, HI 96786

SHWS
SPILLS
ENG CONTROLS

S106819229
N/A

Click here for full text details

E18
South
1/8-1/4
0.209 mi.
1102 ft.

Relative: Lower

NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EA
500 CENTER STREET
WAHIAWA, HI 96786

NPL
CERCLIS
US ENG CONTROLS
US INST CONTROL
ROD
ICIS

1000167735
HI0170090054

Click here for full text details

NPL
EPA Id: HI0170090054

CERCLIS
EPA Id: HI0170090054

E19
South
1/8-1/4
0.209 mi.
1102 ft.

Relative: Lower

NCTAMS EASTPAC - WAHIAWA
500 CENTER ST
WAHIAWA, HI 96786

RCRA-SQG

1000473233
HI6170024388

Click here for full text details

RCRA-SQG
EPA Id: HI6170024388

20
East
1/8-1/4
0.230 mi.
1217 ft.

Relative: Higher

PIONEER HOME SUPPLY WAREHOUSE
235 KELLOG ST
SCHOFIELD BARRACKS, HI 96786

UST

U003154991
N/A

Click here for full text details

UST
Facility Id: 9-202768
Tank Status: Permanently Out of Use

F21
South
1/8-1/4
0.231 mi.
1222 ft.

Relative: Higher

UNOCAL SS NO 3128
966 CALIFORNIA AVE
WAHIAWA, HI 96786

RCRA-SQG
FINDS

1001024237
HIR000000380

Click here for full text details

RCRA-SQG
EPA Id: HIR000000380

F22
South
1/8-1/4
0.231 mi.
1222 ft.

Relative: Higher

MID PAC PETROLEUM LLC 2705799
966 CALIFORNIA AVE
WAHIAWA, HI 96786

SHWS
LUST
UST
Financial Assurance

U001236034
N/A

Click here for full text details

LUST
Facility Id: 9-200030
Facility Status: Site Cleanup Completed (NFA)

MID PAC PETROLEUM LLC 2705799 (Continued) — **U001236034**

UST
Facility Id: 9-200030
Tank Status: Permanently Out of Use
Tank Status: Currently In Use

F23
South
1/8-1/4
0.231 mi.
1222 ft.
Relative: Higher

966 CALIFORNIA AVE
WAHIAWA, HI 96786

EDR US Hist Auto Stat — **1015685625** / **N/A**

Click here for full text details

G24
SSE
1/8-1/4
0.241 mi.
1270 ft.
Relative: Higher

WAHIAWA CHEVRON SS
1011 CALIFORNIA AVE
WAHIAWA, HI 96786

RCRA-CESQG / **FINDS** — **1009398548** / **HIR000137554**

Click here for full text details

RCRA-CESQG
EPA Id: HIR000137554

G25
SSE
1/8-1/4
0.241 mi.
1270 ft.
Relative: Higher

1011 CALIFORNIA AVE
WAHIAWA, HI 96786

EDR US Hist Auto Stat — **1015126594** / **N/A**

Click here for full text details

G26
SSE
1/8-1/4
0.241 mi.
1270 ft.
Relative: Higher

WAHIAWA CHEVRON SS
1011 CALIFORNIA AVE
WAHIAWA, HI 96786

SHWS / **LUST** / **UST** / **Financial Assurance** — **U003222022** / **N/A**

Click here for full text details

LUST
Facility Id: 9-201228
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-201228
Tank Status: Permanently out of Use
Tank Status: Permanently Out of Use

F27
SSE
1/8-1/4
0.243 mi.
1281 ft.
Relative: Higher

HOWARD CONSTRUCTION, INC.
1001 CALIFORNIA AVE
WAHIAWA, HI 96786

UST — **U003221965** / **N/A**

Click here for full text details

UST
Facility Id: 9-200249
Tank Status: Permanently Out of Use

28
SW
1/4-1/2
0.254 mi.
1340 ft.
Relative: Lower

ACE TRANSMISSION
720 KILANI AVE
SCHOFIELD BARRACKS, HI 96786

LUST / **UST** / **Financial Assurance** — **U003154915** / **N/A**

Click here for full text details

LUST
Facility Id: 9-201023
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-201023
Tank Status: Permanently Out of Use

29
South
1/4-1/2
0.260 mi.
1372 ft.
Relative: Higher

WAHIAWA CIVIC CENTER
910 CALIFORNIA AVE
SCHOFIELD BARRACKS, HI 96786

LUST / **UST** — **U003222111** / **N/A**

Click here for full text details

LUST
Facility Id: 9-202643
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-202643
Tank Status: Permanently Out of Use

30
SSW
1/4-1/2
0.278 mi.
1468 ft.
Relative: Lower

U.S. POSTAL SERVICE - WAHIAWA
115 LEHUA ST
WAHIAWA, HI 96786

LUST / **UST** / **Financial Assurance** — **U001236404** / **N/A**

Click here for full text details

LUST
Facility Id: 9-201776
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-201776

U.S. POSTAL SERVICE - WAHIAWA (Continued) — **U001236404**

Tank Status: Permanently Out of Use

---

31 SSW 1/4-1/2 0.304 mi. 1605 ft. Relative: Lower

YAMA'S TEXACO — **LUST** — **U003858604**
805 CALIFORNIA AVE — **UST** — **N/A**
WAHIAWA, HI 96786

Click here for full text details

LUST
Facility Id: 9-203333
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-203333
Tank Status: Permanently Out of Use

---

32 SSW 1/4-1/2 0.371 mi. 1959 ft. Relative: Lower

C&CH WAHIAWA FIRE STATION — **LUST** — **U003986424**
640 CALIFORNIA AVE — **UST** — **N/A**
WAHIAWA, HI 96786

Click here for full text details

LUST
Facility Id: 9-200092
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-200092
Tank Status: Permanently Out of Use

---

33 SW 1/4-1/2 0.384 mi. 2030 ft. Relative: Lower

IMM WAHIAWA — **LUST** — **U001236129**
150 N. KAMEHAMEHA HWY. — **UST** — **N/A**
WAHIAWA, HI 96786 — **Financial Assurance**

Click here for full text details

LUST
Facility Id: 9-200329
Facility Status: Site Cleanup Completed (NFA)
Facility Status: Exposure Prevention Management Plan

UST
Facility Id: 9-200329
Tank Status: Currently in Use
Tank Status: Permanently Out of Use

34 SW 1/4-1/2 0.416 mi. 2194 ft. Relative: Lower

MAHALO WAHIAWA — **LUST** — **U001236337**
119 N KAMEHAMEHA HWY — **UST** — **N/A**
WAHIAWA, HI 96786 — **Financial Assurance**

Click here for full text details

LUST
Facility Id: 9-201458
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-201458
Tank Status: Currently In Use
Tank Status: Permanently Out of Use

---

35 SW 1/4-1/2 0.483 mi. 2551 ft. Relative: Lower

F & M FOOD MART CORP — **LUST** — **U003154917**
10 S KAMEHAMEHA HWY — **UST** — **N/A**
WAHIAWA, HI 96786 — **Financial Assurance**

Click here for full text details

LUST
Facility Id: 9-201033
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-201033
Tank Status: Permanently Out of Use

---

36 South 1/2-1 0.621 mi. 3281 ft. Relative: Lower

SILVER CREST ELDERLY HOUSING — **SHWS** — **1006819917**
529 PINE ST — **N/A**
WAHIAWA, HI 96786

Click here for full text details

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
HI	AIRS	List of Permitted Facilities	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	BROWNFIELDS	Brownfields Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	CDL	Clandestine Drug Lab Listing	Department of Health	08/04/2010	09/10/2010	10/22/2010
HI	DRYCLEANERS	Permitted Drycleaner Facility Listing	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	ENG CONTROLS	Engineering Control Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	Financial Assurance	Financial Assurance Information Listing	Department of Health	12/01/2014	12/19/2014	01/28/2015
HI	INST CONTROL	Sites with Institutional Controls	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	LUST	Leaking Underground Storage Tank Database	Department of Health	12/16/2014	12/19/2014	01/28/2015
HI	RGA HWS	Recovered Government Archive State Hazardous Waste Facilitie	Department of Health		07/01/2013	01/08/2014
HI	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Health		07/01/2013	01/17/2014
HI	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	Department of Health		07/01/2013	01/03/2014
HI	SHWS	Sites List	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	SPILLS	Release Notifications	Department of Health	12/02/2014	12/22/2014	01/28/2015
HI	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	03/10/2012	01/03/2013	02/11/2013
HI	SWF/LF	Permitted Landfills in the State of Hawaii	Department of Health	09/17/2012	04/03/2013	05/10/2013
HI	UIC	Underground Injection Wells Listing	Department of Health	02/07/2013	02/12/2013	04/09/2013
HI	UST	Underground Storage Tank Database	Department of Health	12/18/2014	12/19/2014	01/28/2015
HI	VCP	Voluntary Response Program Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	04/22/2013	03/03/2015	03/09/2015
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2011	02/26/2013	04/19/2013
US	CERCLIS	Comprehensive Environmental Response, Compensation, and Liab	EPA	10/25/2013	11/11/2013	02/13/2014
US	CERCLIS-NFRAP	CERCLIS No Further Remedial Action Planned	EPA	10/25/2013	11/11/2013	02/13/2014
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	07/01/2014	09/10/2014	10/20/2014
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	01/23/2015	02/13/2015	03/09/2015
US	CORRACTS	Corrective Action Report	EPA	12/09/2014	12/29/2014	01/29/2015
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DELISTED NPL	National Priority List Deletions	EPA	12/16/2014	01/08/2015	02/09/2015
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	07/31/2012	08/07/2012	09/18/2012
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EDR US Hist Auto Stat	EDR Exclusive Historic Gas Stations	EDR, Inc.			
US	EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	09/29/2014	09/30/2014	11/06/2014
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	07/21/2014	10/07/2014	10/20/2014
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
US	FEMA UST	Underground Storage Tank Listing	FEMA	01/01/2010	02/16/2010	04/12/2010
US	FINDS	Facility Index System/Facility Registry System	EPA	08/16/2014	09/10/2014	10/20/2014
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	06/06/2014	09/10/2014	09/18/2014
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	12/29/2014	12/30/2014	03/09/2015
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	01/23/2015	02/06/2015	03/09/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	02/01/2013	05/01/2013	11/01/2013

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	01/30/2015	02/05/2015	03/09/2015
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/10/2015	03/13/2015
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	01/28/2015	01/30/2015	03/13/2015
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	01/08/2015	01/08/2015	02/09/2015
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2005	12/08/2006	01/11/2007
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	02/01/2013	05/01/2013	01/27/2014
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	01/30/2015	02/05/2015	03/13/2015
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/13/2015	03/13/2015
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	01/29/2015	01/30/2015	03/13/2015
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	12/14/2014	02/13/2015	03/13/2015
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	09/29/2014	10/01/2014	11/06/2014
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	11/25/2014	11/26/2014	01/29/2015
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	02/18/2014	03/18/2014	04/24/2014
US	LUCIS	Land Use Control Information System	Department of the Navy	12/03/2014	12/12/2014	01/29/2015
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	12/29/2014	01/08/2015	01/29/2015
US	NPL	National Priority List	EPA	12/16/2014	01/08/2015	02/09/2015
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	07/01/2014	10/15/2014	11/17/2014
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	02/01/2011	10/19/2011	01/10/2012
US	PRP	Potentially Responsible Parties	EPA	10/25/2013	10/17/2014	10/20/2014
US	Proposed NPL	Proposed National Priority List Sites	EPA	12/16/2014	01/08/2015	02/09/2015
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	10/07/2014	10/08/2014	10/20/2014
US	RCRA NonGen / NLR	RCRA - Non Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RMP	Risk Management Plans	Environmental Protection Agency	08/01/2014	08/12/2014	11/06/2014
US	ROD	Records Of Decision	EPA	11/25/2013	12/12/2013	02/24/2014
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	03/07/2011	03/09/2011	05/02/2011
US	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2011	07/31/2013	09/13/2013
US	TSCA	Toxic Substances Control Act	EPA	12/31/2012	01/15/2015	01/29/2015
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	09/14/2010	10/07/2011	03/01/2012
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/16/2014	10/31/2014	11/17/2014
US	US AIRS MINOR	Air Facility System Data	EPA	10/16/2014	10/31/2014	11/17/2014

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	12/22/2014	12/22/2014	01/29/2015
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	11/19/2014	11/21/2014	01/29/2015
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	12/30/2014	12/31/2014	01/29/2015
US	Oil/Gas Pipelines	GeoData Digital Line Graphs from 1:100,000-Scale Maps	USGS			
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
US	USGS 7.5' Topographic Map	Scanned Digital USGS 7.5' Topographic Map (DRG)	USGS			

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

KAUHALE NANI
310 NORTH CANE ST.
WAHIAWA, HI 96786

TARGET PROPERTY COORDINATES

Latitude (North):	21.5015 - 21˚ 30' 5.40''
Longitude (West):	158.0254 - 158˚ 1' 31.44''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	600952.0
UTM Y (Meters):	2377826.5
Elevation:	919 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	21158-E1 HALEIWA, HI
Most Recent Revision:	Not reported
South Map:	21158-D1 SCHOFIELD BARRACKS, HI
Most Recent Revision:	Not reported

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

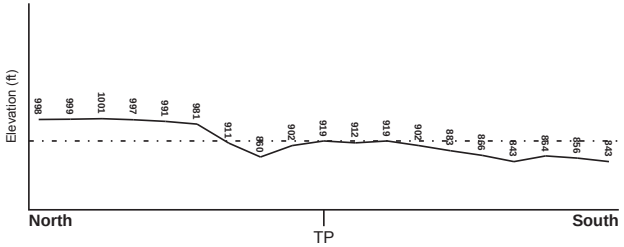
TOPOGRAPHIC INFORMATION

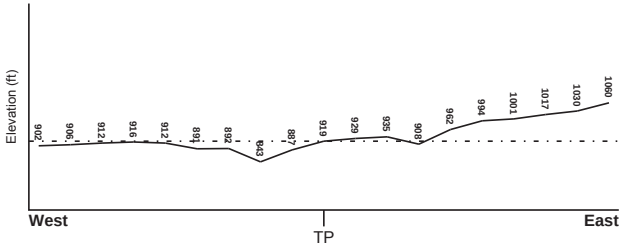
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General West

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 919 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
HONOLULU, HI	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 15003C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
HALEIWA	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

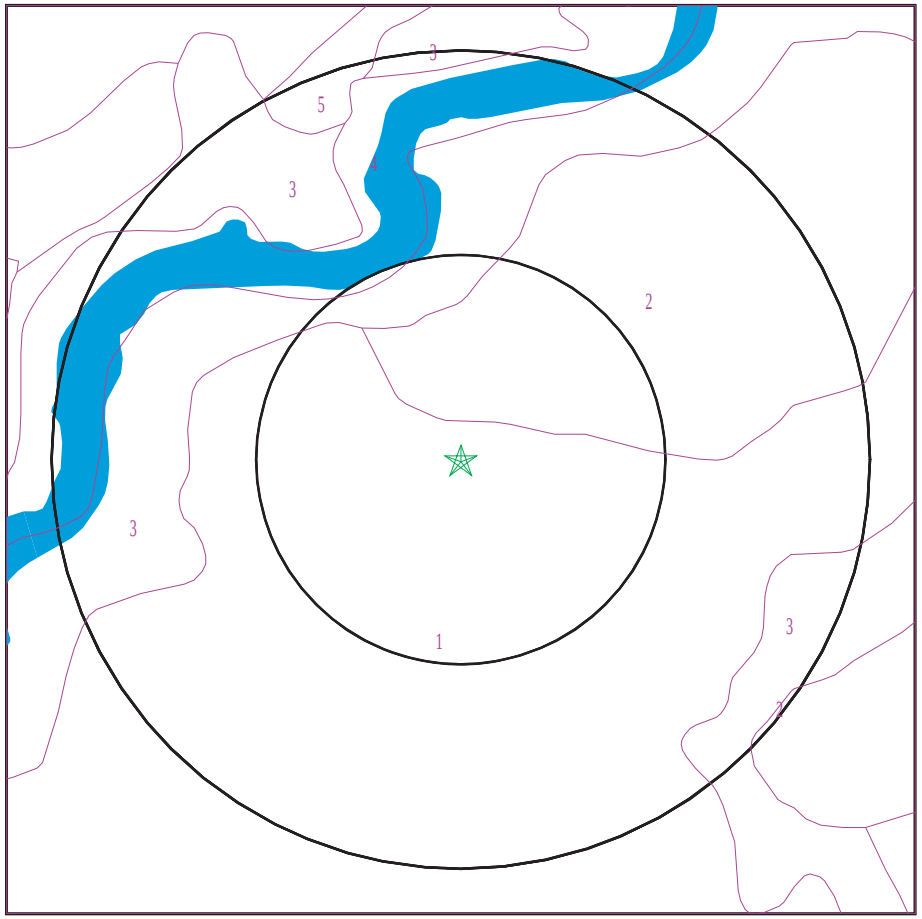
Era: -
System: -
Series: -
Code: N/A *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: -

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4237094.230s



★ Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME: Kauhale Nani ADDRESS: 310 North Cane St. Wahlawa HI 96786 LAT/LONG: 21.5015 / 158.0254	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.230s DATE: March 17, 2015 5:43 pm

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DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Wahiawa

Soil Surface Texture: silty clay

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	ML-K (proposed)	Max: 14.11 Min: 4.23	Max: 6 Min: 5.1
2	11 inches	59 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	ML-K (proposed)	Max: 14.11 Min: 1.41	Max: 7.3 Min: 5.6

Soil Map ID: 2

Soil Component Name: Leilehua

Soil Surface Texture: silty clay

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	ML-K (proposed)	Max: 42 Min: 4.23	Max: 4.4 Min: 3.6
2	11 inches	74 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	ML-K (proposed)	Max: 4.23 Min: 0.42	Max: 4.4 Min: 3.6

Soil Map ID: 3

Soil Component Name: Helemano

Soil Surface Texture: silty clay

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	ML-K (proposed)	Max: 42 Min: 14.11	Max: 7.3 Min: 5.6
2	9 inches	40 inches	paragravelly silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	ML-K (proposed)	Max: 42.34 Min: 4.23	Max: 7.3 Min: 5.6
3	40 inches	59 inches	very paragravelly silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	ML-K (proposed)	Max: 14 Min: 4.23	Max: 7.3 Min: 5.6

Soil Map ID: 4

Soil Component Name: Water > 40 acres

Soil Surface Texture: silty clay

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class:
Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

Soil Map ID: 5

Soil Component Name: Kolekole

Soil Surface Texture: silty clay loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	ML-K (proposed)	Max: 42 Min: 4.23	Max: 5.5 Min: 4.5
2	11 inches	37 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	ML-K (proposed)	Max: 4.23 Min: 0.42	Max: 6 Min: 4.5
3	37 inches	59 inches	stony silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	ML-K (proposed)	Max: 1.41 Min: 0.01	Max: 5 Min: 4.5

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A3	USGS40000270954	1/2 - 1 Mile South
A8	USGS40000270951	1/2 - 1 Mile South
A9	USGS40000270953	1/2 - 1 Mile South
A10	USGS40000270952	1/2 - 1 Mile South
A11	USGS40000270950	1/2 - 1 Mile South
B13	USGS40000270955	1/2 - 1 Mile SW
23	USGS40000270942	1/2 - 1 Mile South
C24	USGS40000270944	1/2 - 1 Mile South
C25	USGS40000270939	1/2 - 1 Mile South
C26	USGS40000270938	1/2 - 1 Mile South
C27	USGS40000270940	1/2 - 1 Mile South
C28	USGS40000270943	1/2 - 1 Mile South
C29	USGS40000270941	1/2 - 1 Mile South
C30	USGS40000270937	1/2 - 1 Mile South

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A2	HI0000354	1/2 - 1 Mile South

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

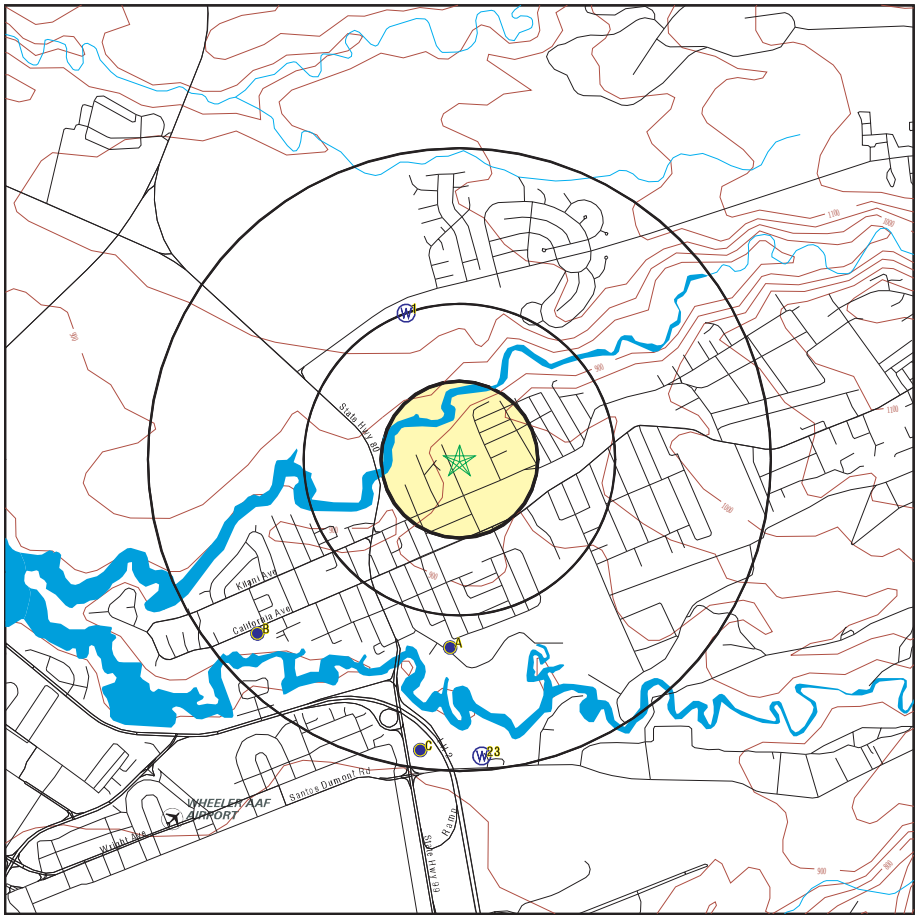
MAP ID	WELL ID	LOCATION FROM TP
1	HI8000000003662	1/4 - 1/2 Mile NNW
A4	HI8000000003628	1/2 - 1 Mile South
A5	HI8000000003626	1/2 - 1 Mile South
A6	HI8000000003627	1/2 - 1 Mile South
A7	HI8000000003625	1/2 - 1 Mile South
B12	HI8000000003630	1/2 - 1 Mile SW
B14	HI8000000003629	1/2 - 1 Mile SW
C15	HI8000000003611	1/2 - 1 Mile South
C16	HI8000000003608	1/2 - 1 Mile South
C17	HI8000000003609	1/2 - 1 Mile South
C18	HI8000000003610	1/2 - 1 Mile South
C19	HI8000000003606	1/2 - 1 Mile South

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
C20	HI8000000003607	1/2 - 1 Mile South
C21	HI8000000003603	1/2 - 1 Mile South
C22	HI8000000003602	1/2 - 1 Mile South

PHYSICAL SETTING SOURCE MAP - 4237094.230s



County Boundary
Major Roads
Contour Lines
Airports
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons

Groundwater Flow Direction
Indeterminate Groundwater Flow at Location
Groundwater Flow Varies at Location

SITE NAME: Kauhale Nani ADDRESS: 310 North Cane St. Wahlawa HI 96786 LAT/LONG: 21.5015 / 158.0254	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.230s DATE: March 17, 2015 5:43 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
1 **NNW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000003662**
A2 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FRDS PWS**	**HI0000354**
A3 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270954**
A4 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003628**
A5 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003626**
A6 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003627**
A7 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003625**
A8 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270951**
A9 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270953**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
A10 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270952**
A11 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270950**
B12 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003630**
B13 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270955**
B14 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003629**
C15 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003611**
C16 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003608**
C17 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003609**
C18 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003610**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
C19 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003606**
C20 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003607**
C21 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003603**
C22 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000003602**
23 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270942**
C24 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270944**
C25 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270939**
C26 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270938**
C27 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270940**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
C28 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270943**
C29 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270941**
C30 **South** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270937**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for HONOLULU County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 96786

Number of sites tested: 3

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.700 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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HAWAII PUBLIC HOUSING AUTHORITY

ENVIRONMENTAL REVIEW

PĀLOLO VALLEY HOMES

Honolulu, O`ahu

AMP 50
HPHA No. 1008

Prepared for:

State of Hawaii
Hawaii Public Housing Authority

Prepared by:

HHF PLANNERS
places for people

U.S. Department of Housing and Urban Development
451 Seventh Street, SW
Washington, DC 20410
www.hud.gov

espanol.hud.gov

Environmental Review for Activity/Project that is Categorically Excluded Subject to Section 58.5

Pursuant to 24 CFR 58.35(a)

Project Information

Project Name: Pālolo Valley Homes (AMP 50)

Responsible Entity: Hawaii Public Housing Authority
1002 North School Street
Honolulu, HI 96817

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

State/Local Identifier: State of Hawaiʻi

Preparer: Mr. Scott Ezer, Vice President
HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaiʻi 96813

Certifying Officer Name and Title: Mr. David Y. Ige
Governor, State of Hawaiʻi

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

Consultant (if applicable): HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaiʻi 96813

Direct Comments to: Mr. Hakim Ouansafi, Executive Director
Hawaii Public Housing Authority
1002 North School Street
Honolulu, Hawaiʻi 96817

Project Location: 2107 ʻĀhē Street
Honolulu, Hawaiʻi 96816

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]**:**

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a "major construction activity" and would involve one or a combination of several HUD designated categories of actions.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent;
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons;
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland;
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation;
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls);
7. Interior and exterior renovations and rehabilitation;
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site;
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Level of Environmental Review Determination:

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.5. Compliance with and completion of conformance determinations for other statute, executive order, or regulation has been completed and support the Categorical Exclusion.

Funding Information

Grant Number	HUD Program	Funding Amount
To be determined	Capital Fund Grants	To be determined
To be determined	Economic Development Initiative Special Project Grant	To be determined
To be determined	Other Grants	To be determined

Estimated Total HUD Funded Amount:

To be determined by HUD using a formula and based upon Federal budget.

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]**:**

Depends upon funds available.

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	*The project is not within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.*
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☒	*Hawai'i has no coastal barriers (http://www.fws.gov/CBRA/Maps/Mapper.html)*
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes ☐ No ☒	*As indicated in the Flood Insurance Rate Map Panel 15003C0367H, the project site is located in Zone X and is determined to have minimal flood hazard and is outside the 500-year flood zone. Based on the project description the project includes no activities that would require further evaluation under this section. The project does not require flood insurance or is excepted from flood insurance. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with Flood Insurance Requirements.*

STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5		
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes ☐ No ☒	*The State of Hawai'i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. EPA's Green Book for currently designated "nonattainment areas" as of June 2015. Planned repair and rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.*
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes ☐ No ☒	*Documentation from the Office of Planning determined that projects receiving federal funds do not require review for consistency with Hawai'i's CZM program.*
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☐ No ☒	*Based on the results of the EDR report and site visit, there are no known hazardous materials, contamination, or toxic chemicals, gasses or radioactive substances in the immediate vicinity which could affect the health or safety of occupants or conflict with intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gasses, etc.*
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes ☒ No ☐	*The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices.*
Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes ☐ No ☒	*There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. Repair and rehabilitation improvements would not increase the number of people exposed to hazardous operation, and thus do not meet the definition of a HUD-assisted project and are not subject to these regulations. The project site is also not within a Formerly Used Defense Site based upon the EDR report and review of data (COE Website).*

Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes ☐ No ☒	*The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. The project is located within the State Land Use Urban District. The existing development is located on urbanized property. No farmlands will be impacted by repair or rehabilitation improvements implemented.*
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes ☐ No ☒	*As indicated in the Flood Insurance Rate Map Panel 15003C0367H, the project site is located in Zone X and is determined to have minimal flood hazard and is outside the 500-year flood zone. The project is in compliance with Executive Order 11988.*
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes ☒ No ☐	*Pālolo Valley Homes is 58 years old and was constructed in 1957. An Architectural Inventory Survey for Pālolo Valley Homes conducted determined that Buildings 16, 17, and 20 have since been remodeled and do not meet National Register of Historic Properties eligibility criteria because they no longer retain their integrity of design or materials. The 17 remaining buildings appear to have retained their historic integrity, and in terms of NRHP criteria, were evaluated as excellent examples of public housing in Hawai`i. In a letter dated December 11, 2015, the State Historic Preservation Officer concurred with the HPHA's determination that repair and rehabilitation improvements for this housing project would have "no adverse effect" on historic properties pursuant to NHPA Section 106 and subject to certain mitigative measures.*

Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes ☐ No ☒	*The project site is not situated along a highway or major arterial roadway that has a high volume of vehicular traffic that may generate significant noise. The HUD noise level calculator estimated noise levels at the project site to be 51.9 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.*
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes ☐ No ☒	*The housing project is located within the O'ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation.*
Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☐ No ☒	*There are no known wetlands within the housing project's property, and therefore, no wetlands will be adversely impacted by the project improvements (http://www.fws.gov/wetlands/data/mapper.HTML)*
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes ☐ No ☒	*There are no Wild and Scenic Rivers in Hawai'i, which excludes this project from mitigation or formal consultation requirements (http://www.rivers.gov/map.php) .*
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes ☐ No ☒	*Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, these improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects on minority populations and low-income populations. Improvements should benefit low-income and minority populations living within this housing project.*

Field Inspection (Date and completed by)**:** May 28, 2015
Glenn Tadaki, Planner
HHF Planners

Summary of Findings and Conclusions:

Repair and rehabilitation improvements implemented for this existing housing project by HPHA should not result in significant environmental impacts based upon research data collected, a field inspection, consultation with the site manager and maintenance staff, consultation with pertinent resource agencies, and prior HPHA experience implementing repair and rehabilitation improvements. Therefore, repair and rehabilitation improvements would comply and be consistent with the statutes, executive orders, and regulations addressed. Furthermore, HPHA would evaluate improvements planned to ensure the work is consistent with the designated categories of actions described under the project description section. Compliance with these factors evaluated are further addressed in the attached Source Documentation Statutory Worksheet along with relevant technical reports/assessments.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Law, Authority, or Factor	Mitigation Measure
Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	*Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.* *Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved land site at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed upon completion of work, and no contamination of adjacent habitats shall be allowed from project-related activities.* *Hawaiian Hoary Bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.* *Newell's Shearwater and Hawaiian Petrel: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.*

	<u>Hawaiian Hawk</u>: If noise greater than 60 dBA or vegetation clearing is proposed during the hawk's breeding season (March through September), an area within 328 feet of the project site must be surveyed. If a hawk nest is found, noisy work activities must be postponed until the nest is no longer occupied. *<u>Hawaiian Goose (Nene)</u>: Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season (September through March). A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.* *<u>Hawaiian Waterbirds</u>: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo'i, impoundments or other vegetated water bodies.* *1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols.* *2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.* *3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.* *In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.* *<u>Additional Measures:</u> The following additional measures would be implemented:*

	1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.
National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	*1.When considering rehabilitation improvements or building modifications: 1) the buildings' character-defining features shall be retained to the extent practicable; and 2) the renovations shall adhere to the Secretary of the Interior's (SOI) Standards for Rehabilitation.* *2. If rehabilitation improvements or building modifications cannot retain the character-defining features or adhere to the SOI's Standards, a Historic American Buildings Survey (HABS) will be conducted subject to the following conditions:* *a. Level II HABS documentation will be conducted in accordance with the National Park Service standards; and* *b. A representative sample of multiple building types would be selected for HABS documentation due to the multiple types of buildings constructed for housing projects.* *3. If ground disturbing activity is anticipated, HPHA must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation.* *a. Submit detailed plans, specifications and a detailed scope of work once the plans have been developed.* *b. Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation.* *c. Submit a TMK map showing the full extent of the project area within the affected parcel/s.* *d. Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area.* *e. Summary of land use history, such as previous intensive cultivation, grubbing or grading.* *f. Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.* *In addition to these mitigation measures, the HPHA would enter into a Programmatic Agreement with the SHPO to address the implementation of future repair and rehabilitation improvements to State housing projects after the current Section 106 review process is completed and prior to the next environmental review process in approximately five years. Furthermore, should subsurface human remains or other*

	traces of human activity greater than 50 years old be encountered during construction, all work in the vicinity of the find would immediately stop and the SHPD would be promptly notified. The treatment of any human remains that are encountered would be conducted in accordance with applicable requirements of Chapter 6E, Hawai'i Revised Statutes (Historic Preservation) and Chapter 13-300, Hawai'i Administrative Rules ***(Rules of Practice and Procedure Relating to Burial Sites and Human Remains).***

Determination:

☐ This categorically excluded activity/project converts to **EXEMPT** per Section 58.34(a)(12), because it does not require any mitigation for compliance with any listed statutes or authorities, nor requires any formal permit or license; **Funds may be committed and drawn down after certification of this part** for this (now) EXEMPT project; OR

☒ This categorically excluded activity/project cannot convert to Exempt status because one or more statutes or authorities listed at Section 58.5 requires formal consultation or mitigation. Complete consultation/mitigation protocol requirements, **publish NOI/RROF and obtain "Authority to Use Grant Funds"** (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR

☐ This project is not categorically excluded OR, if originally categorically excluded, is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

Preparer Signature: Scott Ezer Date: 12-17-15

Name/Title/Organization: Mr. Scott Ezer, Vice President
HHF Planners

Responsible Entity Agency Official Signature:

David Y. Ige Date: APR 28 2016

Name/Title: Mr. David Y. Ige, Governor

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

PĀLOLO VALLEY HOMES (HA # 1008)

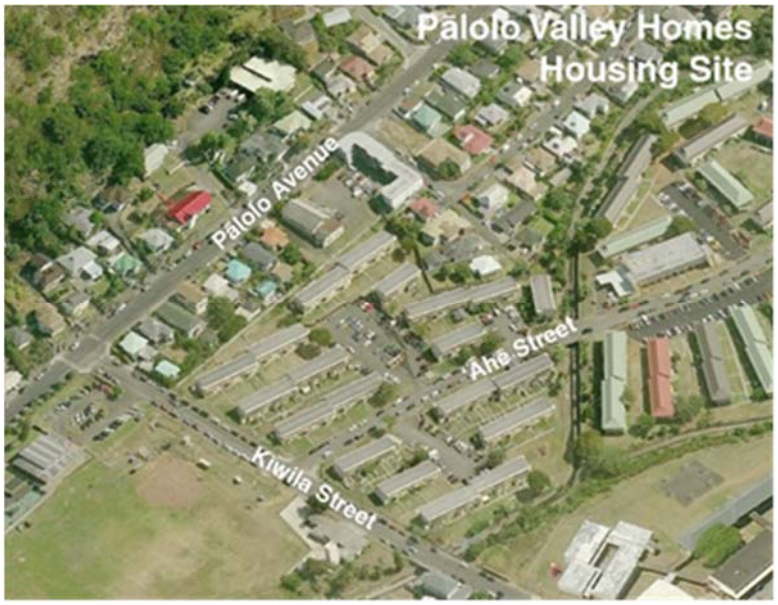
TMK: (1) 3-4-007: 015, 017

Hawai‘i Public Housing Authority (HPHA) Environmental Review

SOURCE DOCUMENTATION (SD) STATUTORY WORKSHEET

Site Visit Date: May 28, 2015
Prepared By: Glenn Tadaki

PROJECT DESCRIPTION



The Pālolo Valley Homes housing project is located within the Pālolo community in urban Honolulu on the island of O‘ahu. Pālolo is situated between the neighborhoods of Kaimuki to the south, Saint Louis Heights to the west, and Wilhemina Rise to the east.

The project site is bordered by Pālolo Stream on the east and Kīwila Street on the south. Access to the site is provided by ‘Āhē Street. Pālolo Valley Homes lies within HPHA’s Asset Management Project (AMP) 50.

Pālolo Valley Homes was first occupied in 1957 and has a street address of 2107 ‘Āhē Street. The property is split by ‘Āhē Street and consists of two parcels [TMK No. (1) 3-4-007: 015 and 017] with a combined area of 6.62 acres. The housing project consists of 20 two-story apartment buildings and 118 units with one, two, three, four, or five bedrooms per unit. The property is designated for “Urban” use by the State Land Use Commission and is zoned for “A-1 Low Density Apartment” use by the City and County of Honolulu.

The project site is not located within a tsunami evacuation zone, and the entire site is located in Flood Zone X based upon the Flood Insurance Rate Map (Community Panel Number 15003C0367H, Revised November 5, 2014). Zone X is an area determined to be outside the 0.2% annual chance floodplain.

The following figures in Exhibit A provide supporting information on this housing project:

Figure 1: Location Map
Figure 2: TMK Map
Figure 3: Site Map
Figure 4: Flood Map

COMPLIANCE FACTORS

I. AIRPORT CLEAR ZONES AND ACCIDENT POTENTIAL ZONES (24 CFR PART 51D)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The housing project does not lie within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: 24 CFR 51 (D).

Honolulu International Airport Master Plan - 2010 (August 1994), State Department of Transportation, Airports Division; and

*Hawai`i Airports and Flying Safety Guide (2012-13, Fifth Edition, Revision 1)* Hawai`i Department of Transportation, Airports Division.

HDOT website at: http://hidot.hawaii.gov/airports/files/2013/01/Airport-Safety-Guide-2012-2013-5rev1.pdf

II. COASTAL BARRIER RESOURCES (COASTAL BARRIER IMPROVEMENT ACT OF 1990 [16 USC 3501])

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i does not have any designated coastal barrier resource units.

SUPPORTING DOCUMENTATION:

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/cbra/maps/mapper.html (Date accessed: 6/30/15).

III. FLOOD INSURANCE (FLOOD DISASTER PROTECTION ACT OF 1973 AND NATIONAL FLOOD INSURANCE REFORM ACT OF 1994 [42 USC 4001-4128 AND 42 USC 5154a])

	SUPPORTING DOCUMENTS
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program.

The project site is located in Zone X (area of minimal flood hazard) and is located outside the 500-year flood zone. A field inspection and information obtained from the AMP Manager confirmed no major flooding issues within the site. Based on its description, the Pālolo Valley Homes housing project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance is not mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal any signs of previous flooding problems. Pālolo Stream borders the site on the east, while Pūkele Stream borders it on the north. Both streams are channelized along their boundaries with the project site. An interview with the Maintenance Supervisor also determined that no major ponding or flooding issues have occurred on the project site.

Printed: Flood Insurance Rate Map, City and County of Honolulu, Hawai'i Community Panel Number 15003C0367H, Revised November 5, 2014.

Hawai`i Department of Land and Natural Resources website at http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 6/30/15).

IV. CLEAN AIR ACT (40 CFR PARTS 6, 51, 93)

	SUPPORTING DOCUMENTS
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. Environmental Protection Agency's Green Book for currently designated "nonattainment areas" as of June 2015. Planned rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.

SUPPORTING DOCUMENTATION:

Printed: *State of Hawai‘i Annual Summary 2013 Air Quality Data*. State of Hawai'i, Department of Health, July 2014.

U.S. Environmental Protection Agency website at: http://epa.gov/airquality/greenbk/

V. COASTAL ZONE MANAGEMENT ACT (16 USC 1451, SECTIONS 307 (C), (D)

CONTACT:
Mr. John Nakagawa
Office of Planning
Department of Business, Economic Development & Tourism
State of Hawai‘i
P.O. Box 2359
Honolulu, Hawai'i, 96804-2359

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai‘i's Coastal Zone Management (CZM) program.

SUPPORTING DOCUMENTATION:

Contact: In an e-mail to the Office of Planning (OP) dated July 27, 2015, the HPHA determined that the use of HUD funds for the implementation of repair and rehabilitation improvements does not require review for consistency with Hawai‘i's CZM program. The OP confirmed this determination in an e-mail dated July 28, 2015 and included in the Appendices.

Experience: As part of past environmental reviews in December 2010, a letter from the OP dated July 20, 2005 determined that their review for consistency with Hawai‘i's CZM program was not required. A copy of this letter is included in the Appendices.

VI. CONTAMINATION AND TOXIC SUBSTANCES (24 CFR PART 50.3 & 58.5(I)(2))

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Project Not Affected.

There are no known hazardous materials, contamination, toxic chemicals, gases or radioactive substances which could affect the health or safety of occupants or conflict with the intended use of the property. Repair and rehabilitation improvements would not increase the number of people being exposed to hazardous materials, contamination, toxic chemicals, gases, etc.

SUPPORTING DOCUMENTATION:

Field: A site inspection and interview with the AMP Manager and Maintenance Supervisor revealed no presence of any toxic or radioactive materials on the project site that warrant any concern. A secure storage facility by Building 14 is used for flammable and hazardous materials, and is in acceptable condition and labeled with signage.

Study: Environmental Data Resources, Inc. (EDR), conducted a search of available environmental records and prepared a Radius Map Report (Inquiry Number 4237094.242s, March 17, 2015). EDR reviewed more than 25 federal and statewide regulatory databases for information regarding the treatment, storage, disposal and release of toxic chemicals at the project site and within specific radii (generally 1 mile) of the site. A Detail Map within the EDR report documents those sites identified within a 0.25 mile radius of the project site. Some of the sites contain underground storage tanks (UST) that are currently in use or are permanently out of use. The EDR report in Exhibit B includes the results of their research findings.

The EDR report notes that a National Pollutant Discharge Elimination System (NPDES) Permit was issued for stormwater discharges associated with construction activities (e.g., clearing, grading, and excavation) for the first and second phases of physical improvements at Pālolo Valley Homes.

In the vicinity of the project site, the report notes that one UST (1,000 gallons) at the Pālolo Fire Station was rendered permanently out of use in 1993. PCB contamination was found in the soil at Pālolo Elementary School in 2013, but was cleaned up and does not pose a hazard. The report also notes that Pālolo Valley District Park is classified as a conditionally exempt small quantity generator because it produces 100 kilograms (kg) or less of hazardous waste per month and accumulates 1,000 kg or less of hazardous waste at any time. No violations have been reported for the park as a conditionally exempt small quantity generator, although it was cited for lead and mercury waste in 2007 when it was classified as a large quantity generator. The 2007 violation led to enforcement action that was followed by compliance in 2008.

The project site was not identified as a Formerly Used Defense Site (FUDS) by the U.S. Army Corps of Engineers and is not subject to any cleanup actions for Department of Defense-generated contamination.

VII. ENDANGERED SPECIES (50 CFR PART 402)

CONTACT:	SUPPORTING DOCUMENTS	
Mr. Loyal Mehrhoff, Field Supervisor		Field
Pacific Islands Administrator	X	Contact
Fish and Wildlife Services		Printed
U.S. Department of the Interior	X	Experience
300 Ala Moana Boulevard, Room 3-122, Box 50088		Study
Honolulu, Hawai'i 96813		
Tel. #: 792-9400		

DETERMINATION:

Status Category: No Adverse Effect Subject to Mitigation

The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received by the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices.

SUPPORTING DOCUMENTATION:

Contact: A letter from the HPHA dated July 24, 2015 was submitted to the Pacific Island Administrator for the FWS determining that repair and rehabilitation improvements that may be implemented using HUD funds for this housing project would have no likelihood of effect on any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received by the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices. This housing project is subject to the following minimization and avoidance measures

Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.

Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.

Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.

Newell's shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the

proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.

Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.

Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro lo‘i, impoundments or other vegetated water bodies.

1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS’s recommended Hawaiian Waterbird Survey Protocols.
2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.
3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.

In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.

Additional Measures: The following additional measures would be implemented:

1. No vegetation or soil disturbance shall be conducted outside a project’s previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.

Experience: The FWS was previously consulted as part of environmental reviews that were completed in 2005 (39 housing projects) and 2010 (70 housing projects) which supported the determination that repair and rehabilitation improvements would either: 1) have no likelihood of effect for certain housing projects; or 2) not likely adversely affect federally listed species or critical habitat for certain housing projects subject to mitigative measures. A summary of these consultation efforts follows.

2005 Consultation: In a letter dated July 15, 2005, the Housing and Community Development Corporation of Hawai'i (predecessor to the HPHA), determined that the implementation of minor repair and rehabilitation improvements for 39 housing projects would not have an adverse effect on federally-listed species or critical habitat. In a letter dated August 11, 2005, the FWS concurred with the HCDCH determination.

2010 Consultation: In a letter dated May 17, 2010, the HPHA informed the FWS that HUD funds would be used to immediately implement repair and rehabilitation improvements for six housing projects on O'ahu and the island of Hawai`i. In a subsequent letter dated May 21, 2010, the FWS was informed that HPHA would be using HUD funds to implement minor repair and rehabilitation improvements for 64 projects throughout the State. In both letters, the HPHA determined that the repair and rehabilitation improvements were not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat. Based on further consultation and a meeting with FWS staff on June 24, 2010, the HPHA determined that repair and rehabilitation improvements for most of their housing projects would not likely adversely affect any listed or proposed species, or existing or proposed designated habitat, subject to various mitigative measures for certain housing projects..

VIII. EXPLOSIVE AND FLAMMABLE OPERATIONS (24 CFR PART 51C)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

SUPPORTING DOCUMENTATION:

Field: Field inspection was limited to the exterior of residential buildings and associated structures for this housing project. No above-ground explosive or flammable material storage containers in excess of 100 gallons were observed at the site.

Printed: 24 CFR Part 51, Subpart C addresses acceptable separation distance from above-ground explosive or flammable fuels or chemical containers. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

IX. FARMLANDS PROTECTION (7 CFR PART 658)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. Since the property consists of an existing housing development within an urbanized area, no farmlands would be impacted by the implementation of repair and rehabilitation improvements.

Printed: The property is designated for "Urban" use by the State Land Use Commission and is zoned for "A-1 Low Density Apartment" use by the City and County of Honolulu.

Hawai`i Office of Planning website at http://planning.hawaii.gov/gis/
(Date accessed: 6/30/2015)

X. FLOODPLAIN MANAGEMENT (EXECUTIVE ORDER 11988, 24 CFR PART 55)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Affect Program

The project site is located in Zone X, an area of minimal flooding (i.e., 0.2% annual chance flood), and is located outside the 500-year flood zone. A field inspection and information obtained from the AMP Manager confirmed no major flooding issues within the project site.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal any signs of previous flooding problems. Pālolo Stream borders the site on the east, while Pūkele Stream borders it on the north. Both streams are channelized along their boundaries with the project site. An interview with the Maintenance Supervisor also determined that no major ponding or flooding issues have occurred on the project site.

Printed: Flood Insurance Rate Map, City and County of Honolulu, Hawai'i Community Panel Number 15003C0367H, Revised November 5, 2014.

Hawai`i Department of Land and Natural Resources website at http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 6/30/15).

XI. HISTORIC PRESERVATION (NATIONAL HISTORIC PRESERVATION ACT OF 1966; SECTIONS 106 AND 110; 36 CFR, PART 800)

CONTACT:

Ms. Suzanne Case, Chairperson
Department of Land and Natural Resources (DLNR)
State of Hawai'i
1151 Punchbowl Street
Honolulu, Hawai'i 96813
Tel. #: 587-0400

SUPPORTING DOCUMENTS	
X	Field
X	Contact
X	Printed
X	Experience
X	Study

DETERMINATION:

Status Category: No Adverse Effect on Historic Properties with Mitigation

Pālolo Valley Homes is 58 years old and was first occupied in 1957. A Historic Property Evaluation (HPE) prepared by Mason Architects in April 2006 evaluated six HPHA housing projects and determined that this project met the eligibility criteria for listing in the National Register of Historic Places (NRHP). To be considered eligible, a property must meet the National Register criteria for evaluation which involves examining its integrity, significance, and age (generally at least 50 years old).

In May 2015, Fung Associates conducted an Architectural Inventory Survey (AIS) for Pālolo Valley Homes. Buildings 16, 17, and 20 have since been remodeled (completed in April 2014) and do not meet NRHP-eligibility criteria because they no longer retain their integrity of design or materials. The 17 remaining buildings have been minimally altered and appear significant for their association with the development of public housing in Hawai`i, and for their architecture which is typical of the public housing design of the period. As a result, the non-remodeled buildings appear to have retained their historic integrity, and in terms of NRHP criteria, were evaluated as excellent examples of public housing in Hawai`i. In a letter to the State Historic Preservation Officer (SHPO) dated August 20, 2015, the HPHA determined that repair and rehabilitation improvements for this housing project would have "no adverse effect" on historic properties subject to certain mitigative measures. In a letter dated December 11, 2015, the SHPO concurred with the HPHA's determination and provided additional conditions for ground-disturbing activities. In responding to this letter, the HPHA concurred with the conditions set forth by the SHPO.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the Pālolo Valley Homes housing project did not locate any existing or potential archaeological sites (e.g., heiau) or cultural features on the property. The project site has undergone extensive ground-altering activities since it was initially developed and improved with buildings, driveways, parking lots, sidewalks, and other related improvements. An interview with the AMP Manager and Maintenance Supervisor indicates that no known sites or features are present on the property and that Buildings 14, 15, 18, and 19 are scheduled for remodeling 2015.

Contact: Based on the findings and recommendations of the 2015 AIS, the HPHA submitted a letter to the State Historic Preservation Officer dated August 20, 2015 regarding 28 housing projects, which is included in the Appendix. Of this total, 15 housing projects did not meet National Register eligibility criteria, therefore, a "no historic properties affected" determination was proposed for these repair and rehabilitation improvements. Repair and rehabilitation improvements for the other 13 housing projects (including Pālolo Valley Homes) were determined to meet National Register eligibility criteria and were proposed to have "no adverse effect" on historic properties subject to certain mitigative measures. In a letter to the SHPO dated August 20, 2015, the HPHA determined that repair and rehabilitation improvements for this housing project would have "no adverse effect" on historic properties subject to certain mitigative measures.

In a letter dated December 11, 2015, the SHPO concurred with the HPHA's determination that repair and rehabilitation improvements for this housing project would have "no adverse effect" on historic properties pursuant to NHPA Section 106 and subject to the following mitigative measures. . In response to this letter, the HPHA concurred with the conditions set forth by the SHPO. A copy of these letters are included in Exhibit C.

1. When considering rehabilitation improvements or building modifications: 1) the buildings' character-defining features shall be retained to the extent practicable; and 2) the renovations shall adhere to the Secretary of the Interior's (SOI) Standards for Rehabilitation.

2. If rehabilitation improvements or building modifications cannot retain the character-defining features or adhere to the SOI's Standards, a Historic American Buildings Survey (HABS) will be conducted subject to the following conditions:

    a. Level II HABS documentation will be conducted in accordance with the National Park Service standards; and

    b. A representative sample of multiple building types would be selected for HABS documentation due to the multiple types of buildings constructed for housing projects.

3. If ground disturbing activity is anticipated, HPHA must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation.

    a. Submit detailed plans, specifications and a detailed scope of work once the plans have been developed.

    b. Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are

50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation.

c. Submit a TMK map showing the full extent of the project area within the affected parcel/s.

d. Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area.

e. Summary of land use history, such as previous intensive cultivation, grubbing or grading.

f. Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

In addition to these mitigation measures, the HPHA would enter into a Programmatic Agreement with the SHPO to address the implementation of future repair and rehabilitation improvements to State housing projects after the current Section 106 review process is completed and prior to the next environmental review process in approximately five years. Furthermore, should subsurface human remains or other traces of human activity greater than 50 years old be encountered during construction, all work in the vicinity of the find would immediately stop and the SHPD would be promptly notified. The treatment of any cultural remains and human remains that are encountered would be conducted in accordance with applicable requirements of Chapter 6E, Hawai‘i Revised Statutes (Historic Preservation) and Chapter 13-300, Hawai‘i Administrative Rules **(**Rules of Practice and Procedure Relating to Burial Sites and Human Remains).

Printed: A review of the U.S. National Parks Service website for the National Register of Historic Places did not identify any historic properties within the limits of this housing project. A similar review of the State DLNR website for the State Register of Historic Places revealed that there are no historic properties within the project site.

National Register: U.S. National Park Service website at:
http://www.nps.gov/nr/research/ (Date accessed: 7/2/15).

State Register: Hawai`i Department of Land and Natural Resources website at:
http://dlnr.hawaii.gov/shpd/state-register/ (Date accessed: 7/2/15).

Experience: In a letter to the SHPD dated July 15, 2005, the Housing and Community Development Corporation of Hawai`i (HCDCH), a predecessor to the HPHA, proposed minor repair and rehabilitation improvement at 39 public housing projects throughout Hawai`i (including Pālolo Valley Homes) and believed the work would have “no effect” on significant historic sites. The HCDCH also asked the SHPD to: (1) define the area of potential effect for the housing projects; (2) identify and evaluate historic properties within the housing projects; and (3) assess and resolve any adverse effects of the housing projects per Section 106 of the National Historic Preservation Act of 1966.

In a letter to the HCDCH dated September 27, 2005, the SHPO responded by requesting that a programmatic agreement (PA) with the HCDCH be developed that would also address the recordation of housing projects that have not yet reached the 50-year milestone but may face possible adverse effects from the proposed work.

Based on follow up discussions with the SHPD, Mason Architects prepared a historic property evaluation (HPE) on behalf of the HCDCH in April 2006 for six public housing projects on Hawai`i Island and O`ahu (including Pālolo Valley Homes). The six projects covered by the HPE met, or would soon meet, the 50-year age criteria to become eligible for listing in the NRHP. At the time, only two of the projects were over 50 years old and only two met NRHP eligibility criteria. The HPE was submitted to the SHPD for review and comment on June 6, 2006. No comments or objections were received from the SHPO on the 2006 HPE or the "no effect" determination that was set forth in the HCDCH letter dated July 15, 2005.

In a letter to the SHPO dated July 14, 2010, the HPHA determined that minor repair and rehabilitation improvement for three out of five public housing projects on Hawai`i Island and O`ahu would have "no adverse effect" on historic properties. This determination was based on an HPE that Mason Architects prepared on behalf of the HPHA in June 2010. The five projects covered by the HPE met, or would soon meet, the 50-year age criteria to become eligible for listing in the NRHP. At the time, all five projects were over 50 years old but only three met NRHP eligibility criteria. No comments or objections were received from the SHPO on the 2010 HPE or the "no adverse effect" determination set forth in the HPHA letter dated July 14, 2010.

In letter to the SHPO dated April 19, 2011, the HPHA determined that minor repair and rehabilitation improvement at 57 public housing projects throughout Hawai`i would have "no effect" on historic properties. The SHPO had no comments or objections on the "no effect" determination.

Study: The 2015 AIS evaluated 17 HPHA housing projects including Pālolo Valley Homes. The purpose of the AIS was to evaluate certain previously-evaluated housing projects along with other housing projects in order to determine if they would meet NRHP eligibility criteria. The section of the AIS that covers this housing project is included in Exhibit C, while the entire document is included in the Appendices.

Two of the 17 housing projects are over 50 years old, while the remaining 15 are over 45 years old and will be at least 50 years old when repair and rehabilitation improvements are implemented. In addition, eight of the 17 projects met the eligibility criteria for listing in the NRHP and were considered significant for their role in the social history of Hawai'i, for representing the efforts of a territorial and statewide housing reform, and for their architecture, which reflected a type, style, method of construction, and materials used during the period in which they were constructed. The housing projects that were not considered NRHP eligible were evaluated as such because of their loss of integrity due to prior renovations.

Pālolo Valley was the site of two of the four evacuation camps that were built in 1942 in anticipation of another Japanese attack on Oahu. The buildings were turned over to the Hawai`i Housing Authority (HHA) and converted to wartime public housing when a second attack became unlikely. The HHA also developed an area for emergency public housing on the Pālolo Golf Course to help address the wartime housing shortage. In December 1951, the HHA authorized the demolition of the evacuation camps and emergency housing which since given way to the present Pālolo Valley Homes and Pālolo Valley District Park. Buildings 16, 17, and 20 were remodeled in a post-modern style and are not considered significant due to their loss of design integrity. The remaining 17 buildings still retain their original windows and kitchen design, and much of their original flooring and are considered to be good examples of their type and style. As a result, the non-remodeled buildings are

considered to have retained their historic integrity as well as meeting the eligibility criteria for listing in the NRHP as excellent examples of public housing in Hawai`i.

XII. NOISE ABATEMENT CONTROL (24 CFR PART 51B)

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Within HUD Noise Standards

The project site is not situated along a highway or major arterial roadway that has a high volume of vehicular traffic that may generate significant noise. Palolo Avenue is a City roadway located west of the project site which is further buffered by existing single-family residences along this roadway. No significant noise levels are impacting the project site from the adjacent Palolo Elementary School or Palolo District Park located across Kawila Street. The HUD noise level calculator estimated noise levels from Palolo Avenue at the project site to be 51.9 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

SUPPORTING DOCUMENTATION:

Field: The project site is situated within a residential community in the rear of Palolo Valley. Single-family residences are located to the west and north (*mauka*), Palolo District Park is located across Kawila Street, and Palolo Elementary School is located to the east. The school's buildings situated nearest to existing residential buildings is about 160 feet away. No significant noise levels were experienced from school activities or the district park. No significant noise generating sources were identified within the project site during the site inspection. Noise sources are predominantly associated with vehicular traffic along adjacent roadways.

Study: The HUD day/night noise level calculator was used to estimate approximate traffic noise levels at the project site. Palolo Avenue is a City road generally running in a north-south (*mauka-makai*) direction providing vehicular access into and out from the residential community in this valley. This road is located to the west of the project site which is further buffered by existing single-family residences along this roadway. 10th Avenue is another City road to the east of the project site providing vehicular access into and out from this valley. Palolo Avenue has about 13,200 vehicles a day based upon State Department of Transportation 2013 traffic data. 10th Avenue has less average daily traffic than Palolo Avenue, therefore, Palolo Avenue was used for HUD calculator. Given the distance of the center lines of this roadway from the project site (about 180 feet), the estimated noise levels at the project site using this HUD calculator was 51.9 dBA. Palolo District Park is located across Kawila Street and the project site. However, noise from recreational activities occurring there are not expected to generate significant noise effects on project residents, and no activities occur during overnight hours. Therefore, traffic noise levels at

this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

XIII. SOLE SOURCE AQUIFER (40 CFR PART 149)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact on Sole Source Aquifer.

The housing project is located within the O‘ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation. However, if exceptional circumstances require compliance steps with any of these authorities, such compliance must be established and documented prior to approving the site-specific loan or grant.

The sewer line for Building 10 collapsed in September 2014. The building had to be abandoned because of the sewer line failure. There were no activities observed during the site visit that would degrade the quality of drinking water. In addition, the implementation of repair and maintenance improvements will not have any impact on drinking water quality.

SUPPORTING DOCUMENTATION:

Printed: This determination was based upon review of the Sole Source Aquifer Memorandum of 4/30/90 (Sections II.B.1 and II.B.2) and consideration of the type of rehabilitation related improvements that would be conducted for this project.

XIV. WETLANDS PROTECTION (EXECUTIVE ORDER 11990)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the property did not identify the presence of any wetlands.

Printed: U.S Fish and Wildlife Service website at: http://www.fws.gov/wetlands/data/mapper.html (Date accessed 6/30/2015).

XV. WILD AND SCENIC RIVERS ACT (16 USC 1271, SECTION 7 (B), (C))

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no Wild and Scenic Rivers in Hawaiʻi, which excludes this project from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: National Wild and Scenic Rivers System website at: http://www.rivers.gov/index.php (Date accessed: 6/30/2015).

XVI. ENVIRONMENTAL JUSTICE (EXECUTIVE ORDER NO. 12898)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact on Requirements.

Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, repair and rehabilitation improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations. Repair and rehabilitation improvements should benefit low-income and minority populations living within this housing project.

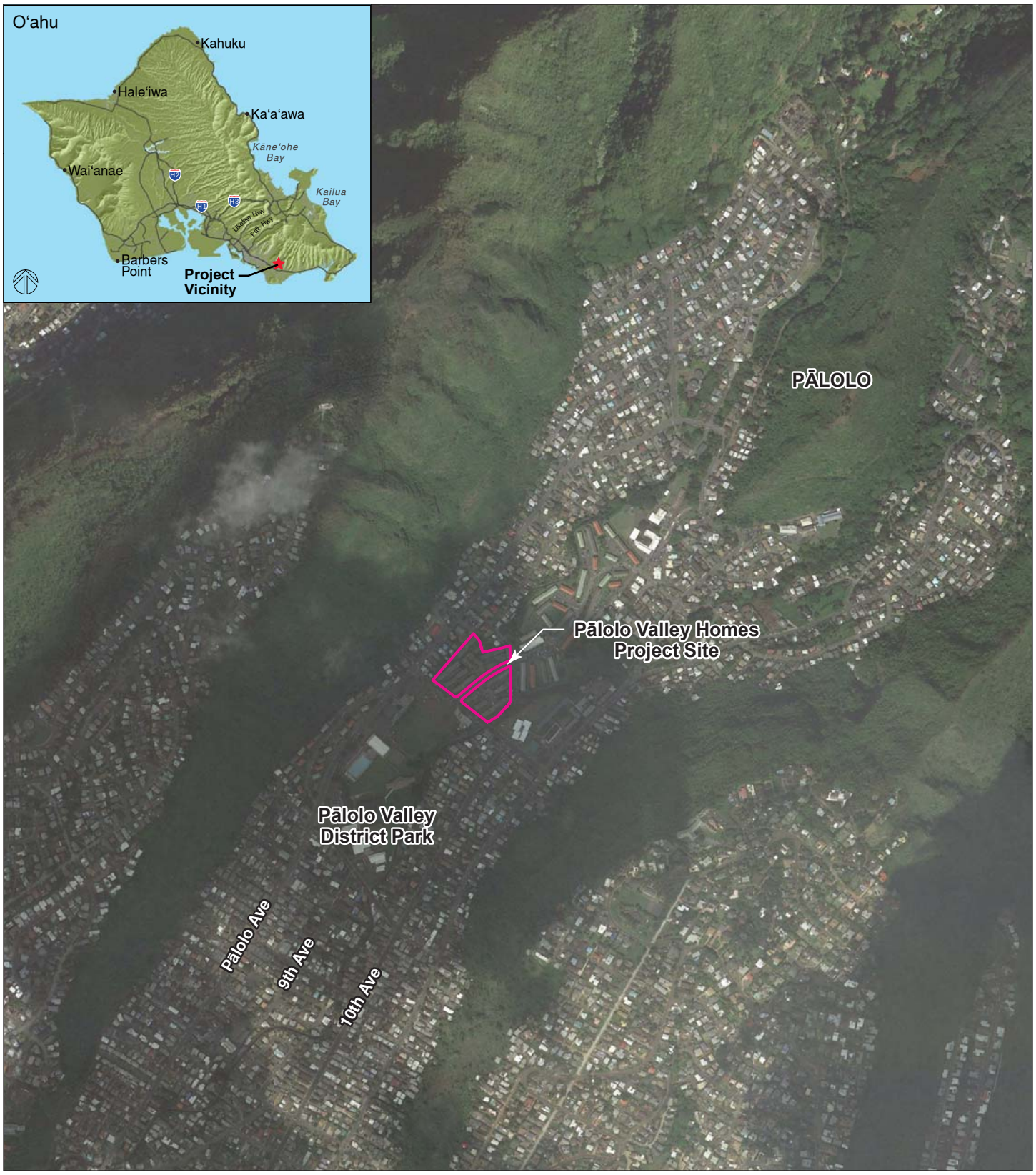
SUPPORTING DOCUMENTATION:

Printed: Executive Order 12898.

U.S. Department of Housing and Urban Development website at:
https://www.hudexchange.info/environmental-review/environmental-justice/

EXHIBIT A

Location Map, TMK Map, Site Map, Flood Map, and Site Photos



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

HPHA No. 1008 - Pālolo Valley Homes (AMP 50)

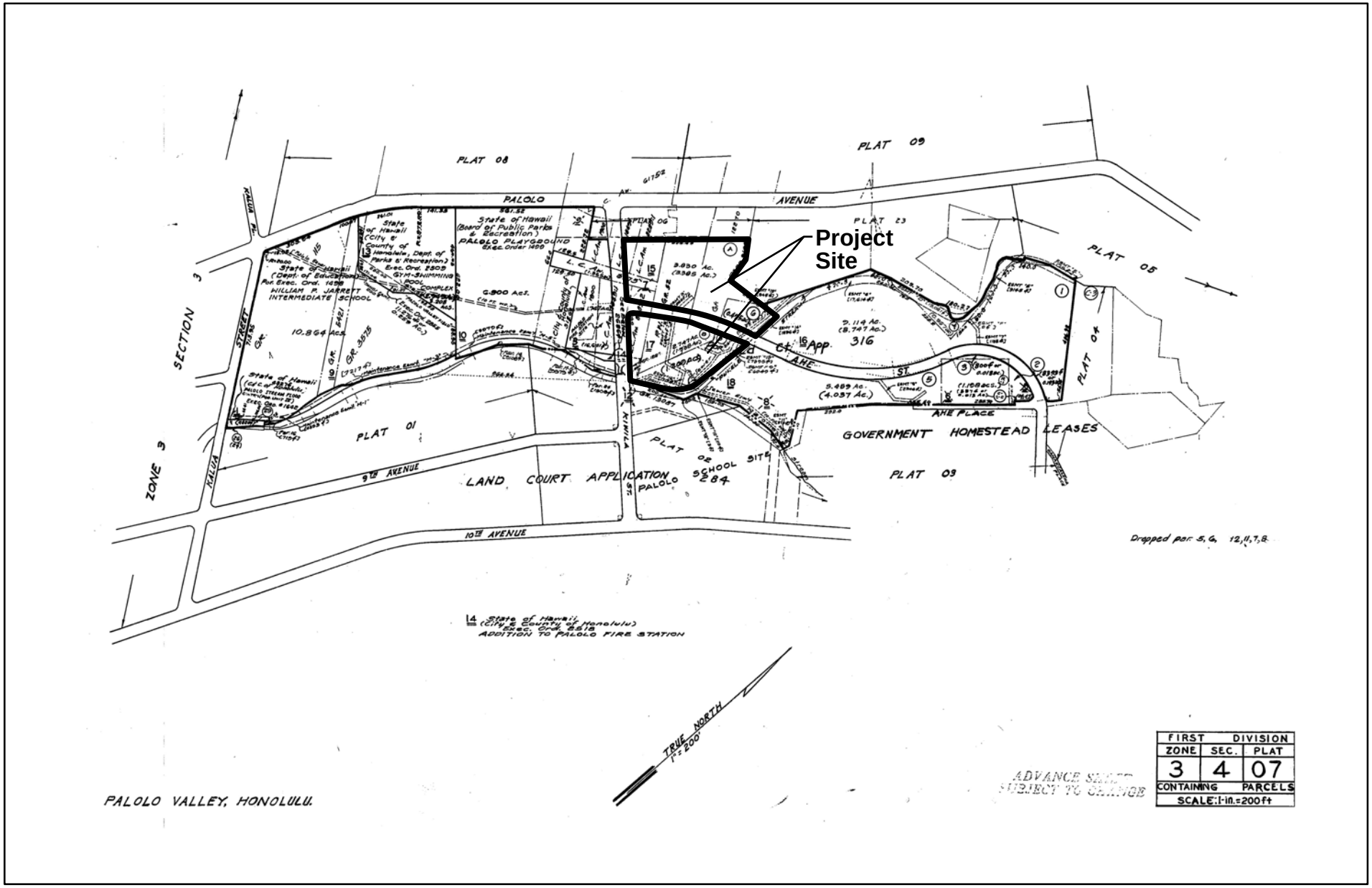
Figure 1 - Project Location Map

3/3/2014

Honolulu, O'ahu

1,000 FT

HHF PLANNERS
places for people



HPHA No. 1008 - Pālolo Valley Homes (AMP 50)

Figure 2 - TMK Map

Honolulu, O'ahu

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1008 - Pālolo Valley Homes (AMP 50)

Figure 3 - Site Map

Honolulu, O'ahu

80 FEET

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

LEGEND

Zone X - Outside the 0.2% Annual Chance of Flood

HPHA No. 1008 - Pālolo Valley Homes (AMP 50)

Figure 4 - Flood Map

Honolulu, O'ahu

80 FEET

HHF PLANNERS
places for people

PĀLOLO VALLEY HOMES
SITE PHOTOS

Building 14, eligible for the NRHP.

Kiwila Street (facing west) by drain canal.

Ahe Street (facing north) by drain canal.

Buildings 18 & 19 are scheduled for remodeling.

East boundary of project (facing north) behind renovated Bldg 16& 17

West property line (facing south) adjacent to the rail transport right-of-way, along Kamehameha Highway

PĀLOLO VALLEY HOMES
SITE PHOTOS

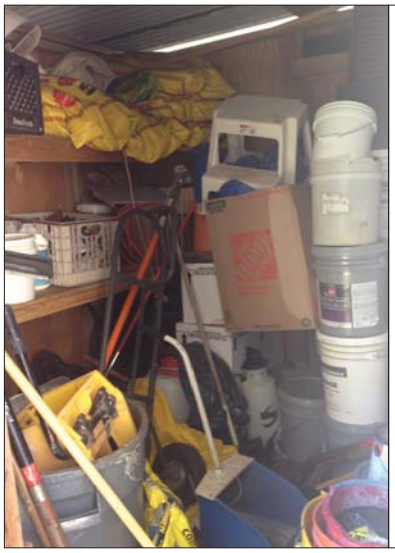
Building 10, recently abandoned due to sewer line break.

Open space between builings.

Remodeled Building 16 &17

Drain inlet next to Building 5

Renovated Building 20



Hazardous material storage

EXHIBIT B

EDR Radius Map Report

Palolo Valley Homes
2107 Ahe St.
Honolulu, HI 96816

Inquiry Number: 4237094.242s
March 17, 2015

EDR Summary Radius Map Report

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

FORM-NULL-PVC

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

2107 AHE ST.
HONOLULU County, HI 96816

COORDINATES

Latitude (North):	21.3008000 - 21˚ 18' 2.88''
Longitude (West):	157.7941000 - 157˚ 47' 38.76''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	625083.8
UTM Y (Meters):	2355778.0
Elevation:	220 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	USGS 7.5 min quad index

MAPPED SITES SUMMARY

Target Property Address:
2107 AHE ST.
, HI 96816

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
1	PALOLO VALLEY HOMES	2107 AHE STREET	FINDS		TP
2	C&CH PALOLO FIRE STA	3345 KIWILI ST	LUST, UST	Lower	421, SSW
3	PALOLO ELEMENTARY SC	2106 10TH AVE	SHWS	Higher	926, SE
4	PALOLO VALLEY DISTRI	2007 PALOLO AVE	RCRA-CESQG, FINDS	Higher	977, WSW
5	MARKS AUTO SERVICE	2404 10TH AVE	RCRA NonGen / NLR, FINDS, LUST, UST	Higher	1782, ENE
6	AIM PALOLO	1841 PALOLO AVE	LUST, UST, Financial Assurance	Lower	2199, SW
7	FORMER PALOLO SUBSTA	3419 PAALEA ST	SHWS	Lower	2805, SSW
8	HECO SUBSTATION: PUK	2702 MYRTLE ST	SHWS, SPILLS	Higher	4311, NNE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 7 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
PALOLO VALLEY HOMES 2107 AHE STREET HONOLULU, HI 96816	FINDS	N/A

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

Federal RCRA generators list

RCRA-CESQG: A review of the RCRA-CESQG list, as provided by EDR, and dated 12/09/2014 has revealed that there is 1 RCRA-CESQG site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PALOLO VALLEY DISTRI	***2007 PALOLO AVE***	***WSW 1/8 - 1/4 (0.185 mi.)***	***4***	***7***

State- and tribal - equivalent CERCLIS

SHWS: A review of the SHWS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 3 SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PALOLO ELEMENTARY SC	2106 10TH AVE	SE 1/8 - 1/4 (0.175 mi.)	3	7
HECO SUBSTATION: PUK	***2702 MYRTLE ST***	***NNE 1/2 - 1 (0.816 mi.)***	***8***	***8***

Lower Elevation	Address	Direction / Distance	Map ID	Page
FORMER PALOLO SUBSTA	3419 PAALEA ST	SSW 1/2 - 1 (0.531 mi.)	7	8

EXECUTIVE SUMMARY

State and tribal leaking storage tank lists

LUST: A review of the LUST list, as provided by EDR, and dated 12/16/2014 has revealed that there are 3 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MARKS AUTO SERVICE Facility Status: Site Cleanup Completed (NFA)	***2404 10TH AVE***	***ENE 1/4 - 1/2 (0.338 mi.)***	***5***	***7***

Lower Elevation	Address	Direction / Distance	Map ID	Page
C&CH PALOLO FIRE STA Facility Status: Site Cleanup Completed (NFA)	***3345 KIWILI ST***	***SSW 0 - 1/8 (0.080 mi.)***	***2***	***7***
AIM PALOLO Facility Status: Site Cleanup Completed with EHMP	***1841 PALOLO AVE***	***SW 1/4 - 1/2 (0.416 mi.)***	***6***	***8***

State and tribal registered storage tank lists

UST: A review of the UST list, as provided by EDR, and dated 12/18/2014 has revealed that there is 1 UST site within approximately 0.25 miles of the target property.

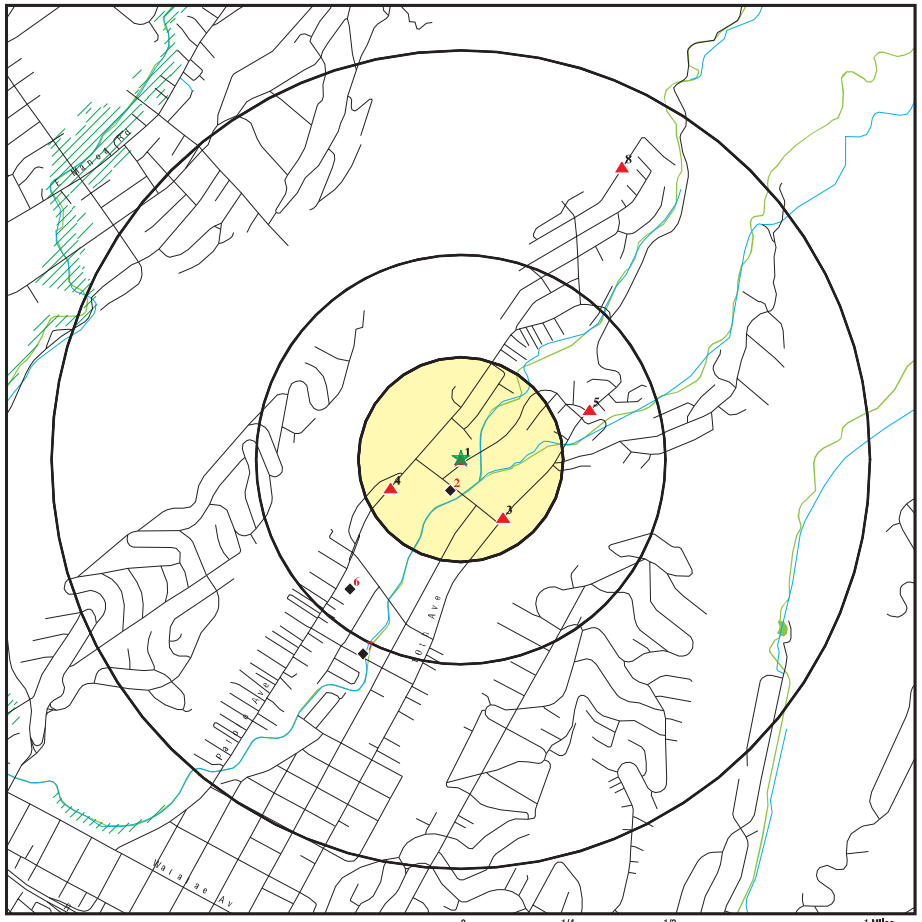
Lower Elevation	Address	Direction / Distance	Map ID	Page
C&CH PALOLO FIRE STA	***3345 KIWILI ST***	***SSW 0 - 1/8 (0.080 mi.)***	***2***	***7***

ORPHAN SUMMARY

Count: 0 records.

City	EDR ID	Site Name	Site Address	Zip	Database(s)
		NO SITES FOUND			

OVERVIEW MAP - 4237094.242S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Palolo Valley Homes ADDRESS: 2107 Ahe St. Honolulu HI 96816 LAT/LONG: 21.3008 / 157.7941	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.242s DATE: March 17, 2015 5:48 pm

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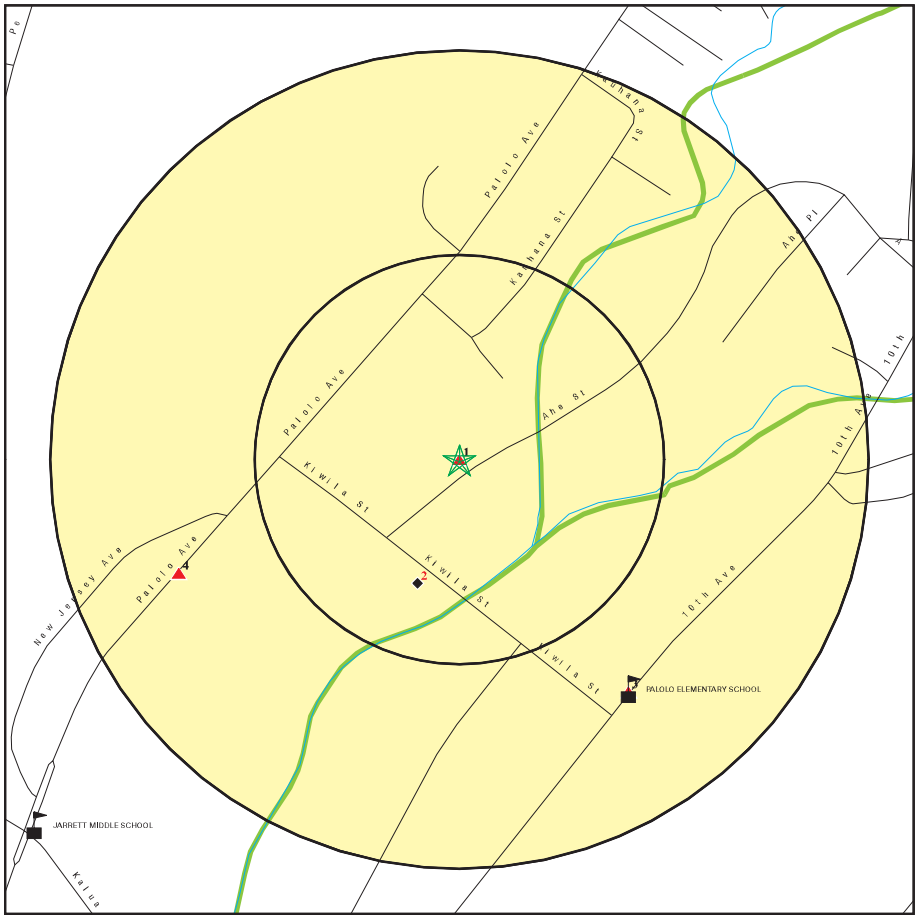
DETAIL MAP - 4237094.242S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

0 1/16 1/8 1/4 Miles

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Palolo Valley Homes ADDRESS: 2107 Ahe St. Honolulu HI 96816 LAT/LONG: 21.3008 / 157.7941	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.242s DATE: March 17, 2015 5:48 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	1	NR	NR	NR	1
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
SHWS	1.000		0	1	0	2	NR	3
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		1	0	2	NR	NR	3
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250		1	0	NR	NR	NR	1

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		0	0	0	NR	NR	0
INST CONTROL	0.500		0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP	1	NR	NR	NR	NR	NR	1
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		0	0	NR	NR	NR	0
EDR US Hist Cleaners	0.250		0	0	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
RGA HWS	TP		NR	NR	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

1
Target Property
Actual: 220 ft.

PALOLO VALLEY HOMES - PHYSICAL IMPROVEMENTS PHASES 1 AND 2
2107 AHE STREET
HONOLULU, HI 96816

FINDS — **1016367843**, **N/A**

Click here for full text details

2
SSW
< 1/8
0.080 mi.
421 ft.
Relative: Lower

C&CH PALOLO FIRE STATION
3345 KIWILI ST
HONOLULU, HI 96816

LUST, **UST** — **U004109529**, **N/A**

Click here for full text details

LUST
Facility Id: 9-100088
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-100088
Tank Status: Permanently Out of Use

3
SE
1/8-1/4
0.175 mi.
926 ft.
Relative: Higher

PALOLO ELEMENTARY SCHOOL
2106 10TH AVE
HONOLULU, HI

SHWS — **S108859932**, **N/A**

Click here for full text details

4
WSW
1/8-1/4
0.185 mi.
977 ft.
Relative: Higher

PALOLO VALLEY DISTRICT PARK
2007 PALOLO AVE
HONOLULU, HI 96816

RCRA-CESQG, **FINDS** — **1001487368**, **HIR000054239**

Click here for full text details

RCRA-CESQG
EPA Id: HIR000054239

5
ENE
1/4-1/2
0.338 mi.
1782 ft.
Relative: Higher

MARKS AUTO SERVICE
2404 10TH AVE
HONOLULU, HI 96816

RCRA NonGen / NLR, **FINDS**, **LUST**, **UST** — **1000601525**, **HID984467597**

Click here for full text details

RCRA NonGen / NLR
EPA Id: HID984467597

LUST
Facility Id: 9-102441
Facility Status: Site Cleanup Completed (NFA)

MARKS AUTO SERVICE (Continued) — **1000601525**

UST
Facility Id: 9-102441
Tank Status: Permanently Out of Use

6
SW
1/4-1/2
0.416 mi.
2199 ft.
Relative: Lower

AIM PALOLO
1841 PALOLO AVE
HONOLULU, HI 96816

LUST, **UST**, **Financial Assurance** — **U001235400**, **N/A**

Click here for full text details

LUST
Facility Id: 9-101176
Facility Status: Site Cleanup Completed with EHMP

UST
Facility Id: 9-101176
Tank Status: Permanently Out of Use
Tank Status: Currently In Use

7
SSW
1/2-1
0.531 mi.
2805 ft.
Relative: Lower

FORMER PALOLO SUBSTATION
3419 PAALEA ST
HONOLULU, HI

SHWS — **S108008505**, **N/A**

Click here for full text details

8
NNE
1/2-1
0.816 mi.
4311 ft.
Relative: Higher

HECO SUBSTATION: PUKELE SUBSTATION
2702 MYRTLE ST
HONOLULU, HI 96814

SHWS, **SPILLS** — **S110061485**, **N/A**

Click here for full text details

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
HI	AIRS	List of Permitted Facilities	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	BROWNFIELDS	Brownfields Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	CDL	Clandestine Drug Lab Listing	Department of Health	08/04/2010	09/10/2010	10/22/2010
HI	DRYCLEANERS	Permitted Drycleaner Facility Listing	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	ENG CONTROLS	Engineering Control Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	Financial Assurance	Financial Assurance Information Listing	Department of Health	12/01/2014	12/19/2014	01/28/2015
HI	INST CONTROL	Sites with Institutional Controls	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	LUST	Leaking Underground Storage Tank Database	Department of Health	12/16/2014	12/19/2014	01/28/2015
HI	RGA HWS	Recovered Government Archive State Hazardous Waste Facilitie	Department of Health		07/01/2013	01/08/2014
HI	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Health		07/01/2013	01/17/2014
HI	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	Department of Health		07/01/2013	01/03/2014
HI	SHWS	Sites List	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	SPILLS	Release Notifications	Department of Health	12/02/2014	12/22/2014	01/28/2015
HI	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	03/10/2012	01/03/2013	02/11/2013
HI	SWF/LF	Permitted Landfills in the State of Hawaii	Department of Health	09/17/2012	04/03/2013	05/10/2013
HI	UIC	Underground Injection Wells Listing	Department of Health	02/07/2013	02/12/2013	04/09/2013
HI	UST	Underground Storage Tank Database	Department of Health	12/18/2014	12/19/2014	01/28/2015
HI	VCP	Voluntary Response Program Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	04/22/2013	03/03/2015	03/09/2015
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2011	02/26/2013	04/19/2013
US	CERCLIS	Comprehensive Environmental Response, Compensation, and Liab	EPA	10/25/2013	11/11/2013	02/13/2014
US	CERCLIS-NFRAP	CERCLIS No Further Remedial Action Planned	EPA	10/25/2013	11/11/2013	02/13/2014
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	07/01/2014	09/10/2014	10/20/2014
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	01/23/2015	02/13/2015	03/09/2015
US	CORRACTS	Corrective Action Report	EPA	12/09/2014	12/29/2014	01/29/2015
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DELISTED NPL	National Priority List Deletions	EPA	12/16/2014	01/08/2015	02/09/2015
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	07/31/2012	08/07/2012	09/18/2012
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EDR US Hist Auto Stat	EDR Exclusive Historic Gas Stations	EDR, Inc.			
US	EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	09/29/2014	09/30/2014	11/06/2014
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	07/21/2014	10/07/2014	10/20/2014
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
US	FEMA UST	Underground Storage Tank Listing	FEMA	01/01/2010	02/16/2010	04/12/2010
US	FINDS	Facility Index System/Facility Registry System	EPA	08/16/2014	09/10/2014	10/20/2014
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	06/06/2014	09/10/2014	09/18/2014
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	12/29/2014	12/30/2014	03/09/2015
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	01/23/2015	02/06/2015	03/09/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	02/01/2013	05/01/2013	11/01/2013

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	01/30/2015	02/05/2015	03/09/2015
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/10/2015	03/13/2015
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	01/28/2015	01/30/2015	03/13/2015
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	01/08/2015	01/08/2015	02/09/2015
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2005	12/08/2006	01/11/2007
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	02/01/2013	05/01/2013	01/27/2014
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	01/30/2015	02/05/2015	03/13/2015
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/13/2015	03/13/2015
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	01/29/2015	01/30/2015	03/13/2015
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	12/14/2014	02/13/2015	03/13/2015
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	09/29/2014	10/01/2014	11/06/2014
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	11/25/2014	11/26/2014	01/29/2015
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	02/18/2014	03/18/2014	04/24/2014
US	LUCIS	Land Use Control Information System	Department of the Navy	12/03/2014	12/12/2014	01/29/2015
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	12/29/2014	01/08/2015	01/29/2015
US	NPL	National Priority List	EPA	12/16/2014	01/08/2015	02/09/2015
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	07/01/2014	10/15/2014	11/17/2014
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	02/01/2011	10/19/2011	01/10/2012
US	PRP	Potentially Responsible Parties	EPA	10/25/2013	10/17/2014	10/20/2014
US	Proposed NPL	Proposed National Priority List Sites	EPA	12/16/2014	01/08/2015	02/09/2015
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	10/07/2014	10/08/2014	10/20/2014
US	RCRA NonGen / NLR	RCRA - Non Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RMP	Risk Management Plans	Environmental Protection Agency	08/01/2014	08/12/2014	11/06/2014
US	ROD	Records Of Decision	EPA	11/25/2013	12/12/2013	02/24/2014
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	03/07/2011	03/09/2011	05/02/2011
US	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2011	07/31/2013	09/13/2013
US	TSCA	Toxic Substances Control Act	EPA	12/31/2012	01/15/2015	01/29/2015
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	09/14/2010	10/07/2011	03/01/2012
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/16/2014	10/31/2014	11/17/2014
US	US AIRS MINOR	Air Facility System Data	EPA	10/16/2014	10/31/2014	11/17/2014

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	12/22/2014	12/22/2014	01/29/2015
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	11/19/2014	11/21/2014	01/29/2015
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	12/30/2014	12/31/2014	01/29/2015
US	Oil/Gas Pipelines	GeoData Digital Line Graphs from 1:100,000-Scale Maps	USGS			
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
US	USGS 7.5' Topographic Map	Scanned Digital USGS 7.5' Topographic Map (DRG)	USGS			

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

PALOLO VALLEY HOMES
2107 AHE ST.
HONOLULU, HI 96816

TARGET PROPERTY COORDINATES

Latitude (North):	21.3008 - 21˚ 18' 2.88''
Longitude (West):	157.7941 - 157˚ 47' 38.76''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	625083.8
UTM Y (Meters):	2355778.0
Elevation:	220 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	21157-C7 HONOLULU, HI
Most Recent Revision:	Not reported

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

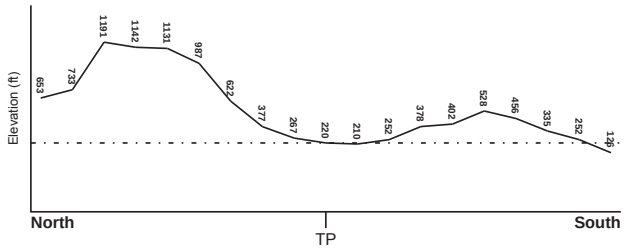
TOPOGRAPHIC INFORMATION

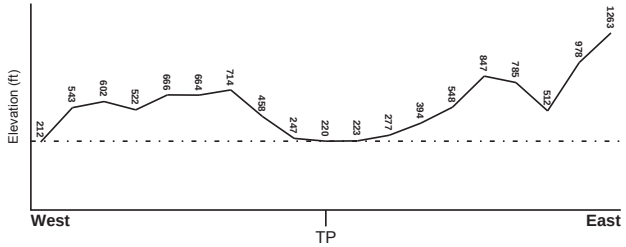
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 220 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
HONOLULU, HI	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 15003C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
HONOLULU	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

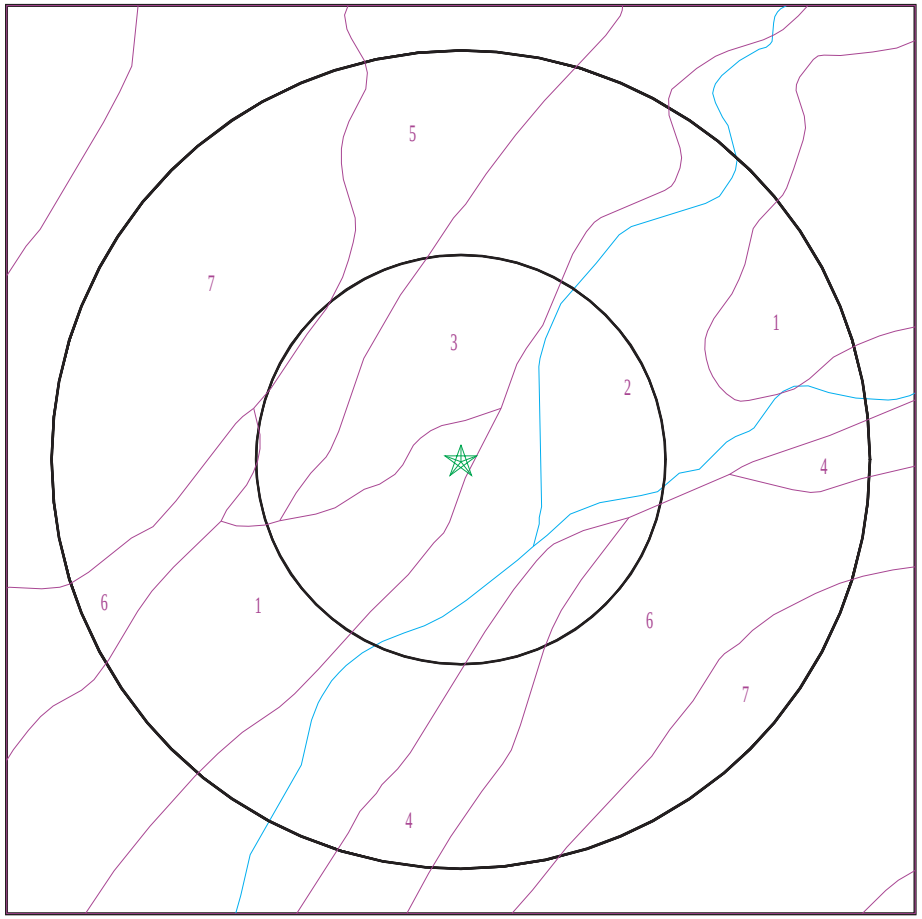
Era: -
System: -
Series: -
Code: N/A *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: -

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4237094.242s



★ Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME: Palolo Valley Homes ADDRESS: 2107 Ahe St. Honolulu HI 96816 LAT/LONG: 21.3008 / 157.7941	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.242s DATE: March 17, 2015 5:48 pm

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DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Lualualei

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4.23 Min: 0.42	Max: 7.3 Min: 6.6
2	9 inches	59 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 7.8 Min: 5.6

Soil Map ID: 2

Soil Component Name: Kawaihapai

Soil Surface Texture: stony clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	22 inches	stony clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 42.34 Min: 4.23	Max: 7.3 Min: 6.6
2	22 inches	31 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.14 Min: 14.11	Max: 7.3 Min: 6.6
3	31 inches	53 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.14 Min: 14.11	Max: 7.3 Min: 6.6

Soil Map ID: 3

Soil Component Name: Kaena

Soil Surface Texture: stony clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Poorly drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 107 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	stony clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4.23 Min: 0.42	Max: 7.3 Min: 6.6
2	9 inches	37 inches	stony clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 7.3 Min: 6.6
3	37 inches	53 inches	stony clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 7.3 Min: 6.6

Soil Map ID: 4

Soil Component Name: Kaena

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Poorly drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 107 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4.23 Min: 0.42	Max: 7.3 Min: 6.6
2	9 inches	37 inches	stony clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 7.3 Min: 6.6
3	37 inches	53 inches	stony clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 7.3 Min: 6.6

Soil Map ID: 5

Soil Component Name: Kaena

Soil Surface Texture: very stony clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Poorly drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 107 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	very stony clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4.23 Min: 0.42	Max: 7.3 Min: 6.6
2	9 inches	37 inches	stony clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 7.3 Min: 6.6
3	37 inches	53 inches	stony clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 7.3 Min: 6.6

Soil Map ID: 6

Soil Component Name: Lualualei

Soil Surface Texture: extremely stony clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	extremely stony clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4.23 Min: 0.42	Max: 7.3 Min: 6.6
2	9 inches	59 inches	extremely stony clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 7.3 Min: 5.6

Soil Map ID: 7

Soil Component Name: Rock land

Soil Surface Texture: silty clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	3 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	3 inches	7 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6
3	7 inches	20 inches	bedrock	Not reported	Not reported	Max: 0.42 Min: 0.02	Max: Min:

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A2	USGS40000269686	1/2 - 1 Mile NE
B5	USGS40000269725	1/2 - 1 Mile NW
B6	USGS40000269726	1/2 - 1 Mile NW
B7	USGS40000269727	1/2 - 1 Mile NW
B8	USGS40000269724	1/2 - 1 Mile NW
B9	USGS40000269722	1/2 - 1 Mile NW
B10	USGS40000269723	1/2 - 1 Mile NW
C12	USGS40000269553	1/2 - 1 Mile ESE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A3	HI0000331	1/2 - 1 Mile NE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

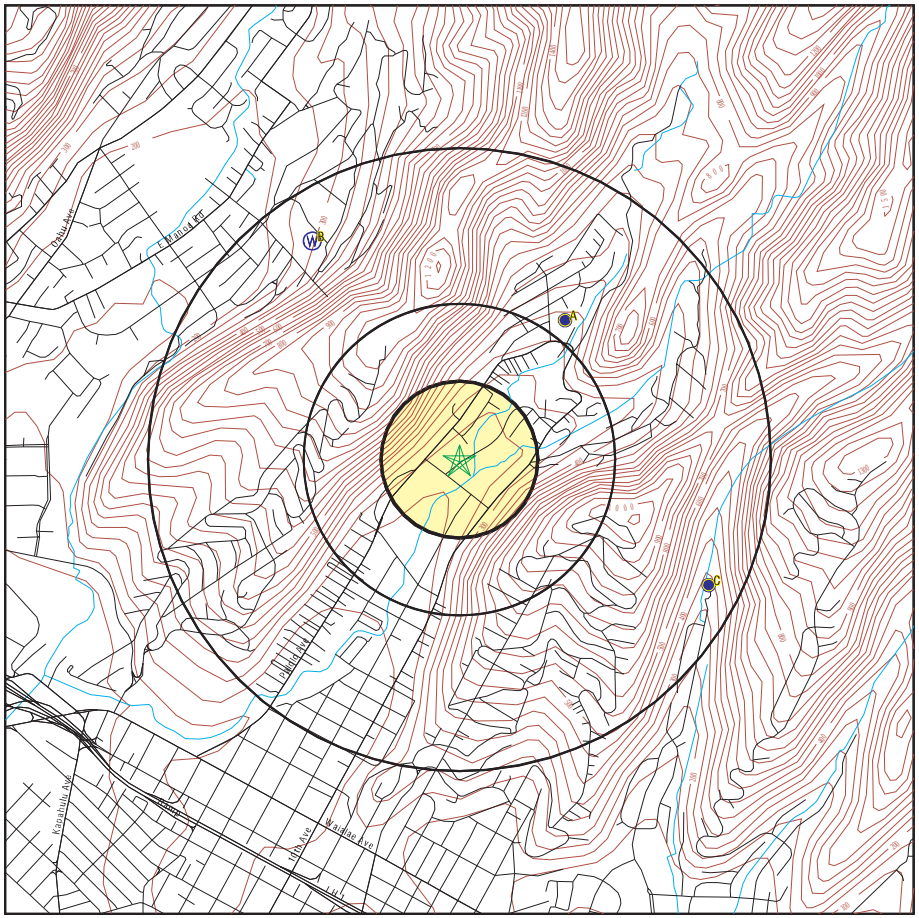
MAP ID	WELL ID	LOCATION FROM TP

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	HI8000000002262	1/2 - 1 Mile NE
A4	HI8000000002275	1/2 - 1 Mile NNE
C11	HI8000000002116	1/2 - 1 Mile ESE

PHYSICAL SETTING SOURCE MAP - 4237094.242s



County Boundary
Major Roads
Contour Lines
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons

Groundwater Flow Direction
Indeterminate Groundwater Flow at Location
Groundwater Flow Varies at Location

0 1/4 1/2 1 Miles

N

SITE NAME: Palolo Valley Homes ADDRESS: 2107 Ahe St. Honolulu HI 96816 LAT/LONG: 21.3008 / 157.7941	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.242s DATE: March 17, 2015 5:48 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
A1 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002262**
A2 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269686**
A3 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FRDS PWS**	**HI0000331**
A4 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002275**
B5 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269725**
B6 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269726**
B7 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269727**
B8 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269724**
B9 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269722**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
B10 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269723**
C11 **ESE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002116**
C12 **ESE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269553**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for HONOLULU County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 96816

Number of sites tested: 14

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.107 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	0.650 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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EXHIBIT C

Section 106 Consultation &

Architectural Inventory Survey Information

DAVID Y. IGE
GOVERNOR OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

KEKOA KALUHIWA
FIRST DEPUTY

JEFFREY T. PEARSON
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

December 11, 2015

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
P.O. Box 17907
Honolulu, HI 96817

LOG: 2015.02939, 2015.03557
DOC: 1511JLP28
Architecture, Archaeology
History and Culture

Dear Mr. Ouansafi:

SUBJECT: **Chapter 6E-8 and National Historic Preservation Act Section (NHPA) Section 106 Consultation – Department of Housing and Urban Development (HUD) Repair and Rehabilitation Project Department of Human Services, Hawai‘i Public Housing Authority (HPHA) Palolo Valley Homes Rehabilitation Project – 2107 Ahe Street Waikiki Ahupua‘a, Kona District, Island of O‘ahu TMK: (1) 3-4-007:016**

Thank you for your initial submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services (DHS), Hawaii Public Housing Authority (HPHA) consultation with SHPD in accordance with 36 CFR 800.3 and Hawaii Revised Statutes (HRS), Chapter 6E. We received your another submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience.

The submittal indicates that the HPHA is requesting the State Historic Preservation Officer's (SHPO) concurrence with a determination of "no effect" for the proposed HUD repair and rehabilitation improvement projects involving 43 existing public housing developments located throughout the State over the next five (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 consultation on their behalf.

This letter addresses Palolo Valley Homes Residential Rehabilitation Project, 2107 Ahe Street. The HPHA has identified the area of potential effects (APE) as the 9.11-acre area parcel owned by the State (HPHA) which is identified as TMK: (1) 3-4-007:016. DHS/HPHA have indicated at this stage of the planning process, they are unclear whether the subject 9.11-acre project area will require any ground disturbances.

Our records indicate that no archaeological inventory survey has been conducted within the subject parcel and that no historic properties have been identified. However, based on nearby studies potential exists to encounter subsurface traditional Hawaiian and/or historic properties within the subject parcel.

The SHPD has reviewed the undertaking 2107 Ahe Street, and the SHPO's determination is **no adverse effect** pursuant to NHPA Section 106 and **no historic properties affected** pursuant to HRS §6E-8 within the APE **provided the following conditions are met:**

- If ground disturbing activity is anticipated, DHS must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation;
- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;

- Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;
- Submit a TMK map showing the full extent of the project area within the affected parcel/s;
- Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Summary of land use history, such as previous intensive cultivation, grubbing or grading;
- Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions regarding archaeological resources or concerns please contact Susan Lebo at (808) 692-8019 or at Susan.A.Lebo@hawaii.gov. For any history and cultural concerns please contact Kaʻāhiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov. Please contact Jessica Puff at Jessica.L.Puff@hawaii.gov or (808) 692-8023 for any questions regarding architectural concerns or this letter.

Sincerely,

Susan A. Lebo

Signed for

Alan A. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

PALOLO VALLEY HOMES

Project	Palolo Valley Homes
Architect	Edwin Bauer
Built	1952-1957
National Register Eligibility	Eligible
Criteria	A and C
Significance	Association with the development of public housing in Hawaii and architecturally significant in typical design of the public housing in its period.
Character Defining Features	Flat roof, canopies over the windows and entry doors, concrete block wall adjoining entry doors, wood framed windows, wood framed interior and exterior doors, original building numbers, original vinyl tiles, and intact kitchen and bathrooms. Some has original building numbers. Buildings are placed immediately next each other with projections.

Landscape Architect: Donald Wolbrink

This housing project was previously evaluated by Mason Architects in 2006, at which time it was considered to meet the criteria for listing in the National Register of Historic Places. Since that time three of the buildings, numbers 16, 17, and 20 have been remodeled and no longer retain their integrity of design or materials, and do not appear to meet the criteria for listing in the National Register of Historic Places. The other seventeen buildings all appear to meet the criteria for listing in the National Register of Historic Places as a historic district.

Description

Palolo Valley Homes sits on a sloping lot on the Diamond Head side of Palolo Avenue. It is a complex of 20, two- story, reinforced concrete buildings rendered in a modern style. An over-arching Zeilenbau configuration is employed, with approximately 55 feet between the buildings. Some of the buildings are paired, being connected, with one of the two projecting outward from the other. There are four building forms utilized, all in the same modern style with a rectangular footprint, differing only in the number of units which they contain. Type A houses five units, of which two are one-bedroom, two three-bedroom, and one five-bedroom. Type B houses six units with two-bedroom, two three-bedroom and two four-bedroom. Type C has eight units, four two-bedroom, two three-bedroom and two four-bedroom. For variety, the B type building's plan is also reversed. The one- and two-bedroom units occupy only one floor, and are stacked one above the other and are placed at the ends of the buildings. Exterior concrete steps, traversing the sides of the buildings in a straight run access the second story units.

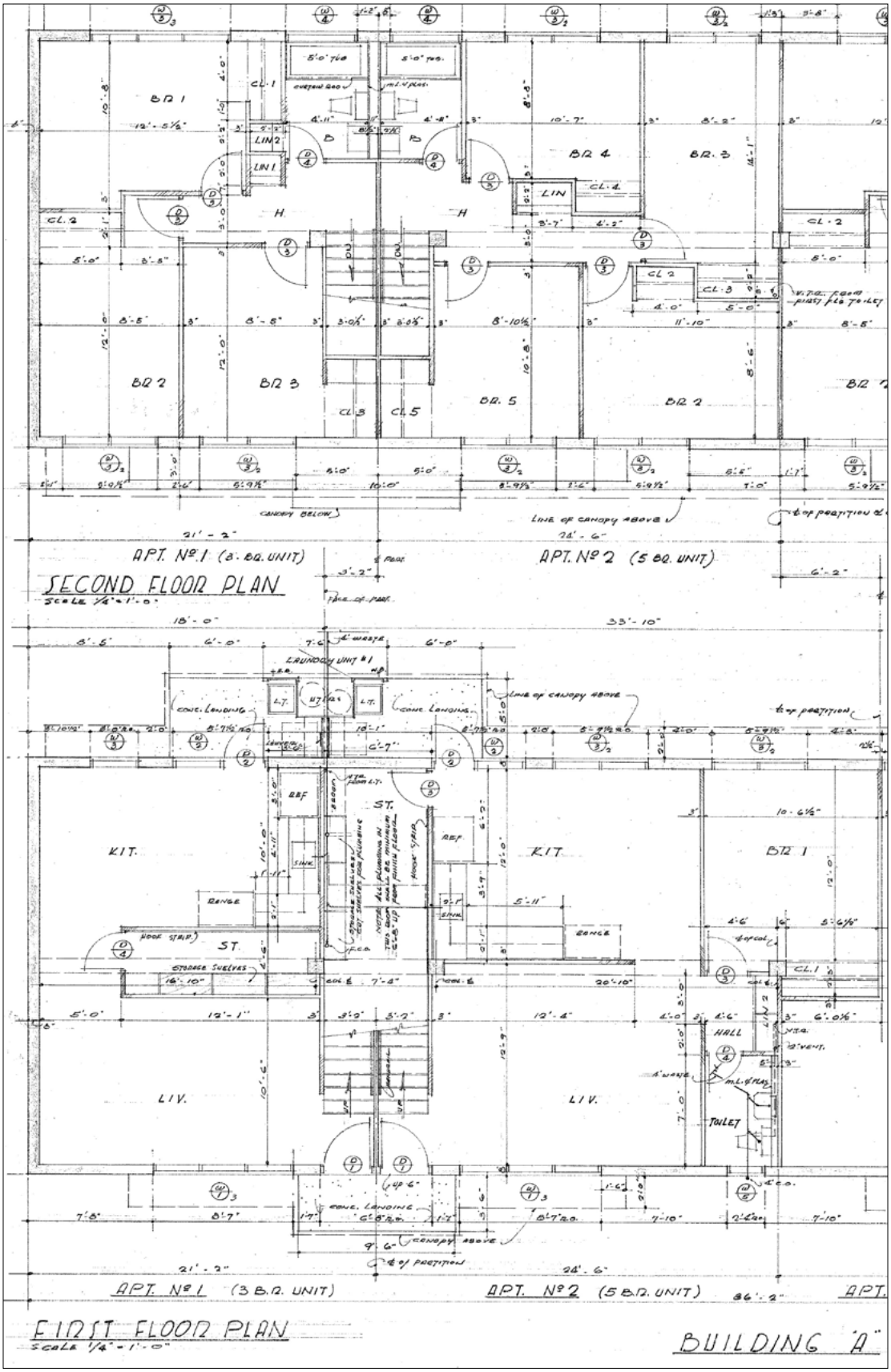
Site Plan Showing Eligible Buildings

These steps have a metal pipe railing and the landings at the top have been enclosed with concrete blocks sometime after the opening of the project. All the buildings have flat roofs with no eaves. A continuous, thin, flat roofed, reinforced concrete canopy runs continuously across the façade above the second story windows, and a similar style canopy is above the first story bands of windows and the entry doors, projecting outward above the portals. These canopies are also present on the rear elevations. The windows are 1 pane over 1 pane double hung sash, and many of the entries retain their original six-panel doors. The entries are paired, except in Type B, where the two-bedroom entry is solitary. To conform to the slope of the land, units on the uphill side of the property have lateral running, concrete steps leading to the entries. Some of these retain their original metal pipe railings, but many have been replaced by a wrought iron railing. All the first story entries are adorned with fluting incised in the concrete along the outside edge of their frames. Concrete block walls, 5.5-inche wide have been placed between adjoining doorways since the completion of the project. Some of the original building numbers, incised in the concrete walls are still evident, but others have been covered with newer metal building number signs.

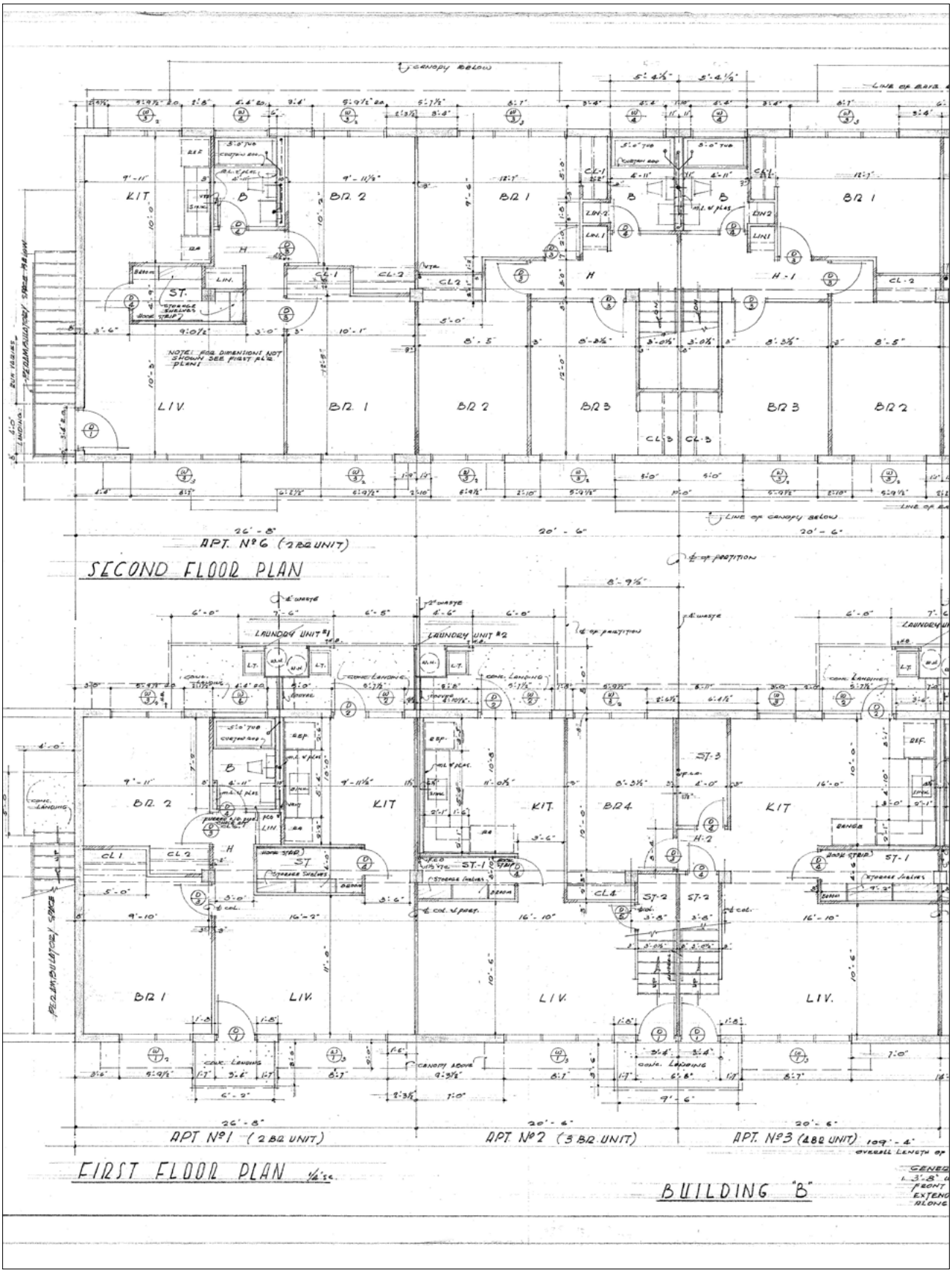
Building Type A

Building Type B

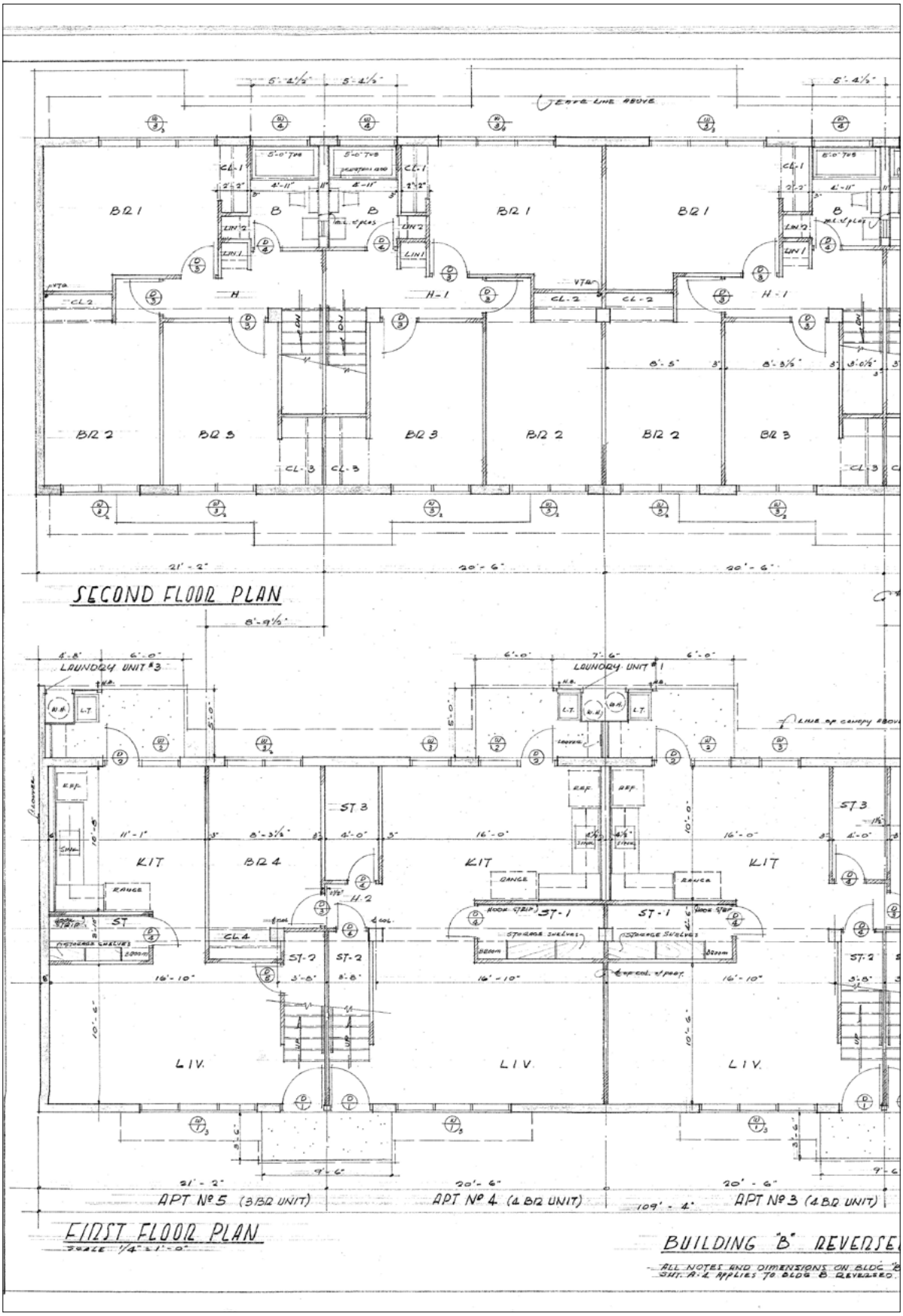
Building Type C



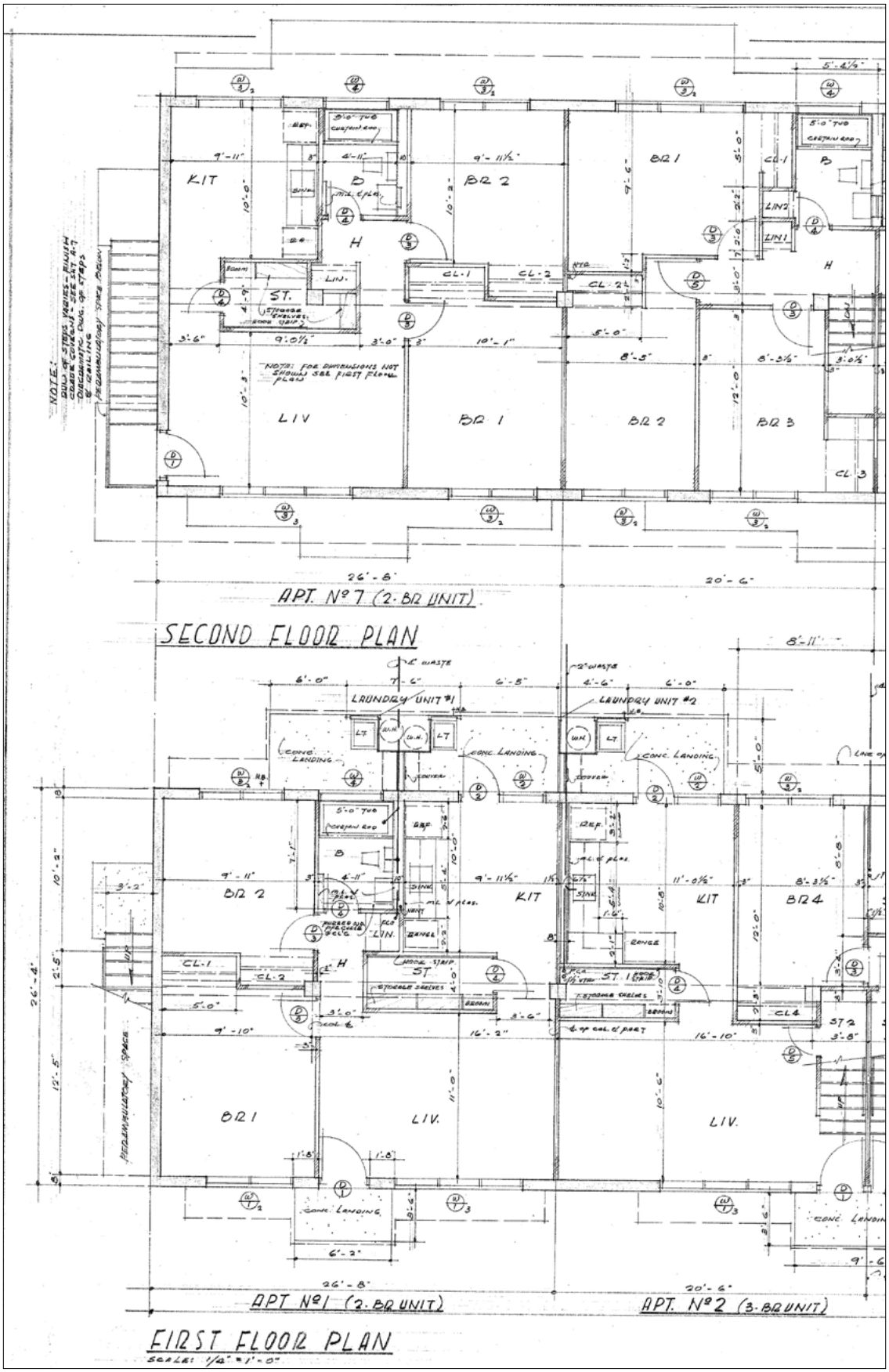
Building Type A Typical Floor Plan
Harland Bartholomew & Associates, Edwin L. Bauer, *First & Second Floor Plans, Building A (Palolo Valley Homes)*, Sheet A-03, 1956, Hawaii Housing Authority.



Building Type B Typical Floor Plan
Harland Bartholomew & Associates, Edwin L. Bauer, *First & Second Floor Plans, Building B (Palolo Valley Homes)*, Sheet A-04, 1956, Hawaii Housing Authority.



Building Type B Typical Reversed Floor Plan
Harland Bartholomew & Associates, Edwin L. Bauer, *First & Second Floor Plans, Building B Reversed (Palolo Valley Homes)*, Sheet A-05, 1956, Hawaii Housing Authority.



Building Type C Typical Floor Plan
Harland Bartholomew & Associates, Edwin L. Bauer, *First & Second Floor Plans, Building C (Palolo Valley Homes)*, Sheet A-06, 1956, Hawaii Housing Authority.

PALOLO VALLEY HOMES

The interiors of the units remain very intact. The three-, four- and five-bedroom units have two floors with living room and kitchen on the first floor and bedrooms on the second. With the larger units, one bedroom is included on the first floor. Many of the units retain their 9 inches square, brown, vinyl tile floors, although many of the floors have been patched with 12-inch square, white tiles. The ceilings are of concrete. The kitchens retain their stainless steel sinks and counter tops and their original cabinets. The bathrooms retain their tub-shower with their tile walls. Some units still have their original metal medicine cabinets and the original light above. The original sliding windows in the bathrooms have been replaced with a pair of jalousie windows. A number of single panel doors remain although new knobs are evident. The only possible original knobs were observed on the kitchen's pantry door. Interior partition walls are of 3-inch wide concrete block. Bedroom and hall closets have no doors, but rather fixtures to support curtain rods and curtains. A rear lanai off the kitchen is used as a laundry area and to house the water heater; these originally open areas have been enclosed with extruded metal mesh. The second floor units' flat roofed laundry areas are placed at the corner(s) of the buildings, and while originally of wood are now of concrete block.

Overview of the Site

Original and New Metal Pipe Railings

Original Building Numbers

Concrete Block Walls by the Entrance with Original Entry Doors

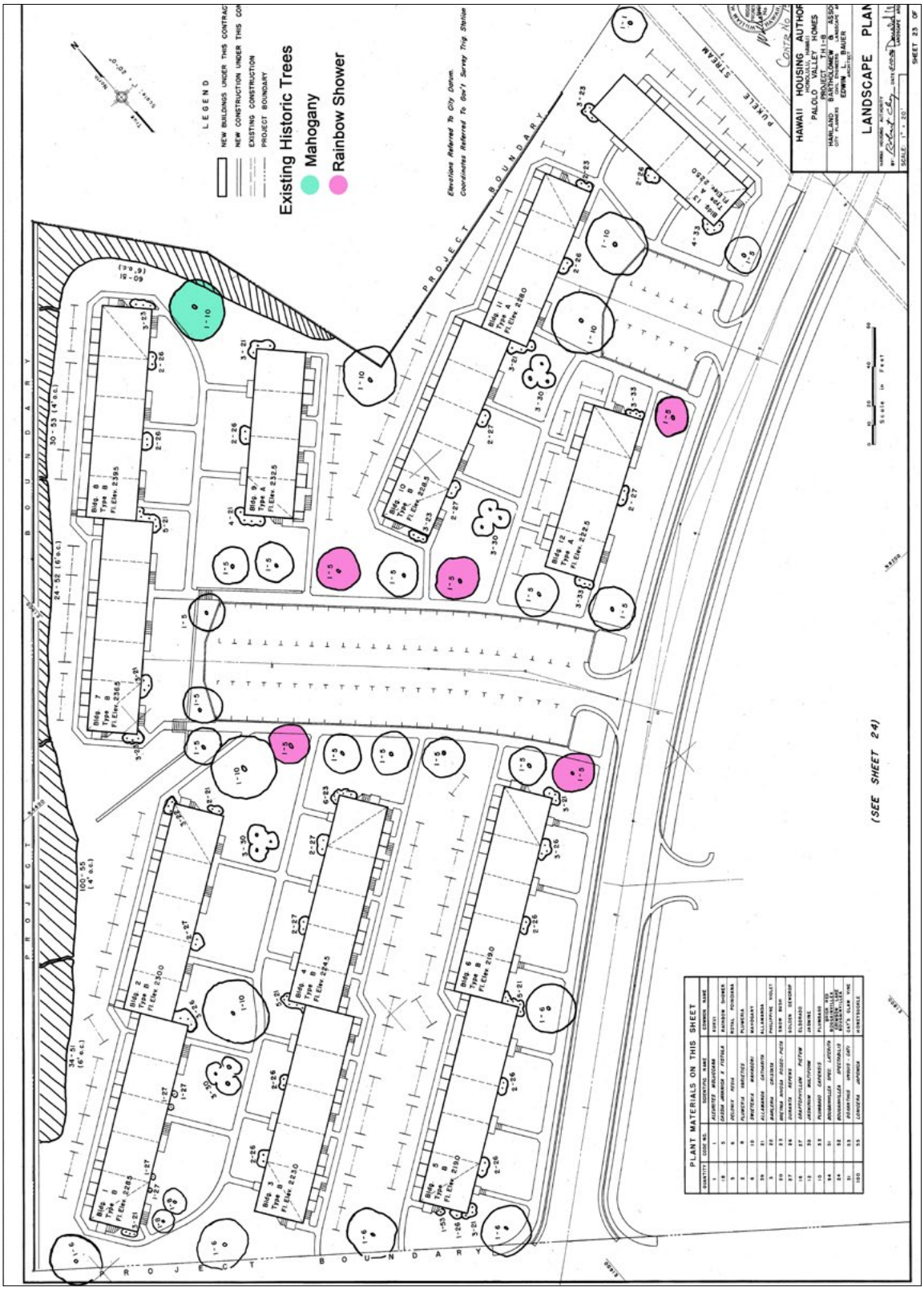
Original and New Floor Tiles

Building Type B Two Bedroom Kitchen

Original Medicine Cabinet and Light Fixture

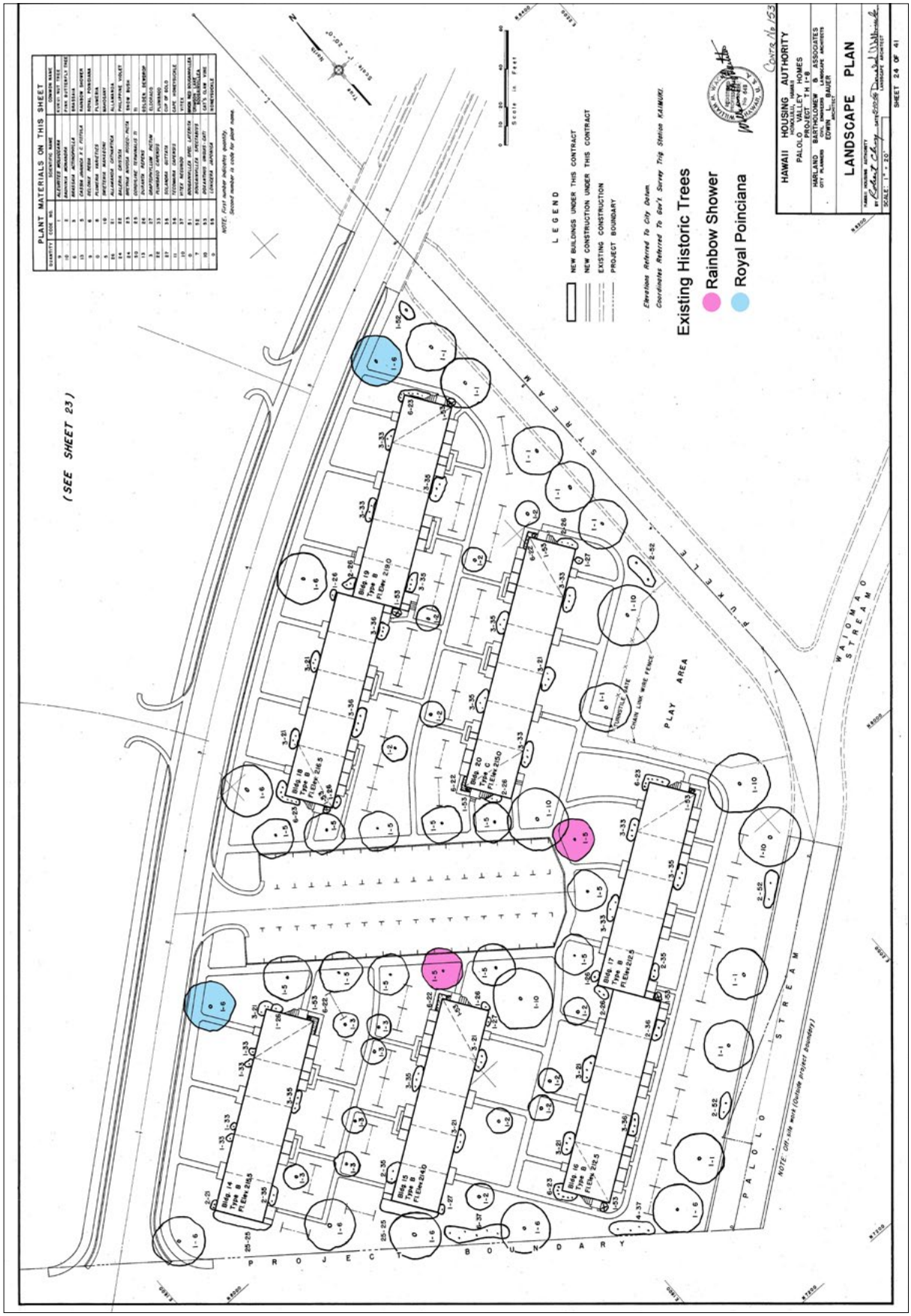
Original Door Knobs

Most all of the historic landscaping has disappeared with the passage of time from the present 6.58 acre site. However several major trees, including Mahogany and Royal Poinciana, still stand (See below and next page).



Landscape Plan Shows Historic Trees

Harland Bartholomew & Associates, Edwin L. Bauer, *Landscape Plan (Palolo Valley Homes)*, Sheet 23, 1956, Hawaii Housing Authority.



Landscape Plan Shows Historic Trees
Harland Bartholomew & Associates, Edwin L. Bauer, *Landscape Plan (Palolo Valley Homes)*, Sheet 24, 1956, Hawaii Housing Authority.

PALOLO VALLEY HOMES

The only significant alterations to the exterior of the Palolo Valley Homes have been the enclosing of the rear lanai, the replacement of the bathroom sliding windows, the enclosing of the second story unit's entries, and the replacement of the second story units' laundry areas. Some of these alterations appear to be over 50 years old and have acquired significance in their own right, and all occur on the rear of the buildings as shown in below pictures. On the interior, some of the flooring have been repaired with 12-inch square vinyl tiles and doors and door knobs have been replaced. These alterations are not sufficient to affect the historic character of the buildings in a significant manner. As such, the buildings retain their integrity of location, setting, design, materials, craftsmanship, feelings and association.

View of Front Side of Buildings

View of Rear Side of Buildings

History and Significance

Palolo Valley was the location of two of the four evacuation camps built in 1942 by the Office of Civilian Defense in anticipation of another Japanese attack on Oahu. When it became apparent a second invasion was unlikely, these buildings were turned over to the HHA and converted into wartime public housing. In addition, during 1945, the HHA developed an emergency public housing area on the Palolo Golf Course to help address the wartime housing shortage. 56, single-story, canec buildings comprised the emergency housing. Eight of the structures measured 20 feet x 108 feet with each containing four three-bedroom units. Eighteen of the structures measured 20 feet x 110 feet and housed five two-bedroom apartments, and the remaining thirty buildings were 20 feet x 118 feet and contained two one-bedroom and four two-bedroom apartments. The average apartment was 16 feet x 22 feet with a 4 feet wide lanai. Each apartment contained a kitchen sink and was wired for electricity. Sanitary facilities were at both ends of the buildings, one for men and another for women. Each had two toilets, two showers, and one sink, with laundry trays with running water located at the rear of each of the women's bathrooms. Both the walls and roofs were built of 1.5-inch canec, with the roofs further protected by rolled asphalt roofing. There were no windows, but rather screened openings. It was anticipated another 500 units would be constructed on the site, but the war ended before much of this expansion could be realized. Neither the evacuation camps nor the emergency housing remain standing, having given way to the present Palolo Valley Housing and Palolo Valley District Park.

Shaded buildings were demolished to make way for the bold oputlined buildings,
which comprised the final phase of the Palolo Valley Homes
Harland Bartholomew & Associates, Edwin L. Bauer, *Key Map (Palolo Valley Homes)*, Sheet 2, 1956, Hawaii Housing Authority.

PALOLO VALLEY HOMES

With the conclusion of the war, one of the evacuation camps, known as the Palolo School Camp, was closed as it was deemed unsatisfactory for occupancy. However, the Palolo Evacuation Camp and the adjacent, at the time 362 unit, emergency housing project remained in operation. In addition, in 1948, using Territorial funding, the HHA approved the construction of 82 one-, two- and three-bedroom units on the hillside Ewa of Palolo Avenue, with construction starting in January 1950. These reinforced concrete buildings were designed by Honolulu architect Louis Davis. These units have been remodeled and no longer retain their historic integrity and are not a part of this survey project.

In December 1951, the HHA authorized the incremental demolition and replacement of the World War II evacuation camp and the emergency housing, thus expanding the Palolo Valley Homes Project onto the lands Diamond Head of Palolo Avenue. Again, strictly utilizing Territorial moneys, the agency planned to build 111, 124 and 118 units in three phases. However, this was scaled back and the 124 unit development eliminated. The two realized phases were designed by Honolulu architect Edwin Bauer with Harland Bartholomew and Associates' Honolulu office, headed by Donald Wolbrink, handling the planning and landscape architecture. Bids for the first 111 units were opened on June 19, 1952, with Walker-Moody being the low bidder. By May 1953, ten buildings containing 55 units had been completed, with the remaining units ready for occupancy in June 1954. In June 1956, Pacific Construction Company commenced work on the third and final phase with its 118 units in twenty buildings. When completed in 1957 the entire Palolo Valley Homes project saw 532 temporary units supplanted by permanent, reinforced concrete units. As these units received no federal subsidy, rents were higher than at the federally supported housing projects, and were initially set in a range from $50/month for a one bedroom to $75/month for a five-bedroom. The phase of the project, located mauka of Pukele Stream, has been heavily altered and is no longer under the administration of the HPHA and not a part of this survey project.

One more phase was planned for the Palolo Valley Homes project, but was canceled in 1954 as this portion of the area then occupied by the Emergency Housing was designated park by the City and County Master Plan. The HHA attempted to obtain this area for low income housing in 1956 when 420 families were displaced by the expansion of the Honolulu Airport; however, the recreational needs of the area prevailed and the Palolo Valley District Park was developed.

In addition to Palolo Valley Housing, Edwin Bauer designed a number of housing projects for the HHA including the first three increments of Puahala Homes, and Kuhio Homes. He was a graduate of the University of Southern California, who came to Hawaii during World War II to work at Pearl Harbor, then stayed after the war. Bauer was a prominent Honolulu architect of the post-war period responsible for many well designed buildings, including Palolo Valley Homes. Other works include: St. Elizabeth's Episcopal Church and Our Redeemer Evangelical Lutheran Church, several Waikiki hotels, including the Breakers and Hawaiiana, the American Security Bank on Liliha Street and the First Hawaiian Bank in Lihue, the Lihue Plantation Headquarters Building, the Continental Building at King and Kalakaua, the Niu Shopping Center, the Waikiki Business Plaza, the Oahuan Apartments and 1001 Wilder, as well as several buildings at Kaiser's Hawaiian Village. He eventually concentrated his efforts on constructing and managing his own apartments.

The 17, minimally altered buildings constructed as part of the Palolo Valley Homes project appear to be significant at a statewide level under Criterion A, for their associations with the development of public housing in Hawaii and under Criterion

C for their architecture which is typical of the public housing design of the period.

The major projects in Honolulu undertaken by HHA during the 1950s were Mayor Wright Housing, Kalihi Valley Homes, Kuhio Homes, Puahala Housing, and Palolo Valley Homes. Previous inventory studies concluded that neither Mayor Wright Housing nor Kuhio Homes appeared to meet the criteria for listing in the National Register.[25] The initial increments of Puahala Housing have also been remodeled and have lost their integrity. A large segment of the 400 units constructed for Kalihi Homes have also been remodeled and no longer retain their historic character. As such this final phase of Palolo Valley Homes, and those remaining buildings at Kalihi Valley Homes are the best examples of low income housing constructed in Honolulu during the 1950s. The Palolo Valley Homes has strong associations with the development of public housing in Hawaii during the post-war period, and reflects the high social consciousness of the Territorial government, which funded this project without the aid of federal support, as by this time the Republican dominated federal government had shifted priorities from low income housing to urban renewal.

The Palolo Valley Homes is also significant under Criterion C as its architecture is typical for its period in its design, use of materials, and craftsmanship. Following the Bauhaus inspired Zeilenbau site plan, the buildings are laid out in parallel rows with space in between to allow for ample light and ventilation. Also, the reinforced concrete buildings were constructed in a modern style typical of public housing of the period, as proclaimed by their flat roofs, horizontal lines accentuated by their flat roofed canopies, and minimal ornamentation. Also, such interior finishes as the tile in the showers, stainless steel counter tops and sink in the kitchen, vinyl tile floors, double hung sash windows and single panel doors all bespeak the period.

Projects adhering to the Zeilenbau plan and the international style of architectural design included: Palolo Valley Homes and Kalihi Valley Homes, and they are considered as a good example of their type and style. Certain buildings in Palolo Valley Homes had been remodeled in a post-modern style, and these were evaluated not significant for lack of design integrity. All the remaining buildings were considered to be good examples of their type and style. Palolo Valley Homes still retain their original windows, original kitchen designs including the stainless steel sink and counter tops, and also retain much of the original flooring. The rear laundry areas have been enclosed. In addition, housing projects following the Zeilenbau plan examined in previous studies, most notably Mayor Wright Housing and Kuhio Homes, were considered to not meet the criteria for listing in the National Register of Historic Places. As a result, the non-remodeled buildings at Palolo Valley Homes appear to best retain their historic integrity and were evaluated as meeting the criteria for listing in the National Register of Historic Places as excellent examples of public housing in Hawaii to follow the Zeilenbau plan.

25 Mason Architects, Inc. 2006 and 2010 report.

HAWAII PUBLIC HOUSING AUTHORITY

ENVIRONMENTAL REVIEW

KŪHIŌ PARK TERRACE (HIGH-RISE)

Honolulu, O`ahu

AMP 52
HPHA No. 1010

Prepared for:

State of Hawaii
Hawaii Public Housing Authority

Prepared by:

HHF PLANNERS
places for people

U.S. Department of Housing and Urban Development
451 Seventh Street, SW
Washington, DC 20410
www.hud.gov

espanol.hud.gov

Environmental Review for Activity/Project that is Categorically Excluded Subject to Section 58.5

Pursuant to 24 CFR 58.35(a)

Project Information

Project Name: Kūhiō Park Terrace (AMP 52)

Responsible Entity: Hawaii Public Housing Authority
1002 North School Street
Honolulu, HI 96817

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

State/Local Identifier: State of Hawaiʻi

Preparer: Mr. Scott Ezer, Vice President
HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaiʻi 96813

Certifying Officer Name and Title: Mr. David Y. Ige
Governor, State of Hawaiʻi

Grant Recipient (if different than Responsible Entity):
Same as Responsible Entity

Consultant (if applicable): HHF Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaiʻi 96813

Direct Comments to: Mr. Hakim Ouansafi, Executive Director
Hawaii Public Housing Authority
1002 North School Street
Honolulu, Hawaiʻi 96817

Project Location: 1475 Linapuni Street
Honolulu, Hawaiʻi 96819

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]**:**

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a "major construction activity" and would involve one or a combination of several HUD designated categories of actions.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent;
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons;
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland;
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation;
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls);
7. Interior and exterior renovations and rehabilitation;
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site;
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Level of Environmental Review Determination:

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.5. Compliance with and completion of conformance determinations for other statute, executive order, or regulation has been completed and support the Categorical Exclusion.

Funding Information

Grant Number	HUD Program	Funding Amount
To be determined	Capital Fund	To be determined
To be determined	Economic Development Initiative Special Project Grant	To be determined
To be determined	Other Grants	To be determined

Estimated Total HUD Funded Amount:

To be determined by HUD using a formula and based upon federal budget.

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]**:**

Depends upon funds available.

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	*The project is not within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.*
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☒	*The State of Hawai'i does not have any designated coastal barrier resource units. (http://www.fws.gov/CBRA/Maps/Mapper.html)*
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes ☐ No ☒	*As indicated in the Flood Insurance Rate Map Panel 15003C0353G (Revised November 2014), all buildings within this housing project are located in Flood Zone X (areas determined to be outside the 0.2% annual chance floodplain). The majority of the project site (comprised of three tax map parcels) is located within Zone X. However, Parcels 7 and 9 are situated along Kalihi Stream. The southern boundary of Parcel 7 borders this stream which is designated both Zone XS and Zone AEF. This area along the stream is undeveloped open space comprised of vegetation and trees.* *For Parcel 9, the southern and southeast boundaries of this parcel border and includes a portion of Kalihi Stream. The southern end consists of open space. The southeastern end of the parcel includes a portion of the stream that is designated as Zone AEF, Zone AE and Zone XS. This southeast end of the parcel consists of a paved parking lot with chain-link fence bordering*

		the top of the stream bank to keep people out of the stream. The stream bank lowers in elevation as it approaches the bottom of the stream. A field inspection and information obtained from the site manager confirmed no major flooding issues within the site. *Based on its description, this project does not involve any activities that would require further evaluation under this section. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.*
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes ☐ No ☒	*The State of Hawai'i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. EPA's Green Book for currently designated "nonattainment areas" as of June 2015. Planned repair and rehabilitation improvements are not expected to generate significant pollutants affecting the State's status as an attainment area.*
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes ☐ No ☒	*Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai'i's Coastal Zone Management (CZM) program.*
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☒ No ☐	*There are a few known hazardous materials previously identified within the project site that have been addressed. One material involves lead reported under the building (specific building not identified) and asphalt. The community center was also identified as a building having lead reported under it. No further work is necessary for lead identified on the project site, however, there are restrictions for future construction work that involve subsurface disturbances affecting this site that should be implemented by HPHA.* *The second material identified was elevated levels of dieldrin (insecticide) reported found around the perimeter of the buildings. The project site was used for agricultural purposes until developed for residential homes in the 1940s. The assessment and response to this is ongoing, and it has a medium priority. Controls are required to manage the contamination, and HPHA should implement provisions for repair and*

		rehabilitation improvements that involve subsurface disturbances around buildings.
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes ☒ No ☐	*The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received from the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices, while project-specific mitigation measures are identified in the following section*
Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes ☐ No ☒	*There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.*
Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes ☐ No ☒	*The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.*
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes ☐ No ☒	*As indicated in the Flood Insurance Rate Map Panel 15003C0353G (Revised November 2014), all buildings within this housing project are located in Flood Zone X (areas determined to be outside the 0.2% annual chance floodplain). The majority of the project site (comprised of three tax map parcels) is located within Zone X. However, Parcels 7 and 9 are situated along Kalihi Stream. The southern boundary of Parcel 7 borders this stream which is designated both Zone XS and Zone AEF. This area along the stream is undeveloped open space comprised of vegetation and trees. For Parcel 9, the southern and southeast boundaries of this parcel border and includes a portion of Kalihi Stream. The southern end consists of open space. The southeastern end of the parcel includes a portion of the stream that is designated as Zone AEF, Zone AE and Zone XS. This southeast end of the parcel consists of a*

		paved parking lot with chain-link fence bordering the top of the stream bank to keep people out of the stream. The stream bank lowers in elevation as it approaches the bottom of the stream. A field inspection and information obtained from the site manager confirmed no major flooding issues within the site. The project is in compliance with Executive Order 11988.
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes ☒ No ☐	*The KPT High-Rise project includes two high-rise residential buildings, community buildings within the common area, and a single-family residence used by the management company. The two high-rise towers, a community building, and the single-family residence were constructed in 1965. More recently, a family education building (1976), Head Start modular building (no date), and a resource center (2003) were constructed as part of community buildings serving the larger KPT project. A Historic Property Evaluation (HPE) Update study (June 2015) determined that only the two high-rise towers, the original community building, and the single-family residence met NRHP eligibility criteria. In a letter dated December 11, 2015, the State Historic Preservation Officer concurred with the HPHA's determination that repair and rehabilitation improvements for this housing project would have "no adverse effect" on historic properties pursuant to NHPA Section 106 and subject to certain mitigative measures.*
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes ☐ No ☒	*The project site is not situated along a highway that has a high volume of vehicular traffic. The HUD noise calculator estimated noise levels at the project site to be 63.1 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.*
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes ☐ No ☒	*The housing project is located within the O'ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation.*

Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☐ No ☒	*There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.* *(http://www.fws.gov/wetlands/data/mapper.HTML)*
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes ☐ No ☒	*There are no Wild and Scenic Rivers in Hawai'i, which excludes this project from mitigation or formal consultation requirements (http://www.rivers.gov/map.php)*
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes ☐ No ☒	*Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, these improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects on minority populations and low-income populations. Improvements should benefit low-income and minority populations living within this housing project.*

Field Inspection (Date and completed by)**:** June 12, 2015
Joseph Tamburello
HHF Planners

Summary of Findings and Conclusions:

Repair and rehabilitation improvements implemented for this existing housing project by HPHA should not result in significant environmental impacts based upon research data collected, a field inspection, consultation with the site manager and maintenance staff, consultation with pertinent resource agencies, and prior HPHA experience implementing repair and rehabilitation improvements. Therefore, repair and rehabilitation improvements would comply and be consistent with the statutes, executive orders, and regulations addressed. Furthermore, HPHA would evaluate improvements planned to ensure the work is consistent with the designated categories of actions described under the project description section. Compliance with these factors evaluated are further addressed in the attached Source Documentation Statutory Worksheet along with relevant technical reports/assessments.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Law, Authority, or Factor	Mitigation Measure
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	*Restrictions identified for the buildings addressing lead include prohibiting any activity that may disturb the integrity of the capping system, and reassess this system if the asphalt or building are disturbed. Therefore, HPHA should confirm that any repair or rehabilitation improvements that involve subsurface disturbances be checked with the State Department of Health (DOH) and HPHA records to ensure it would not disturb the capping system implemented.* *To address dieldrin, HPHA should include provisions for the contractor to implement safety procedures and other pertinent measures for employees involved in repair and rehabilitation improvements that involve subsurface disturbances around buildings. HPHA should also coordinate with the DOH to complete the conditions assessment and implement appropriate responses to address dieldrin.*
Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	*Newell's shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.* *Hawaiian goose (Nene): If Nene are known to be present within the project site, a qualified biologist will conduct a Nene survey at the project site prior to construction initiation. Nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.* *Additional Measures: The following additional measures would be implemented:* *1. In the event that any earth-disturbing activities are proposed (e.g. foundation repair), Best Management Practices for erosion control will be employed to ensure sediments are not*

	delivered to drainages or waterways as a result of the proposed activity. 2. *Where tree or brush removal outside the footprint of the existing development and landscaped areas is proposed, a qualified botanist will inspect the proposed disturbance area prior to project implementation to document any listed plant species. Should listed plants be discovered, they will either be avoided or consultation with the FWS be initiated.*
National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	1. *When considering rehabilitation improvements or building modifications: 1) the buildings' character-defining features shall be retained to the extent practicable; and 2) the renovations shall adhere to the Secretary of the Interior's (SOI) Standards for Rehabilitation.* 2. *If rehabilitation improvements or building modifications cannot retain the character-defining features or adhere to the SOI's Standards, a Historic American Buildings Survey (HABS) will be conducted subject to the following conditions:* a. *Level II HABS documentation will be conducted in accordance with the National Park Service standards; and* b. *A representative sample of multiple building types would be selected for HABS documentation due to the multiple types of buildings constructed for housing projects.* 3. *If ground disturbing activity is anticipated, HPHA must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation.* a. *Submit detailed plans, specifications and a detailed scope of work once the plans have been developed.* b. *Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation.* c. *Submit a TMK map showing the full extent of the project area within the affected parcel/s.* d. *Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area.* e. *Summary of land use history, such as previous intensive cultivation, grubbing or grading.* f. *Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.* *In addition to these mitigation measures, the HPHA would enter into a Programmatic Agreement with the SHPO to address the implementation of future repair and rehabilitation improvements to State housing projects after the current Section 106 review process is completed and prior to the next environmental review process in approximately five years. Furthermore, should subsurface human remains or other traces of human activity greater than 50 years old*

	be encountered during construction, all work in the vicinity of the find would immediately stop and the SHPD would be promptly notified. The treatment of any human remains that are encountered would be conducted in accordance with applicable requirements of Chapter 6E, Hawai'i Revised Statutes (Historic Preservation) and Chapter 13-300, Hawai'i Administrative Rules (Rules of Practice and Procedure Relating to Burial Sites and Human Remains).

Determination:

☐ This categorically excluded activity/project converts to **EXEMPT** per Section 58.34(a)(12), because it does not require any mitigation for compliance with any listed statutes or authorities, nor requires any formal permit or license; **Funds may be committed and drawn down after certification of this part** for this (now) EXEMPT project; OR

☒ This categorically excluded activity/project cannot convert to Exempt status because one or more statutes or authorities listed at Section 58.5 requires formal consultation or mitigation. Complete consultation/mitigation protocol requirements, **publish NOI/RROF and obtain "Authority to Use Grant Funds"** (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR

☐ This project is not categorically excluded OR, if originally categorically excluded, is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

Preparer Signature: Scott Ezer Date: 12-17-15

Name/Title/Organization: Mr. Scott Ezer, Vice President
HHF Planners

Responsible Entity Agency Official Signature:

David Y. Ige Date: APR 28 2016

Name/Title: Mr. David Y. Ige, Governor

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

Kūhiō Park Terrace High-Rise (HA # 1010)

TMK: (1) 1-3-039:007, 009 & 010

Hawai‘i Public Housing Authority (HPHA) Environmental Review

SOURCE DOCUMENTATION (SD) STATUTORY WORKSHEET

Site Visit Date: June 12, 2015
Prepared By: Joseph Tamburello

PROJECT DESCRIPTION

The Kūhiō Park Terrace High-Rise housing project is located in the Kalihi community of Honolulu on the island of O‘ahu. Kalihi is an urban neighborhood situated west of downtown Honolulu and east of Fort Shafter.

The housing site is situated along Linapuni Street and is bordered to the north by the Kūhiō Park Terrace Low-Rise housing project. This housing project is within HPHA’s Asset Management Project (AMP) 52. There are no other project sites within AMP 52. This project was renovated recently by a developer under a public-private partnership, and is now known as The Towers at Kūhiō Park, and under the management of Interstate Realty Management Company with oversight by HPHA.

Kūhiō Park Terrace High-Rise apartments were first occupied in 1965 and have the street address 1475 Linapuni Street. This property consists of three parcels identified as Tax Map Key (TMK) No. (1) 1-3-039:007, 009, & 010, with a combined area of 18.36 acres. The housing project is comprised of two 16-story high-rise apartment buildings (Towers A and B) with one-, two-, and three-bedroom units. Five common area buildings on the property include a Community Building, a Community Resource Center, a Teen Building, a Child Care Building, and a Cultural Pavilion. There is also a single-family home used as a residence for the managing company. The State’s land use designation for the property is the “Urban District.” The City’s zoning for the site is A-2 Medium-density Apartment for the portion of the property containing the High-Rise apartment buildings, and P-2 General Preservation for the portion of the property containing the common areas and open space.

The project site is not located within a tsunami evacuation zone, and the majority of the project site is located in Flood Zone X, an area of minimal flood hazard (Flood Rate Insurance Map Panel Numbers 15003C0353G, Revised November 05, 2014). The northeastern end of the project site, comprised of open space and a parking lot, is located within a flood area associated with Kalihi Stream.

The following figures in Exhibit A provide supporting information on this housing project:

Figure 1: Location Map
Figure 2: TMK Map
Figure 3: Site Map
Figure 4: Flood Map

COMPLIANCE FACTORS

I. AIRPORT CLEAR ZONES AND ACCIDENT POTENTIAL ZONES (24 CFR PART 51D)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The housing project does not lie within an FAA-designated civilian airport Runway Clear Zone (RCZ) or Runway Protection Zone, or within a military airfield Clear Zone (CZ) or Accident Potential Zone (APZ). The project is also an existing development and does not involve the purchase or sale of existing property, therefore excluding it from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: 24 CFR 51 (D).

Honolulu International Airport Master Plan - 2010 (August 1994), State Department of Transportation, Airports Division;

*Hawai`i Airports and Flying Safety Guide (2012-13, Fifth Edition, Revision 1)* Hawai`i Department of Transportation, Airports Division; and

http://hidot.hawaii.gov/airports/files/2013/01/Airport-Safety-Guide-2012-2013-5rev1.pdf

II. COASTAL BARRIER RESOURCES (COASTAL BARRIER IMPROVEMENT ACT OF 1990 [16 USC 3501])

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i does not have any designated coastal barrier resource units.

SUPPORTING DOCUMENTATION:

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/cbra/maps/mapper.html (Date accessed: 6/30/15).

III. FLOOD INSURANCE (FLOOD DISASTER PROTECTION ACT OF 1973 AND NATIONAL FLOOD INSURANCE REFORM ACT OF 1994 [42 USC 4001-4128 AND 42 USC 5154a])

SUPPORTING DOCUMENTS	
X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Conflict with Program.

As indicated in the Flood Insurance Rate Map Panel 15003C0353G (Revised November 2014), all buildings within this housing project are located in Flood Zone X (areas determined to be outside the 0.2% annual chance floodplain). The majority of the project site (comprised of three tax map parcels) is located within Zone X as indicated under Figure 4. However, Parcels 7 and 9 are situated along Kalihi Stream. The southern boundary of Parcel 7 borders this stream which is designated both Zone XS and Zone AEF. Zone XS is areas of 0.2 percent annual chance flood and areas of one percent annual chance flood with average depths of less than one foot. Zone AEF consists of the floodway area within Zone AE (100-year flood). This area along the stream is undeveloped open space comprised of vegetation and trees.

For Parcel 9, the southern and southeast boundaries of this parcel border and includes a portion of Kalihi Stream. The southern end of this parcel presently consists of open space. The southeastern end of the parcel includes a portion of the stream that is designated as Zone AEF, Zone AE (base flood elevation determined) and Zone XS. This southeast end of the parcel consists of a paved parking lot with chain-link fence bordering the top of the stream bank to keep people out of the stream. The stream bank lowers in elevation as it approaches the bottom of the stream.

A field inspection and information obtained from the site manager confirmed no major flooding issues within the site. Based on its description, repair and rehabilitation improvements should not involve any activities that would require work within flood areas and further evaluation under this section. Except for fencing, no existing structures are within the flood area along Kalihi Stream. Because the project is on State-owned property, it is exempt from flood insurance requirements. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance standards.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal signs of flooding problems. An interview with the AMP Manager also determined that major ponding or flooding issues are currently not an issue for the project site.

Printed: Flood Insurance Rate Map, Community Panel Number 15003C0353G, Revised November 05, 2014. A small portion of the southern boundaries of both Parcels 7 and 9 are located in Flood Zone XS (Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot), and Zone AEF (floodway areas in Zone AE (special flood hazard areas subject to inundation by the 1% annual chance flood with base flood elevations (BFE) determined). The floodway is the channel of the stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1 percent annual chance flood can be carried without increasing the BFE. The southeastern end of Parcel 9 includes a portion of Kalihi Stream that is designated as Zone XS, Zone AE, and Zone AEF. There are no residential buildings or other structures present within these flood areas. The southeast end of Parcel 9 consists of a paved parking lot with chain-link fence bordering the top of the stream bank to keep people out of the stream.

Hawai`i Department of Land and Natural Resources website at:
http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 7/27/15)

IV. CLEAN AIR ACT (40 CFR PARTS 6, 51, 93)

SUPPORTING DOCUMENTS	
	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The State of Hawai‘i is within a designated attainment area for all federal ambient air quality standards as verified under the U.S. Environmental Protection Agency’s Green Book for currently designated “nonattainment areas” as of June 2015. Planned rehabilitation improvements are not expected to generate significant pollutants affecting the State’s status as an attainment area.

SUPPORTING DOCUMENTATION:

Printed: *State of Hawai‘i Annual Summary 2013 Air Quality Data*. State of Hawai’i, Department of Health, July 2014.

U.S. Environmental Protection Agency website at: http://epa.gov/airquality/greenbk/

V. COASTAL ZONE MANAGEMENT ACT (16 USC 1451, SECTIONS 307 (C), (D)

CONTACT:

Mr. John Nakagawa
Office of Planning
Department of Business, Economic Development & Tourism
State of Hawai‘i
P.O. Box 2359
Honolulu, Hawai’i, 96804-2359

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

Projects receiving federal funds from the U.S. Department of Housing and Urban Development (HUD), Public Housing Capital Fund do not require review for consistency with Hawai‘i’s Coastal Zone Management (CZM) program.

SUPPORTING DOCUMENTATION:

Contact: In an email to the Office of Planning (OP) dated July 27, 2015, the HPHA determined that the use of HUD funds for the implementation of repair and rehabilitation improvements does not require review for consistency with Hawai‘i’s CZM program. The OP confirmed this determination in an email dated July 28, 2015 and it is included in the Appendices.

Experience: Previous reviews conducted by OP in 2003, 2005, and 2010 determined that projects receiving federal funds from HUD do not require CZM federal consistency review. OP’s current determination confirms this condition is still applicable. Copies of these prior documentations are included in the Appendices.

VI. CONTAMINATION AND TOXIC SUBSTANCES (24 CFR PART 50.3 & 58.5(I)(2))

SUPPORTING DOCUMENTS	
X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Project Not Adversely Affected, But Subject to Conditions

There are a few known hazardous materials previously identified within the project site that have been addressed. One material involves lead reported under the building (specific building not identified) and asphalt. The community center was also identified as a building having lead reported under it in a separate record researched. No further work is necessary for lead identified on the project site, however, there are restrictions for future construction work affecting this site. Restrictions identified for the buildings include prohibiting any activity that may disturb the integrity of the capping system, and reassess this system if the asphalt or building are disturbed. Therefore, HPHA should confirm that any repair or rehabilitation improvements that involve subsurface disturbances be checked with the State Department of Health (DOH) and HPHA records to ensure it would not disturb the capping system implemented.

The second material identified was elevated levels of dieldrin (insecticide) reported found around the perimeter of the buildings. The project site was used for agricultural purposes until developed for residential homes in the 1940s. The assessment and response to this is ongoing, and it has a medium priority. Controls are required to manage the contamination. Therefore, HPHA should include provisions for the contractor to implement safety procedures and other pertinent measures for employees involved in repair and rehabilitation improvements that involve subsurface disturbances around buildings. HPHA should also coordinate with the DOH to complete the conditions assessment and implement appropriate responses to address dieldrin.

SUPPORTING DOCUMENTATION:

Field: A site inspection and interview with the Asset Management Project (AMP) Manager revealed no presence of any toxic or radioactive materials on the project site that warrant concern. There is one secured, locked metal cabinet for each high-rise tower (total of two), containing small amounts of paint cans and gasoline for lawn equipment that is located next to the trash area.

Study: Environmental Data Resources, Inc. (EDR), conducted a search of available environmental records and prepared a Radius Map Report (Inquiry Number 4237094.246s, March 17, 2015). EDR reviewed more than 25 federal and statewide regulatory databases for information regarding the treatment, storage, disposal and release of toxic chemicals at the project site and within specific radii (generally 1 mile) of the site. A Detail Map within the EDR report documents those sites identified within a 0.25 mile radius of the project site. The EDR report in Exhibit B includes the results of their research findings.

The EDR report notes the following activities within a 0.125 mile radius from the center of the project site. This housing project along with existing surrounding areas area within the Fort Shafter Army Department of Defense region. This project site was not identified as a Formerly Used Defense Site (FUDS) by the U.S. Army Corps of Engineers and is not subject to any cleanup actions for Department of Defense-generated contamination. The project site, identified in the report as Kūhiō Park Terrace Towers, is listed as a brownfield. The site is registered with the State Department of Health and its hazard priority is “no further work” as potential hazards are managed with controls. Lead under the building (specific building not identified) and asphalt were addressed. Restrictions with the building include prohibiting any activity that may disturb the integrity of the capping system, and reassess this system if the asphalt or building are disturbed. Also, elevated levels of dieldrin (insecticide) were also reported found around the perimeter of the buildings. The assessment and response to this is ongoing and it has a medium priority. Controls are required to manage the contamination. The report also notes that this site was used for agricultural purposes until developed for residential homes in the 1940s.

The Kūhiō Park Terrace Community Center is also a site is registered with the State Department of Health and its hazard priority is “no further work” as potential hazards are managed with controls. Lead under the building and asphalt were addressed, controls are required to manage the contamination, but no restrictions were identified.

The nearby Kūhiō Homes Public Housing Project is classified as a Non-Generator (Handler) that does not generate hazardous waste, and no violations were found. A Chang Chow property along North School Street had a gasoline underground storage tank that is permanently out of use.

VII. ENDANGERED SPECIES (50 CFR PART 402)

CONTACT:
Mr. Loyal Mehrhoff, Field Supervisor
Pacific Islands Administrator
Fish and Wildlife Services
U.S. Department of the Interior
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawai'i 96813
Tel. #: 792-9400

SUPPORTING DOCUMENTS	
	Field
X	Contact
	Printed
X	Experience
	Study

DETERMINATION:

Status Category: No Adverse Effect Subject to Mitigation

The HPHA determined that repair and rehabilitation improvements that may be conducted for this housing project are not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received by the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices.

SUPPORTING DOCUMENTATION:

Contact: A letter from the HPHA dated July 24, 2015 was submitted to the Pacific Island Administrator for the FWS determining that repair and rehabilitation improvements that may be implemented using HUD funds for this housing project would have no likelihood of effect on any listed species or proposed species, or existing or proposed designated critical habitat subject to certain mitigative measures. Concurrence with this determination was received by the U.S. Fish and Wildlife Services (FWS) in their letter dated September 28, 2015 which is included in the Appendices. This housing project is subject to the following minimization and avoidance measures

Brown Tree Snake: Any materials or equipment from Guam will be thoroughly examined to ensure the snake is not transported.

Rats: All trash shall be deposited in covered or closed containers which shall be disposed of at an approved landfill at the end of each work day. In addition, all tools, gear, and construction scrap material shall be removed and no trash shall be allowed to contaminate adjacent properties.

Hawaiian hoary bat: Woody plants greater than 15 feet tall shall not be disturbed, removed, or trimmed during the bat's birthing and pup-rearing season (from June 1st through September 15th) and Federal funds would not be used to purchase or install barbed wire fencing for the housing project.

Newell's shearwater: To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If

nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.

Hawaiian goose (Nene): Project staff will check the work area and vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet of the bird(s). Work will not resume until the bird(s) have left the area of their own accord. In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer. No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.

Hawaiian Waterbirds: The following measures will be implemented if repair or rehabilitation improvements are necessary within 100 feet of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro loʻi, impoundments or other vegetated water bodies.

1. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the project site prior to project initiation using the FWS's recommended Hawaiian Waterbird Survey Protocols.
2. A 100-foot buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.
3. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.

In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.

Additional Measures: The following additional measures would be implemented:

1. No vegetation or soil disturbance shall be conducted outside a project's previously disturbed footprint. Vegetation within each project site shall be managed to minimize the threat of wildfire spreading onto adjacent vegetation.

.Experience: The FWS was previously consulted as part of environmental reviews that were completed in 2005 (39 housing projects) and 2010 (70 housing projects) which supported the determination that repair and rehabilitation improvements would either: 1) have no likelihood of effect for certain housing projects; or 2) not likely adversely affect federally listed species or critical habitat for certain housing projects subject to mitigative measures. A summary of these consultation efforts follows.

2005 Consultation: In a letter dated July 15, 2005, the Housing and Community Development Corporation of Hawaiʻi (predecessor to the HPHA), determined that the implementation of minor repair and rehabilitation improvements for 39 housing projects

would not have an adverse effect on federally-listed species or critical habitat. In a letter dated August 11, 2005, the FWS concurred with the HCDCH determination.

2010 Consultation: In a letter dated May 17, 2010, the HPHA informed the FWS that HUD funds would be used to immediately implement repair and rehabilitation improvements for six housing projects on O‘ahu and the island of Hawai`i. In a subsequent letter dated May 21, 2010, the FWS was informed that HPHA would be using HUD funds to implement minor repair and rehabilitation improvements for 64 projects throughout the State. In both letters, the HPHA determined that the repair and rehabilitation improvements were not likely to adversely affect any listed species or proposed species, or existing or proposed designated critical habitat. Based on further consultation and a meeting with FWS staff on June 24, 2010, the HPHA determined that repair and rehabilitation improvements for most of their housing projects would not likely adversely affect any listed or proposed species, or existing or proposed designated habitat, subject to various mitigative measures for certain housing projects.

VIII. EXPLOSIVE AND FLAMMABLE OPERATIONS (24 CFR PART 51C)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known above-ground explosive or flammable material storage containers in excess of 100 gallons present at the site. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

SUPPORTING DOCUMENTATION:

Field: Field inspection was limited to the exterior of residential buildings and associated structures for this housing project. No above-ground explosive or flammable material storage containers in excess of 100 gallons were observed at the site.

Printed: 24 CFR Part 51, Subpart C addresses acceptable separation distance from above-ground explosive or flammable fuels or chemical containers. If such explosive or flammable containers (e.g. propane tank) are added to the site in the future, then rehabilitation and modernization improvements would need to comply with these regulations if improvements increase existing residential density, convert a building to habitation, or increase the number of people being exposed to hazardous operations.

IX. FARMLANDS PROTECTION (7 CFR PART 658)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. No farmlands will be impacted by the implementation of repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: The project is in compliance with the Farmlands Protection Act because it involves no new property acquisition or major construction, and would not convert agricultural lands to non-agricultural use. Since the property consists of an existing housing development within an urbanized area, no farmlands would be impacted by the implementation of repair and rehabilitation improvements.

Printed: The property is designated for "Urban" use by the State Land Use Commission and the County's zoning for the parcel is RD-3.75 Double-Family Residential District.

Hawai`i Office of Planning website at: http://planning.hawaii.gov/gis/
(Date accessed: 6/30/2015)

X. FLOODPLAIN MANAGEMENT (EXECUTIVE ORDER 11988, 24 CFR PART 55)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Does Not Conflict with Program

As indicated in the Flood Insurance Rate Map Panel 15003C0353G (Revised November 2014), all buildings within this housing project are located in Flood Zone X (areas determined to be outside the 0.2% annual chance floodplain). The majority of the project site (comprised of three tax map parcels) is located within Zone X as indicated under Figure 4. However, Parcels 7 and 9 are situated along Kalihi Stream. The southern boundary of Parcel 7 borders this stream which is designated both Zone XS and Zone AEF. Zone XS is areas of 0.2 percent annual chance flood and areas of one percent annual chance

flood with average depths of less than one foot. Zone AEF consists of the floodway area within Zone AE (100-year flood). This area along stream is undeveloped open space comprised of vegetation and trees.

For Parcel 9, the southern and southeast boundaries of this parcel border and includes a portion of Kalihi Stream. The southern end of this parcel presently consists of open space. The southeastern end of the parcel includes a portion of the stream that is designated as Zone AEF, Zone AE (base flood elevation determined) and Zone XS. This southeast end of the parcel consists of a paved parking lot with chain-link fence bordering the top of the stream bank to keep people out of the stream. The stream bank lowers in elevation as it approaches the bottom of the stream.

A field inspection and information obtained from the site manager confirmed no major flooding issues within the site. Based on its description, repair and rehabilitation improvements should not involve any activities that would require work within flood areas and further evaluation under this section. Except for fencing, no existing structures are within the flood area along Kalihi Stream. The project is in compliance with Executive Order 11988.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the housing project did not visually reveal signs of flooding problems. An interview with the AMP Manager also determined that major ponding or flooding issues are currently not an issue for the project site.

Printed: Flood Insurance Rate Map, Community Panel Number 15003C0353G, Revised November 05, 2014. A small portion of the southern boundaries of both Parcels 7 and 9 are located in Flood Zone XS (Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot), and Zone AEF (floodway areas in Zone AE (special flood hazard areas subject to inundation by the 1% annual chance flood with base flood elevations (BFE) determined). The floodway is the channel of the stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1 percent annual chance flood can be carried without increasing the BFE. The southeastern end of Parcel 9 includes a portion of Kalihi Stream that is designated as Zone XS, Zone AE, and Zone AEF. There are no residential buildings or other structures present within these flood areas. The southeast end of Parcel 9 consists of a paved parking lot with chain-link fence bordering the top of the stream bank to keep people out of the stream.

Hawai`i Department of Land and Natural Resources website at:
http://gis.hawaiinfip.org/FHAT/report/FHAT_Report.pdf (Date accessed: 7/27/15)

XI. HISTORIC PRESERVATION (NATIONAL HISTORIC PRESERVATION ACT OF 1966; SECTIONS 106 AND 110; 36 CFR, PART 800)

CONTACT:

Ms. Suzanne Case, Chairperson
Department of Land and Natural Resources (DLNR)
State of Hawai‘i
1151 Punchbowl Street
Honolulu, Hawai‘i 96813
Tel. #: 587-0400

SUPPORTING DOCUMENTS	
X	Field
X	Contact
X	Printed
X	Experience
X	Study

DETERMINATION:

Status Category: No Adverse Effect on Historic Properties with Mitigation

The Kūhiō Park Terrace (KPT) High-Rise project includes two high-rise residential buildings, community buildings within the common area, and a single-family residence used by the management company. The two high-rise towers, a community building, and the single-family residence were initially occupied in 1965. More recently, a family education building (1976), Head Start modular building (no date), and a resource center (2003) were constructed as part of community buildings serving the larger KPT project. A Historic Property Evaluation (HPE) Update study was conducted by Mason Architects, Inc. in June 2015 to determine whether these structures met National Register of Historic Properties (NRHP) eligibility criteria. This study determined that only the two high-rise towers, the original community building, and the single-family residence met NRHP eligibility criteria. In a letter to the State Historic Preservation Officer (SHPO) dated August 20, 2015, the HPHA determined that repair and rehabilitation improvements for this housing project would have "no adverse effect" on historic properties subject to certain mitigative measures. In a letter dated December 11, 2015, the SHPO concurred with the HPHA's determination and provided additional conditions for ground-disturbing activities. In responding to this letter, the HPHA concurred with the conditions set forth by the SHPO.

SUPPORTING DOCUMENTATION:

Field: A site inspection of this housing project did not locate any existing or potential archaeological sites (e.g., heiau) or cultural features on the property. An interview with the AMP Manager indicates that no known sites or features are present on the property.

Contact: Based on the findings and recommendations of the 2015 AIS, the HPHA submitted a letter to the State Historic Preservation Officer dated August 20, 2015 regarding 28 housing projects, which is included in the Appendix. Of this total, 15 housing projects did not meet National Register eligibility criteria, therefore, a "no historic properties affected" determination was proposed for these repair and rehabilitation improvements. Repair and rehabilitation improvements for the other 13 housing projects (including Kūhiō Park Terrace) were determined to meet National Register eligibility criteria and were proposed to have "no adverse effect" on historic properties subject to certain mitigative measures.

In a letter dated December 11, 2015, the SHPO concurred with the HPHA's determination that repair and rehabilitation improvements for this housing project would have "no adverse effect" on historic properties pursuant to NHPA Section 106 and subject to the following mitigative measures. . In response to this letter, the HPHA concurred with the conditions set forth by the SHPO. A copy of these letters are included in Exhibit C.

1. When considering rehabilitation improvements or building modifications: 1) the buildings' character-defining features shall be retained to the extent practicable; and 2) the renovations shall adhere to the Secretary of the Interior's (SOI) Standards for Rehabilitation.

2. If rehabilitation improvements or building modifications cannot retain the character-defining features or adhere to the SOI's Standards, a Historic American Buildings Survey (HABS) will be conducted subject to the following conditions:

    a. Level II HABS documentation will be conducted in accordance with the National Park Service standards; and

b. A representative sample of multiple building types would be selected for HABS documentation due to the multiple types of buildings constructed for housing projects.

3. If ground disturbing activity is anticipated, HPHA must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation.

   a. Submit detailed plans, specifications and a detailed scope of work once the plans have been developed.

   b. Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation.

   c. Submit a TMK map showing the full extent of the project area within the affected parcel/s.

   d. Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area.

   e. Summary of land use history, such as previous intensive cultivation, grubbing or grading.

   f. Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

In addition to these mitigation measures, the HPHA would enter into a Programmatic Agreement with the SHPO to address the implementation of future repair and rehabilitation improvements to State housing projects after the current Section 106 review process is completed and prior to the next environmental review process in approximately five years. Furthermore, should subsurface human remains or other traces of human activity greater than 50 years old be encountered during construction, all work in the vicinity of the find would immediately stop and the SHPD would be promptly notified. The treatment of any cultural artifacts and human remains that are encountered would be conducted in accordance with applicable requirements of Chapter 6E, Hawai‘i Revised Statutes (Historic Preservation) and Chapter 13-300, Hawai‘i Administrative Rules **(**Rules of Practice and Procedure Relating to Burial Sites and Human Remains).

Printed: A review of the U.S. National Parks Service website for the National Register of Historic Places did not identify any historic properties within the limits of this housing project. A similar review of the State DLNR website for the State Register of Historic Places revealed that there are no historic properties within the project site.

National Register: U.S. National Park Service website at: http://www.nps.gov/nr/research/ (Date accessed: 7/2/15).

State Register: Hawai`i Department of Land and Natural Resources website at: http://dlnr.hawaii.gov/shpd/state-register/ (Date accessed: 7/2/15).

Experience: In a letter to the SHPD dated July 15, 2005, the Housing and Community Development Corporation of Hawai`i (HCDCH), a predecessor to the HPHA, proposed minor repair and

rehabilitation improvement at 39 public housing projects throughout Hawai‘i and believed the work would have “no effect” on significant historic sites. This included the Kūhiō Park Terrace of which the High-Rise and Low-Rise phases were one housing project at the time. The HCDCH also asked the SHPD to: (1) define the area of potential effect for the housing projects; (2) identify and evaluate historic properties within the housing projects; and (3) assess and resolve any adverse effects of the housing projects per Section 106 of the National Historic Preservation Act of 1966.

In a letter to the HCDCH dated September 27, 2005, the SHPO responded by requesting that a programmatic agreement (PA) with the HCDCH be developed that would also address the recordation of housing projects that have not yet reached the 50-year milestone but may face possible adverse effects from the proposed work.

Based on follow up discussions with the SHPD, Mason Architects prepared a historic property evaluation (HPE) on behalf of the HCDCH in April 2006 for six public housing projects on Hawai‘i Island and O‘ahu (included Kūhiō Park Terrace). The six projects covered by the HPE met, or would soon meet, the 50-year age criteria to become eligible for listing in the NRHP. At the time, only two of the projects were over 50 years old and only two met NRHP eligibility criteria. The KPT project did not meet NRHP eligibility criteria. The HPE was submitted to the SHPD for review and comment on June 6, 2006. No comments or objections were received from the SHPO on the 2006 HPE or the “no effect” determination that was set forth in the HCDCH letter dated July 15, 2005.

Study: A Historic Property Evaluation (HPE) Update study was conducted by Mason Architects, Inc. in June 2015 for Kūhiō Park Terrace (KPT) that included both the High-Rise and Low-Rise phases that are now managed as separate HPHA housing projects. The KPT High-Rise project includes the two high-rise residential buildings, community buildings within the common area, and a single-family residence used by the management company. The two high-rise towers, a community building, and the single-family residence were first occupied in 1965. More recently, a family education building was constructed in 1976, a PACT Head Start modular building (no date), and a resource center constructed in 2003 as part of community buildings serving the larger KPT project.
KPT was the State’s first and last attempt to house low-income families in publicly-owned high-rise buildings. The project included both high-rise and low-rise buildings in a campus-like setting. The complex originally featured large grassy areas between buildings and numerous community amenities including a pool with bathhouse, park building, basketball and volleyball courts, a softball field, and a community building. The two towers at KPT High-Rise each have three wings radiating from a central elevator area. Each floor has walkways with solid concrete railings which extend along one side of each wing. These walkways provide access to each apartment's entry, at the kitchen side of the apartments. The opposite side of each wing from the walkways has a lanai, one for each apartment. These also have solid concrete railings with decorative metal grilles extending from the top of the railings to the lanai ceiling.

These buildings and units were recently rehabilitated under a public-private partnership. Recent changes to the buildings include: 1) original concrete masonry unit screens that sheltered the stairwells and central elevator lobbies have been removed and replaced with decorative metal railings; 2) original flat concrete entry awning has been replaced with an angled metal awning; 3) lanais on the opposite side of the buildings from the entry walkways have been enclosed as interior space in each apartment; and 4) the apartments’ kitchen windows have been replaced and their kitchen cabinets and counters have been renovated. Despite some alterations, the high-rise buildings retain their integrity of

location, setting, feeling, and association. There have also been changes to design, materials and workmanship. However, the high-rise buildings were determined to meet National Register of Historic Properties (NRHP) eligibility criteria.

The one-story, single family residence building is a smaller version of the other two types of low-rise buildings (KPT Low-Rise housing project). It is constructed of concrete, with a concrete slab foundation, a flat roof that has deep eaves, and wing walls at the corners of the buildings, and shielding the windows. Windows are glass jalousie and doors are flush wood. This building retains its integrity of location, setting, design, materials design, workmanship, feeling and association. It was determined to meet NRHP eligibility criteria.

The community building built in 1965 (now Community Hall) is a single-story structure southeast of high-rise Tower A, and overlooks the softball field. It is constructed of concrete, with a slab foundation, and a flat roof with overhanging eaves on three sides. The roof is supported by large tapered, plus- or x-shaped concrete columns, as well as large horizontal concrete beams, whose ends are visible above the columns. A street-facing addition to this building was built in 1980. Despite some alterations, to the design, materials and workmanship, this community building retains its integrity of location, setting, feeling, and association, and was determined to meet NRHP eligibility criteria. The other newer community buildings did not meet NRHP eligibility criteria.

XII. NOISE ABATEMENT CONTROL (24 CFR PART 51B)

SUPPORTING DOCUMENTS

X	Field
	Contact
	Printed
	Experience
X	Study

DETERMINATION:

Status Category: Within HUD Noise Standards

The project site is not situated along a highway that has a high volume of vehicular traffic. The HUD noise calculator estimated noise levels at the project site to be 63.1 dBA. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

SUPPORTING DOCUMENTATION:

Field: No significant noise generating sources were identified within the project site during the site inspection. The subject housing lots are located within an urban residential neighborhood, along Linapuni Street. Linapuni Street is expected to have low volumes of traffic because access to the project site is managed primarily for residential use, and is gated at both entrances into the housing project site and staffed with security guards. Therefore, traffic in this area would primarily be to the existing project site. Furthermore, an interview with the AMP Manager did not identify any loud noise producing sources in the area. As a result, notable noise sources are predominantly associated with vehicular traffic along adjacent streets. Traffic noise did not appear significant during the site visit.

Study: The HUD day/night noise level calculator was used to estimate approximate traffic noise generated by the H-1 Highway, a major roadway connecting downtown Honolulu to west and north O‘ahu. Traffic counts were based on 2013 Hawai‘i State Department of Transportation data and applied to a distance of 450 feet from the project site. Using this HUD calculator, the estimated noise levels at the project site is 63.1 dBA. Actual noise levels are expected to be lower since some amount of traffic nose would be buffered by single-family homes and multi-story apartments located between H-1 Highway and the project site. Therefore, traffic noise levels at this site should not exceed 65 dBA and appear to be within HUD noise standards. Repair and rehabilitation improvements are also not expected to significantly change existing traffic conditions at this housing site and along adjacent roadways which would increase noise levels above 65 dBA.

XIII. SOLE SOURCE AQUIFER (40 CFR PART 149)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Impact on Sole Source Aquifer

The housing project is located within the O‘ahu designated sole source aquifer listed under the HUD-EPA (Region IX) Sole Source Aquifer Memorandum of April 30, 1990. Under Section II.B.1 and II.B.2 (Project Identification), the EPA and HUD mutually agree that activities listed under those identified sections would not affect water quality in Region IX sole source aquifers, and need not be referred to EPA for evaluation. However, if exceptional circumstances require compliance steps with any of these authorities, such compliance must be established and documented prior to approving the site-specific loan or grant.

SUPPORTING DOCUMENTATION:

Printed: This determination was based upon review of the Sole Source Aquifer Memorandum of 4/30/90 (Sections II.B.1 and II.B.2) and consideration of the type of rehabilitation related improvements that would be conducted for this project.

XIV. WETLANDS PROTECTION (EXECUTIVE ORDER 11990)

SUPPORTING DOCUMENTS

X	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no known wetlands within the boundaries of the housing project. Therefore, no wetlands will be adversely impacted by repair and rehabilitation improvements.

SUPPORTING DOCUMENTATION:

Field: A site inspection of the property did not identify the presence of any wetlands.

Printed: U.S. Fish and Wildlife Service website at: http://www.fws.gov/wetlands/data/mapper.html (Date accessed 7/23/2015).

XV. WILD AND SCENIC RIVERS ACT (16 USC 1271, SECTION 7 (B), (C))

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: Not Applicable.

There are no Wild and Scenic Rivers in Hawai‘i, which excludes this project from mitigation or formal consultation requirements.

SUPPORTING DOCUMENTATION:

Printed: National Wild and Scenic Rivers System website at: http://www.rivers.gov/index.php (Date accessed: 6/30/2015).

XVI. ENVIRONMENTAL JUSTICE (EXECUTIVE ORDER NO. 12898)

SUPPORTING DOCUMENTS

	Field
	Contact
X	Printed
	Experience
	Study

DETERMINATION:

Status Category: No Conflict with Requirements

Repair and rehabilitation improvements would not involve acquisition of additional properties resulting in the displacement of residents nor would it result in the displacement of existing residents at the housing project. Therefore, repair and rehabilitation improvements would not result in disproportionately high or adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations. Repair and rehabilitation improvements should benefit low-income and minority populations living within this housing project.

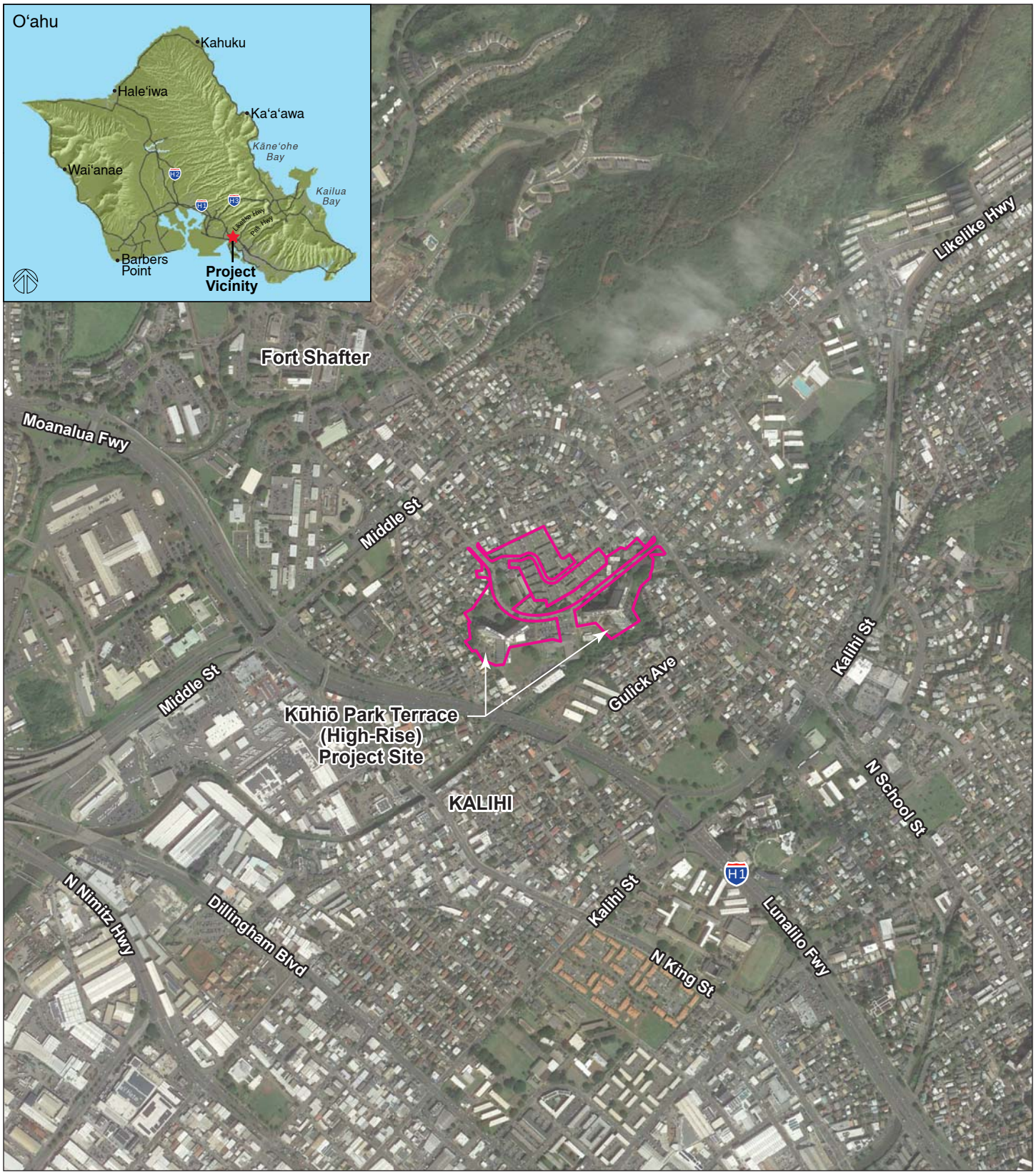
SUPPORTING DOCUMENTATION:

Printed: Executive Order 12898.

U.S. Department of Housing and Urban Development website at:
https://www.hudexchange.info/environmental-review/environmental-justice/

EXHIBIT A

Location Map, TMK Map, Site Map, Flood Map, and Site Photos



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

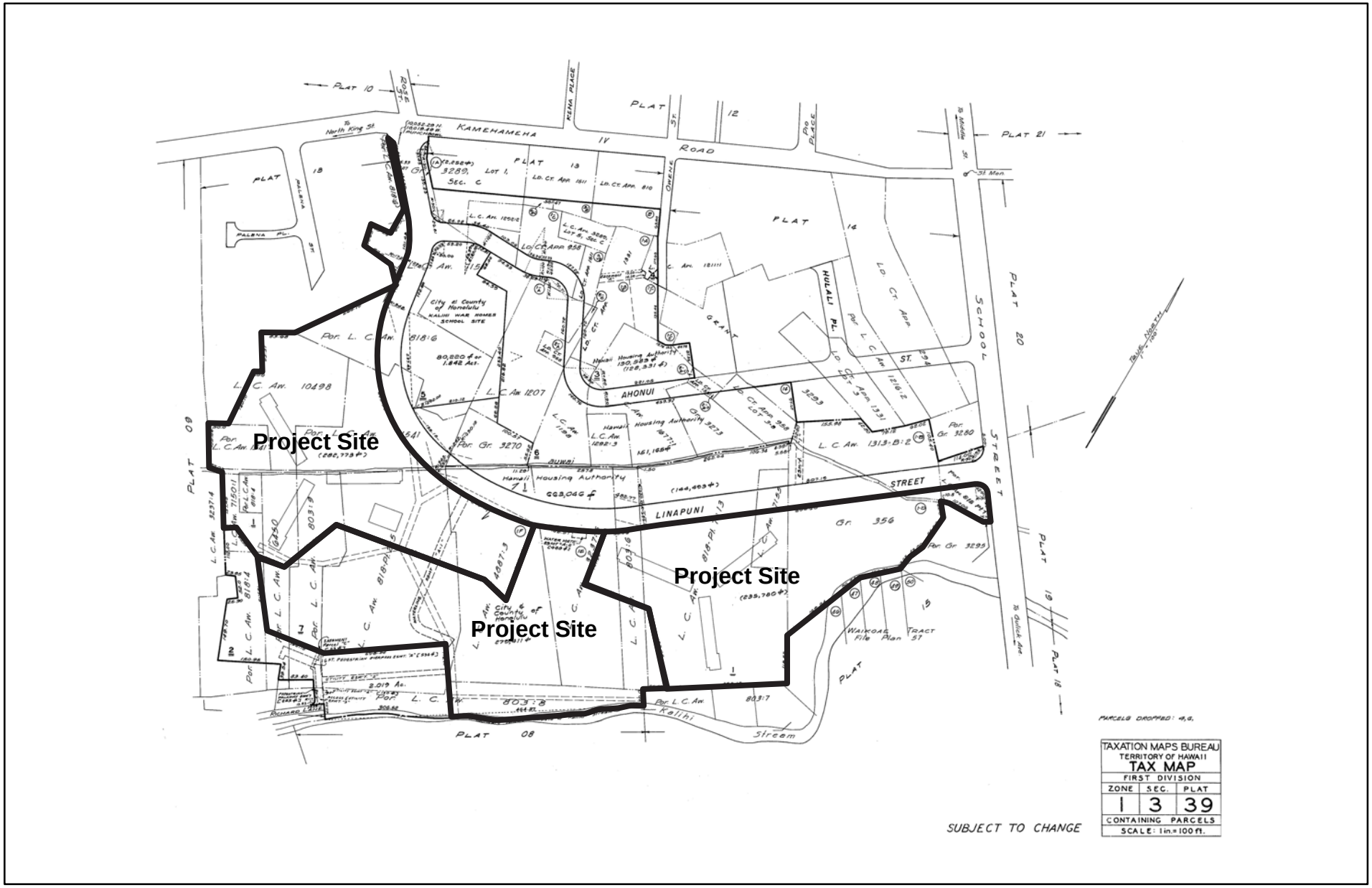
HPHA No.1010 - Kūhiō Park Terrace High-Rise (AMP 52)

Figure 1 - Project Location Map

Honolulu, O'ahu

1,500 FT

HHF PLANNERS
places for people



HPHA No.1010 - Kūhiō Park Terrace High-Rise (AMP 52)

Figure 2 - TMK Map

Honolulu, O'ahu

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

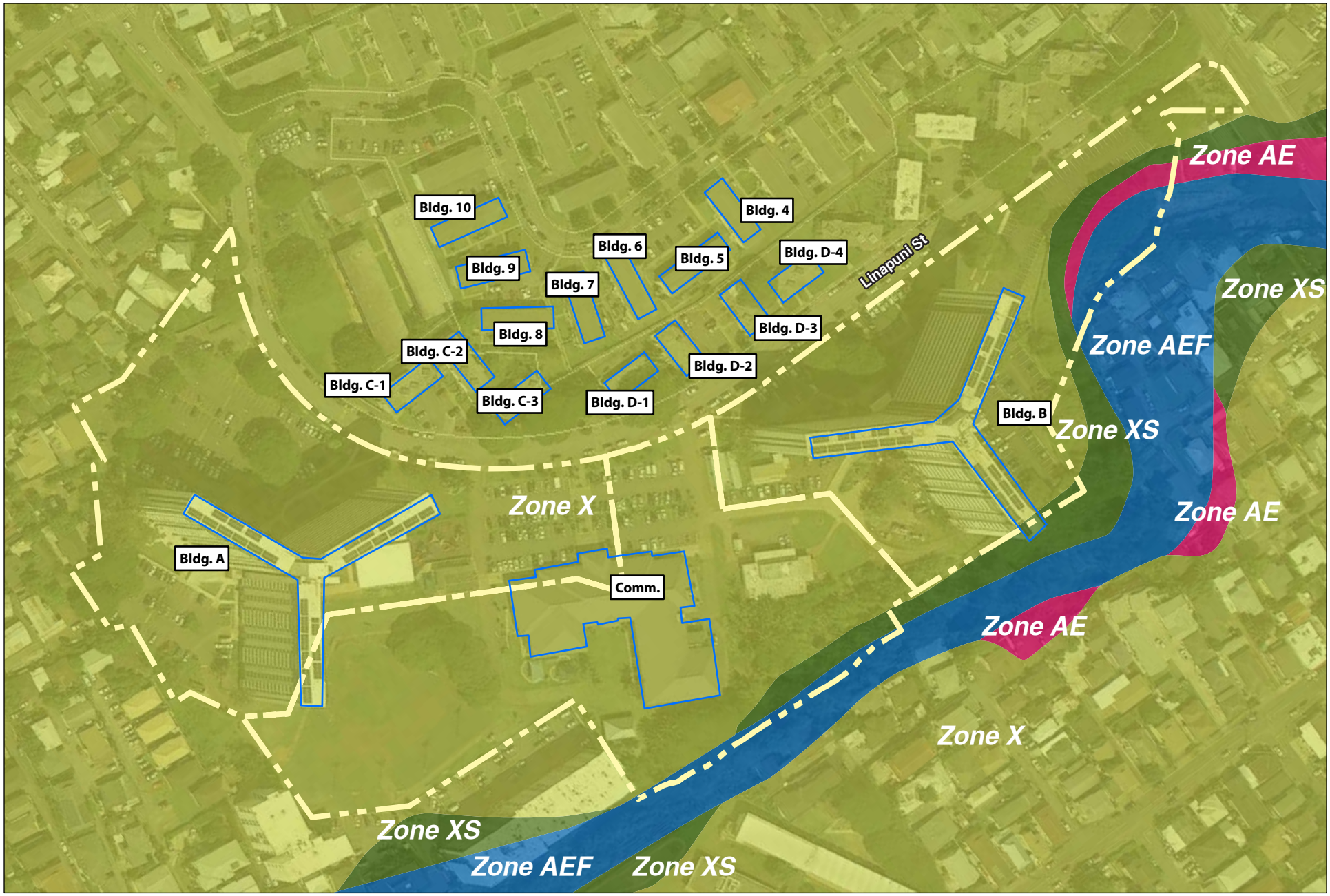
HPHA No.1010 - Kūhiō Park Terrace High-Rise (AMP 52)

Figure 3 - Site Map

Honolulu, O'ahu

200 FEET

HHF PLANNERS
places for people



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

LEGEND

- Zone AE - 1% Annual Chance of Flood
- Zone AEF - Floodway in Zone AE
- Zone XS - 0.2% Annual Chance of Flood
- Zone X - Outside the 0.2% Annual Chance of Flood

HPHA No.1010 - Kūhiō Park Terrace High-Rise (AMP 52)

Figure 4 - Flood Map

Honolulu, O'ahu

200 FEET

HHF PLANNERS
places for people

KŪHIŌ PARK TERRACE HIGHRISE
SITE PHOTOS

At school street entry to housing site, facing south-east

At School Street entry to housing site, facing north-west

Building B (high-rise) at left, Building A at center, viewed from School Street entrance.

Linapuni Elementary School across street from housing site

Linapuni Street, facing western entrance into project

View of Kuhio Park Terrace (high-rise), as seen from School Street entrance

KŪHIŌ PARK TERRACE HIGHRISE
SITE PHOTOS

Family Education Building

Chainlink fencing separates southern boundary of housing site from abutting apartment site

West property line (facing south) adjacent to the rail transport right-of-way, along Kamehameha Highway

Chainlink fence at site boundary, floodway and Kalihi Stream to the right, beyond

Change in elevation to Kalihi Stream at southern boundary of site

Hazardous material storage

EXHIBIT B

EDR Radius Map Report

Kuhio Park Terrace Highrise
1531 Linapuni St.
Honolulu, HI 96819

Inquiry Number: 4237094.246s
March 17, 2015

EDR Summary Radius Map Report

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

FORM-NULL-PVC

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

1531 LINAPUNI ST.
HONOLULU County, HI 96819

COORDINATES

Latitude (North):	21.3377000 - 21˚ 20' 15.72''
Longitude (West):	157.8763000 - 157˚ 52' 34.68''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	616527.5
UTM Y (Meters):	2359799.5
Elevation:	79 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	USGS 7.5 min quad index

Target Property:	E
Source:	USGS 7.5 min quad index

MAPPED SITES SUMMARY

Target Property Address:
1531 LINAPUNI ST.
, HI 96819

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
1	KAUKONAHUA BRIDGE	1531 LINAPUNI ST	ICIS, FINDS		TP
Reg	FORT SHAFTER		DOD	Same	1 ft.
A2	KUHIO PARK TERRACE T	LINAPUNI ST	SHWS, ENG CONTROLS, INST CONTROL, BROWNFIELDS	Higher	276, North
A3	KUHIO PARK TERRACE	1518 LINAPUNI STREET	US BROWNFIELDS	Higher	303, NNE
4	KUHIO HOMES PUBLIC H	1410 THRU 1529 AHONU	RCRA NonGen / NLR, FINDS	Higher	754, NNW
5	KUHIO PARK TERRACE C	1475 LINAPUNI ST	SHWS, ENG CONTROLS, INST CONTROL	Higher	901, NW
6		1532 AMELIA ST	EDR US Hist Auto Stat	Higher	979, ENE
B7		1419 KAMEHAMEHA IV	EDR US Hist Auto Stat	Higher	1081, NNW
B8		1415 KAMEHAMEHA IV	EDR US Hist Auto Stat	Higher	1084, NW
9		1130 PINKHAM ST	EDR US Hist Cleaners	Lower	1102, SSW
C10	CHANG-CHOW PROPERTY,	2161 N SCHOOL ST	SHWS	Higher	1205, ENE
C11	CHANG CHOW PROPERTIE	2161 N SCHOOL ST	UST	Higher	1221, ENE
D12	SHELL SERVICE STATIO	2239 N SCHOOL ST	UST	Higher	1280, NNE
D13	IMM KAM IV	2314 N SCHOOL ST	LUST, UST, Financial Assurance	Higher	1345, NNE
14	7-11 KAM IV 0166	2404 N SCHOOL ST	LUST, UST, Financial Assurance	Higher	1623, NNE
E15	KANE'S AUTO REPAIR	1325 MIDDLE ST	LUST, UST	Higher	1728, NW
E16	BENTON'S MIDDLE STRE	1305 MIDDLE ST	LUST, UST, Financial Assurance	Higher	1754, NW
17	KALIHI STREAM CHEVRO	2160 N. KING ST.	LUST, UST, Financial Assurance	Lower	1789, SW
F18	FACTORY STREET LEAD	2003 N KING ST	SHWS, SPILLS, ENG CONTROLS, INST CONTROL	Lower	2050, SSW
F19	FACTORY STREET SITE	2003 N. KING STREET	CERC-NFRAP	Lower	2050, SSW
20	KSC SERVICE L-4210	2295 N KING ST	LUST, UST	Lower	2121, WSW
21	PACIFIC TIRE	1955 N KING ST	LUST, UST	Lower	2122, SSW
22	KUHIO PARK TERRACE	1600 HAUPU PL	US BROWNFIELDS	Higher	2193, East
23	ISLAND MINI-MART NOR	1860 N KING ST	LUST, UST, Financial Assurance	Lower	2205, South
24	C&CH BOARD OF WATER	2442 KINI PLACE	LUST, UST, Financial Assurance	Higher	2234, NNE
25	2343 NORTH KING STRE	2343 N KING ST	SHWS, INST CONTROL	Lower	2328, West
26	MORRIS ANGELO	905 FACTORY ST	LUST, UST	Lower	2335, SSW
27	FORT SHAFTER	BLDG 422 TANK 7A 7B	LUST, UST	Higher	2339, NW
G28	C&CH KALIHI FIRE STA	1742 N KING ST	LUST, UST	Lower	2362, South
G29	KALIHI CHEVRON SELF	1715 N KING ST	LUST, UST, Financial Assurance	Lower	2445, South
30	U.S. ARMY ADMINISTRA	BLDG 430	LUST, UST	Higher	2446, NW
31	RAKUYO KEN U.S.A.	804 GULICK AVE	LUST, UST	Lower	2462, SW
32	FORT SHAFTER	BLDG 535/EXCHANGE MA	LUST, UST	Higher	2486, NNW
33	SAFETY KLEEN CORP 7	723 UMI ST	RCRA-TSDF, RCRA NonGen / NLR	Lower	2564, WSW
34	KAPALAMA INCINERATOR	757 KOKEA ST	RCRA-SQG, SHWS, SPILLS, INST CONTROL	Lower	2588, SSW
35	FARRINGTON HIGH SCHO	1564 N KING ST	FTTS, HIST FTTS, SHWS, SPILLS	Lower	2770, SSE
36	OTS KALIHI-PALAMA BU	811 MIDDLE ST	SHWS, LUST, UST, Financial Assurance	Lower	3472, West
37	KAMEHAMEHA SCOOLS	1887 MAKUAKANE ST	RCRA-CESQG, FINDS, SHWS, SPILLS, ENG CONTROLS,...	Higher	3613, East
38	DILLINGHAM BOULEVARD	DILLINGHAM BLVD & MO	SHWS, ENG CONTROLS, INST CONTROL	Lower	3807, SSW

MAPPED SITES SUMMARY

Target Property Address:
1531 LINAPUNI ST.
, HI 96819

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
39	FORT SHAFTER BOLLARD	1557 PASS ST	SHWS, SPILLS	Lower	3856, West
40	LENAKONA DEVELOPMENT	2305 KAMEHAMEHA HWY	SHWS, LUST, UST	Lower	3859, SW
41	HAWAII MEAT COMPANY	711 MIDDLE ST	SHWS, SPILLS, ENG CONTROLS, INST CONTROL	Lower	3890, WSW
42	2147 AOAO STREET	2147 AOAO ST	SHWS, SPILLS	Higher	4092, NE
43	HAWAII DAIRY HOLDING	2277 KAMEHAMEHA HWY	SHWS, LUST, UST, VCP, Financial Assurance	Lower	4157, WSW
44	YEE HOP PROPERTY	621 MIDDLE ST	SHWS, SPILLS	Lower	4160, WSW
45	611 MIDDLE STREET WA	611 MIDDLE ST	SHWS, SPILLS, ENG CONTROLS, INST CONTROL	Lower	4343, WSW
46	TAKAMIYA PROPERTY	850 MOOWAA ST	SHWS, SPILLS	Lower	4589, SSE
47	ROSS TRUSTS	819 MOOWAA ST	SHWS, VCP	Lower	4647, SSE
48	GTE-HAWAIIAN TEL EMP	1138 N KING ST	SHWS, ENG CONTROLS, INST CONTROL	Lower	5021, SSE
49	PACIFIC POULTRY	1804 KANAKANUI ST	SHWS, SPILLS	Lower	5065, SSW
50	YUE-FUNG KWAN CONSTR	2004-2008 REPUBLICAN	SHWS, SPILLS	Lower	5149, SW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 7 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
KAUKONAHUA BRIDGE 1531 LINAPUNI ST HONOLULU, HI 96819	ICIS FINDS	N/A

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal CERCLIS NFRAP site List

CERC-NFRAP: A review of the CERC-NFRAP list, as provided by EDR, and dated 10/25/2013 has revealed that there is 1 CERC-NFRAP site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
FACTORY STREET SITE	2003 N. KING STREET	SSW 1/4 - 1/2 (0.388 mi.)	F19	11

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: A review of the RCRA-TSDF list, as provided by EDR, and dated 12/09/2014 has revealed that there is 1 RCRA-TSDF site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SAFETY KLEEN CORP 7	***723 UMI ST***	***WSW 1/4 - 1/2 (0.486 mi.)***	***33***	***14***

State- and tribal - equivalent CERCLIS

SHWS: A review of the SHWS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 22 SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
KUHIO PARK TERRACE T	*LINAPUNI ST*	*N 0 - 1/8 (0.052 mi.)*	*A2*	*7*
KUHIO PARK TERRACE C	*1475 LINAPUNI ST*	*NW 1/8 - 1/4 (0.171 mi.)*	*5*	*7*
CHANG-CHOW PROPERTY,	2161 N SCHOOL ST	ENE 1/8 - 1/4 (0.228 mi.)	C10	8
KAMEHAMEHA SCOOLS	*1887 MAKUAKANE ST*	*E 1/2 - 1 (0.684 mi.)*	*37*	*15*
2147 AOAO STREET	*2147 AOAO ST*	*NE 1/2 - 1 (0.775 mi.)*	*42*	*16*

Lower Elevation	Address	Direction / Distance	Map ID	Page
FACTORY STREET LEAD	*2003 N KING ST*	*SSW 1/4 - 1/2 (0.388 mi.)*	*F18*	*10*
2343 NORTH KING STRE	*2343 N KING ST*	*W 1/4 - 1/2 (0.441 mi.)*	*25*	*12*
KAPALAMA INCINERATOR	*757 KOKEA ST*	*SSW 1/4 - 1/2 (0.490 mi.)*	*34*	*15*
FARRINGTON HIGH SCHO	*1564 N KING ST*	*SSE 1/2 - 1 (0.525 mi.)*	*35*	*15*
OTS KALIHI-PALAMA BU	*811 MIDDLE ST*	*W 1/2 - 1 (0.658 mi.)*	*36*	*15*
DILLINGHAM BOULEVARD	*DILLINGHAM BLVD & MO*	*SSW 1/2 - 1 (0.721 mi.)*	*38*	*16*
FORT SHAFTER BOLLARD	*1557 PASS ST*	*W 1/2 - 1 (0.730 mi.)*	*39*	*16*
LENAKONA DEVELOPMENT	*2305 KAMEHAMEHA HWY*	*SW 1/2 - 1 (0.731 mi.)*	*40*	*16*
HAWAII MEAT COMPANY	*711 MIDDLE ST*	*WSW 1/2 - 1 (0.737 mi.)*	*41*	*16*
HAWAII DAIRY HOLDING	*2277 KAMEHAMEHA HWY*	*WSW 1/2 - 1 (0.787 mi.)*	*43*	*17*
YEE HOP PROPERTY	*621 MIDDLE ST*	*WSW 1/2 - 1 (0.788 mi.)*	*44*	*17*
611 MIDDLE STREET WA	*611 MIDDLE ST*	*WSW 1/2 - 1 (0.823 mi.)*	*45*	*17*
TAKAMIYA PROPERTY	*850 MOOWAA ST*	*SSE 1/2 - 1 (0.869 mi.)*	*46*	*17*
ROSS TRUSTS	*819 MOOWAA ST*	*SSE 1/2 - 1 (0.880 mi.)*	*47*	*17*
GTE-HAWAIIAN TEL EMP	*1138 N KING ST*	*SSE 1/2 - 1 (0.951 mi.)*	*48*	*18*
PACIFIC POULTRY	*1804 KANAKANUI ST*	*SSW 1/2 - 1 (0.959 mi.)*	*49*	*18*
YUE-FUNG KWAN CONSTR	*2004-2008 REPUBLICAN*	*SW 1/2 - 1 (0.975 mi.)*	*50*	*18*

State and tribal leaking storage tank lists

LUST: A review of the LUST list, as provided by EDR, and dated 12/16/2014 has revealed that there are 16 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
IMM KAM IV	*2314 N SCHOOL ST*	*NNE 1/4 - 1/2 (0.255 mi.)*	*D13*	*9*
Facility Status: Site Cleanup Completed (NFA)				
7-11 KAM IV 0166	*2404 N SCHOOL ST*	*NNE 1/4 - 1/2 (0.307 mi.)*	*14*	*9*
Facility Status: Site Cleanup Completed (NFA)				
KANE'S AUTO REPAIR	*1325 MIDDLE ST*	*NW 1/4 - 1/2 (0.327 mi.)*	*E15*	*9*
Facility Status: Site Cleanup Completed (NFA)				
BENTON'S MIDDLE STRE	*1305 MIDDLE ST*	*NW 1/4 - 1/2 (0.332 mi.)*	*E16*	*10*
Facility Status: Site Cleanup Completed (NFA)				
C&CH BOARD OF WATER	*2442 KINI PLACE*	*NNE 1/4 - 1/2 (0.423 mi.)*	*24*	*12*
Facility Status: Site Cleanup Completed (NFA)				
FORT SHAFTER	*BLDG 422 TANK 7A 7B*	*NW 1/4 - 1/2 (0.443 mi.)*	*27*	*13*
Facility Status: Site Cleanup Completed (NFA)				

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
U.S. ARMY ADMINISTRA	*BLDG 430*	*NW 1/4 - 1/2 (0.463 mi.)*	*30*	*14*
Facility Status: Site Cleanup Completed (NFA)				
FORT SHAFTER	*BLDG 535/EXCHANGE MA*	*NNW 1/4 - 1/2 (0.471 mi.)*	*32*	*14*
Facility Status: Site Cleanup Completed (NFA)				

Lower Elevation	Address	Direction / Distance	Map ID	Page
KALIHI STREAM CHEVRO	*2160 N. KING ST.*	*SW 1/4 - 1/2 (0.339 mi.)*	*17*	*10*
Facility Status: Site Cleanup Completed (NFA)				
KSC SERVICE L-4210	*2295 N KING ST*	*WSW 1/4 - 1/2 (0.402 mi.)*	*20*	*11*
Facility Status: Site Cleanup Completed (NFA)				
PACIFIC TIRE	*1955 N KING ST*	*SSW 1/4 - 1/2 (0.402 mi.)*	*21*	*11*
Facility Status: Site Cleanup Completed (NFA)				
ISLAND MINI-MART NOR	*1860 N KING ST*	*S 1/4 - 1/2 (0.418 mi.)*	*23*	*12*
Facility Status: Active Remediation				
MORRIS ANGELO	*905 FACTORY ST*	*SSW 1/4 - 1/2 (0.442 mi.)*	*26*	*12*
Facility Status: Site Cleanup Completed (NFA)				
C&CH KALIHI FIRE STA	*1742 N KING ST*	*S 1/4 - 1/2 (0.447 mi.)*	*G28*	*13*
Facility Status: Site Cleanup Completed (NFA)				
KALIHI CHEVRON SELF	*1715 N KING ST*	*S 1/4 - 1/2 (0.463 mi.)*	*G29*	*13*
Facility Status: Site Cleanup Completed (NFA)				
RAKUYO KEN U.S.A.	*804 GULICK AVE*	*SW 1/4 - 1/2 (0.466 mi.)*	*31*	*14*
Facility Status: Site Cleanup Completed (NFA)				

State and tribal registered storage tank lists

UST: A review of the UST list, as provided by EDR, and dated 12/18/2014 has revealed that there are 2 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CHANG CHOW PROPERTIE	2161 N SCHOOL ST	ENE 1/8 - 1/4 (0.231 mi.)	C11	8
SHELL SERVICE STATIO	2239 N SCHOOL ST	NNE 1/8 - 1/4 (0.242 mi.)	D12	9

State and tribal institutional control / engineering control registries

ENG CONTROLS: A review of the ENG CONTROLS list, as provided by EDR, and dated 12/02/2014 has revealed that there are 3 ENG CONTROLS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
KUHIO PARK TERRACE T	*LINAPUNI ST*	*N 0 - 1/8 (0.052 mi.)*	*A2*	*7*
KUHIO PARK TERRACE C	*1475 LINAPUNI ST*	*NW 1/8 - 1/4 (0.171 mi.)*	*5*	*7*

Lower Elevation	Address	Direction / Distance	Map ID	Page
FACTORY STREET LEAD	*2003 N KING ST*	*SSW 1/4 - 1/2 (0.388 mi.)*	*F18*	*10*

INST CONTROL: A review of the INST CONTROL list, as provided by EDR, and dated 12/02/2014 has revealed that there are 5 INST CONTROL sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
KUHIO PARK TERRACE T	*LINAPUNI ST*	*N 0 - 1/8 (0.052 mi.)*	*A2*	*7*
KUHIO PARK TERRACE C	*1475 LINAPUNI ST*	*NW 1/8 - 1/4 (0.171 mi.)*	*5*	*7*

Lower Elevation	Address	Direction / Distance	Map ID	Page
FACTORY STREET LEAD	*2003 N KING ST*	*SSW 1/4 - 1/2 (0.388 mi.)*	*F18*	*10*
2343 NORTH KING STRE	*2343 N KING ST*	*W 1/4 - 1/2 (0.441 mi.)*	*25*	*12*
KAPALAMA INCINERATOR	*757 KOKEA ST*	*SSW 1/4 - 1/2 (0.490 mi.)*	*34*	*15*

State and tribal Brownfields sites

BROWNFIELDS: A review of the BROWNFIELDS list, as provided by EDR, and dated 12/02/2014 has revealed that there is 1 BROWNFIELDS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
KUHIO PARK TERRACE T	*LINAPUNI ST*	*N 0 - 1/8 (0.052 mi.)*	*A2*	*7*

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A review of the US BROWNFIELDS list, as provided by EDR, and dated 12/22/2014 has revealed that there are 2 US BROWNFIELDS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
KUHIO PARK TERRACE	1518 LINAPUNI STREET	NNE 0 - 1/8 (0.057 mi.)	A3	7
KUHIO PARK TERRACE	1600 HAUPU PL	E 1/4 - 1/2 (0.415 mi.)	22	11

Other Ascertainable Records

RCRA NonGen / NLR: A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 12/09/2014 has revealed that there is 1 RCRA NonGen / NLR site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
KUHIO HOMES PUBLIC H	*1410 THRU 1529 AHONU*	*NNW 1/8 - 1/4 (0.143 mi.)*	*4*	*7*

DOD: A review of the DOD list, as provided by EDR, and dated 12/31/2005 has revealed that there is 1 DOD site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
FORT SHAFTER		0 - 1/8 (0.000 mi.)	0	7

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Auto Stat: A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there are 3 EDR US Hist Auto Stat sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	1532 AMELIA ST	ENE 1/8 - 1/4 (0.185 mi.)	6	8
Not reported	1419 KAMEHAMEHA IV	NNW 1/8 - 1/4 (0.205 mi.)	B7	8
Not reported	1415 KAMEHAMEHA IV	NW 1/8 - 1/4 (0.205 mi.)	B8	8

EDR US Hist Cleaners: A review of the EDR US Hist Cleaners list, as provided by EDR, has revealed that there is 1 EDR US Hist Cleaners site within approximately 0.25 miles of the target property.

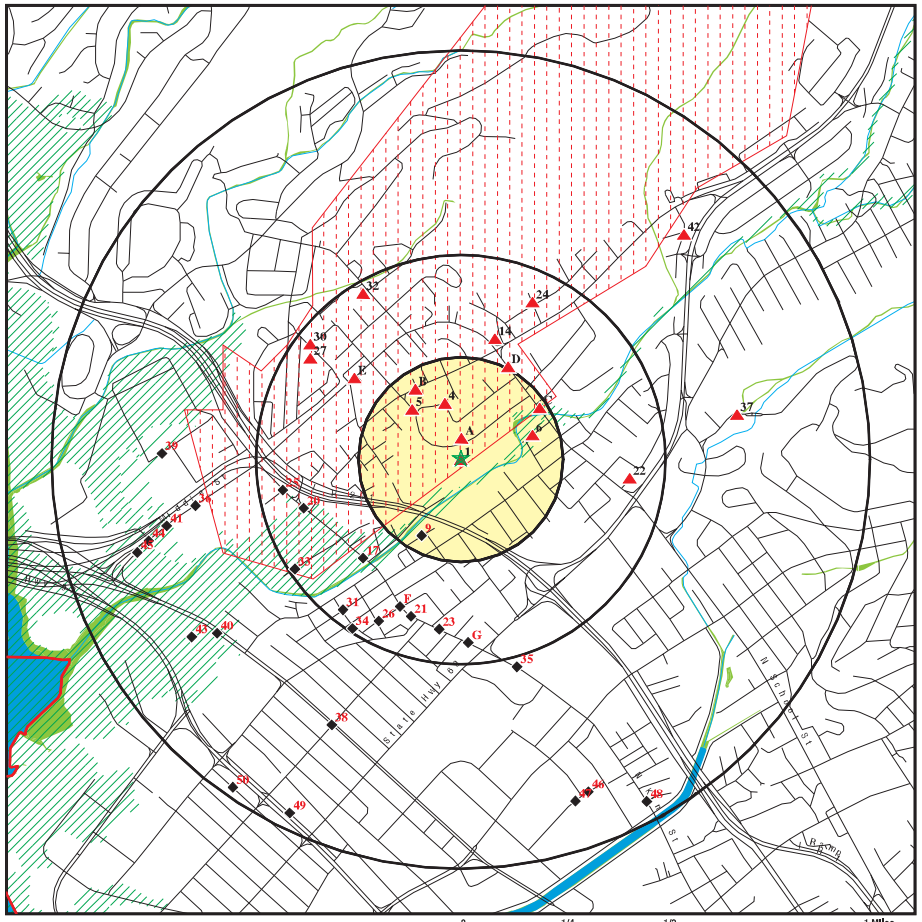
Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	1130 PINKHAM ST	SSW 1/8 - 1/4 (0.209 mi.)	9	8

Count: 11 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
HONOLULU	S117391417	1339 SCHOOL STREET	1339, 1341, 1343 N SCHOOL ST		SHWS, ENG CONTROLS, INST CONT
HONOLULU	S108008549	KALANI, HART, MOKUAEA STREET, HONO	HART ST & KALANI ST & MOKUAEA		SHWS
HONOLULU	S115488703	KALIHI AND KALAEPAA INTERSECTION	KALAEPAA DR AND KALIHI ST		SHWS, SPILLS
HONOLULU	1006820337	ABC DISPOSAL COMPANY	2760 KAMEHAMEHA HWY	96819	SHWS
HONOLULU	S116400203	KUHIO PARK TERRACE UNITS D1 AND D2	LINAPUNI ST		RGA HWS
HONOLULU	S116400204	KUHIO PARK TERRACE, UNITS D1 AND D	LINAPUNI ST		RGA HWS
HONOLULU	S111704706	FORMER KAPALAMA MILITARY RESERVATI	N NIMITZ HWY		SHWS
HONOLULU	S108008765	CITIZENS ENERGY SERVICES PIER 38	NIMITZ HWY		SHWS, SPILLS, ENG CONTROLS, INST CONTROL
HONOLULU	S106819311	NIMITZ HIGHWAY WATER IMPROVEMENT P	N NIMITZ HWY	96817	SHWS
HONOLULU	1006820220	DLNR BURIED DRUM SITE	SAND ISLAND ACCESS RD	96819	SHWS, SPILLS, INST CONTROL
HONOLULU	S108859926	KOKUA KALIHI VALLEY ACTIVE LIVING	UPPER KALIHI ST		SHWS, BROWNFIELDS

OVERVIEW MAP - 4237094.246S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Kuhio Park Terrace Highrise ADDRESS: 1531 Linapuni St. Honolulu HI 96819 LAT/LONG: 21.3377 / 157.8763	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.246s DATE: March 17, 2015 5:48 pm

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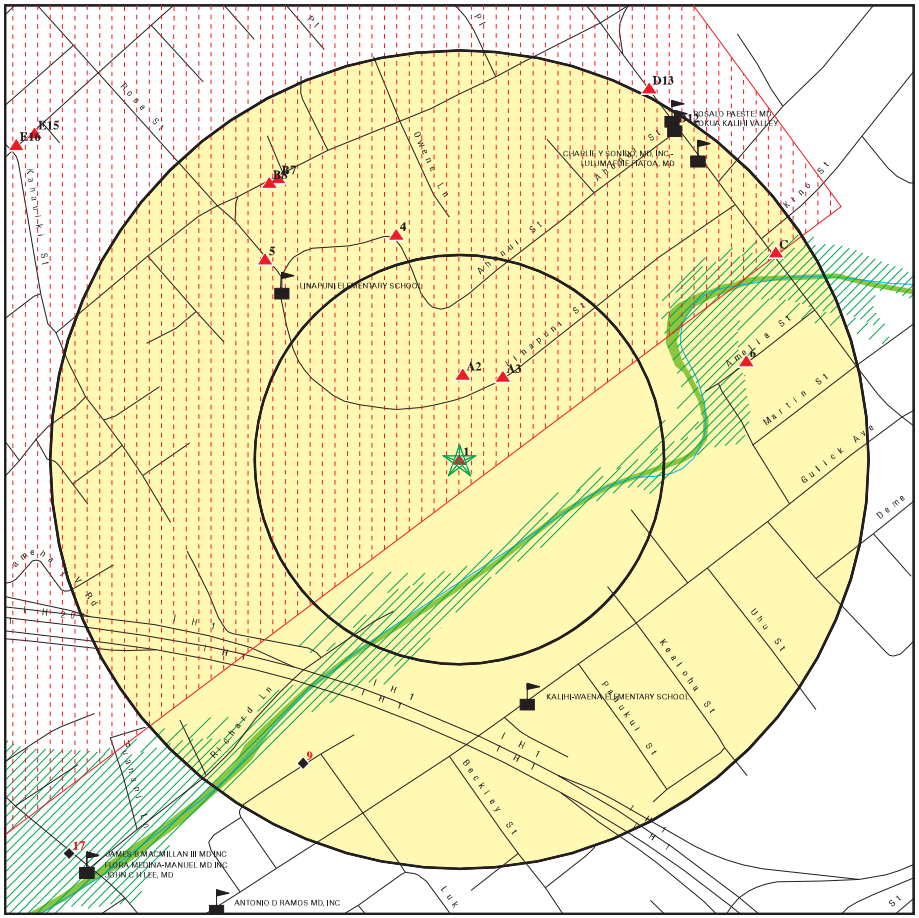
DETAIL MAP - 4237094.246S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	1	NR	NR	1
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	1	NR	NR	1
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
SHWS	1.000		1	2	3	16	NR	22
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	0	16	NR	NR	16
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250		0	2	NR	NR	NR	2

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		1	1	1	NR	NR	3
INST CONTROL	0.500		1	1	3	NR	NR	5
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		1	0	0	NR	NR	1
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		1	0	1	NR	NR	2
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	1	NR	NR	NR	1
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		1	0	0	0	NR	1
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP	1	NR	NR	NR	NR	NR	1
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP	1	NR	NR	NR	NR	NR	1
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		0	3	NR	NR	NR	3
EDR US Hist Cleaners	0.250		0	1	NR	NR	NR	1
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
RGA HWS	TP		NR	NR	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

1 **Target Property** **Actual: 79 ft.**	**KAUKONAHUA BRIDGE** **1531 LINAPUNI ST** **HONOLULU, HI 96819** Click here for full text details	**ICIS** **FINDS**	**1004464735** **N/A**
DOD **Region** **< 1/8** **1 ft.**	**FORT SHAFTER** **FORT SHAFTER (County), HI** Click here for full text details	**DOD**	**CUSA147753** **N/A**
A2 **North** **< 1/8** **0.052 mi.** **276 ft.** **Relative: Higher**	**KUHIO PARK TERRACE TOWERS** **LINAPUNI ST** **HONOLULU, HI 96819** Click here for full text details	**SHWS** **ENG CONTROLS** **INST CONTROL** **BROWNFIELDS**	**S108008570** **N/A**
A3 **NNE** **< 1/8** **0.057 mi.** **303 ft.** **Relative: Higher**	**KUHIO PARK TERRACE** **1518 LINAPUNI STREET** **HONOLULU, HI 96819** Click here for full text details	**US BROWNFIELDS**	**1014697060** **N/A**
4 **NNW** **1/8-1/4** **0.143 mi.** **754 ft.** **Relative: Higher**	**KUHIO HOMES PUBLIC HOUSING PROJECT** **1410 THRU 1529 AHONUI ST** **HONOLULU, HI 96819** Click here for full text details **RCRA NonGen / NLR** EPA Id: HID984469478	**RCRA NonGen / NLR** **FINDS**	**1000823288** **HID984469478**
5 **NW** **1/8-1/4** **0.171 mi.** **901 ft.** **Relative: Higher**	**KUHIO PARK TERRACE COMMUNITY CENTER** **1475 LINAPUNI ST** **HONOLULU, HI 96819** Click here for full text details	**SHWS** **ENG CONTROLS** **INST CONTROL**	**S115488710** **N/A**

6 **ENE** **1/8-1/4** **0.185 mi.** **979 ft.** **Relative: Higher**	**1532 AMELIA ST** **HONOLULU, HI 96819** Click here for full text details	**EDR US Hist Auto Stat**	**1015244366** **N/A**
B7 **NNW** **1/8-1/4** **0.205 mi.** **1081 ft.** **Relative: Higher**	**1419 KAMEHAMEHA IV RD** **HONOLULU, HI 96819** Click here for full text details	**EDR US Hist Auto Stat**	**1015224912** **N/A**
B8 **NW** **1/8-1/4** **0.205 mi.** **1084 ft.** **Relative: Higher**	**1415 KAMEHAMEHA IV RD** **HONOLULU, HI 96819** Click here for full text details	**EDR US Hist Auto Stat**	**1015224213** **N/A**
9 **SSW** **1/8-1/4** **0.209 mi.** **1102 ft.** **Relative: Lower**	**1130 PINKHAM ST** **HONOLULU, HI 96819** Click here for full text details	**EDR US Hist Cleaners**	**1014977237** **N/A**
C10 **ENE** **1/8-1/4** **0.228 mi.** **1205 ft.** **Relative: Higher**	**CHANG-CHOW PROPERTY, NORTH SCHOOL STREET** **2161 N SCHOOL ST** **HONOLULU, HI 96817** Click here for full text details	**SHWS**	**1006820024** **N/A**
C11 **ENE** **1/8-1/4** **0.231 mi.** **1221 ft.** **Relative: Higher**	**CHANG CHOW PROPERTIES** **2161 N SCHOOL ST** **HONOLULU, HI 96817** Click here for full text details **UST** Facility Id: 9-103133 Tank Status: Permanently Out of Use	**UST**	**U003154843** **N/A**

D12 NNE 1/8-1/4 0.242 mi. 1280 ft.
Relative: Higher

SHELL SERVICE STATION — **UST** — **U001235341** / **N/A**
2239 N SCHOOL ST
HONOLULU, HI 96819

Click here for full text details

UST
Facility Id: 9-101027
Tank Status: Permanently Out of Use

D13 NNE 1/4-1/2 0.255 mi. 1345 ft.
Relative: Higher

IMM KAM IV — **LUST, UST, Financial Assurance** — **U001235610** / **N/A**
2314 N SCHOOL ST
HONOLULU, HI 96819

Click here for full text details

LUST
Facility Id: 9-101867
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-101867
Tank Status: Currently In Use

---

14 NNE 1/4-1/2 0.307 mi. 1623 ft.
Relative: Higher

7-11 KAM IV 0166 — **LUST, UST, Financial Assurance** — **U004223404** / **N/A**
2404 N SCHOOL ST
HONOLULU, HI 96819

Click here for full text details

LUST
Facility Id: 9-101187
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-101187
Tank Status: Permanently out of Use
Tank Status: Currently in Use

E15 NW 1/4-1/2 0.327 mi. 1728 ft.
Relative: Higher

KANE'S AUTO REPAIR — **LUST, UST** — **U001235924** / **N/A**
1325 MIDDLE ST
HONOLULU, HI 96819

Click here for full text details

LUST
Facility Id: 9-102478
Facility Status: Site Cleanup Completed (NFA)

UST

KANE'S AUTO REPAIR (Continued) — **U001235924**
Facility Id: 9-102478
Tank Status: Permanently Out of Use

E16 NW 1/4-1/2 0.332 mi. 1754 ft.
Relative: Higher

BENTON'S MIDDLE STREET CHEVRON — **LUST, UST, Financial Assurance** — **1000601384** / **N/A**
1305 MIDDLE ST
HONOLULU, HI 96819

Click here for full text details

LUST
Facility Id: 9-101110
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-101110
Tank Status: Permanently Out of Use
Tank Status: Currently in Use
Tank Status: Currently In Use

---

17 SW 1/4-1/2 0.339 mi. 1789 ft.
Relative: Lower

KALIHI STREAM CHEVRON — **LUST, UST, Financial Assurance** — **1000316728** / **N/A**
2160 N. KING ST.
HONOLULU, HI 96813

Click here for full text details

LUST
Facility Id: 9-101225
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-101225
Tank Status: Permanently Out of Use
Tank Status: Currently In Use

F18 SSW 1/4-1/2 0.388 mi. 2050 ft.
Relative: Lower

FACTORY STREET LEAD — **SHWS, SPILLS, ENG CONTROLS, INST CONTROL** — **1006820199** / **N/A**
2003 N KING ST
HONOLULU, HI 96819

Click here for full text details

F19
SSW
1/4-1/2
0.388 mi.
2050 ft.

Relative: Lower

FACTORY STREET SITE — **CERC-NFRAP** — **1003879898**
2003 N. KING STREET — **HI0000049775**
HONOLULU, HI 96812

Click here for full text details

CERC-NFRAP
EPA Id: HI0000049775

20
WSW
1/4-1/2
0.402 mi.
2121 ft.

Relative: Lower

KSC SERVICE L-4210 — **LUST** — **U001235008**
2295 N KING ST — **UST** — **N/A**
HONOLULU, HI 96819

Click here for full text details

LUST
Facility Id: 9-100031
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-100031
Tank Status: Permanently Out of Use

21
SSW
1/4-1/2
0.402 mi.
2122 ft.

Relative: Lower

PACIFIC TIRE — **LUST** — **U003541731**
1955 N KING ST — **UST** — **N/A**
HONOLULU, HI 96819

Click here for full text details

LUST
Facility Id: 9-101450
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-101450
Tank Status: Permanently Out of Use

22
East
1/4-1/2
0.415 mi.
2193 ft.

Relative: Higher

KUHIO PARK TERRACE — **US BROWNFIELDS** — **1014949094**
1600 HAUPU PL — **N/A**
KALIHI, OAHU, HI 96819

Click here for full text details

23
South
1/4-1/2
0.418 mi.
2205 ft.

Relative: Lower

ISLAND MINI-MART NORTH KING — **LUST** — **U004223403**
1860 N KING ST — **UST** — **N/A**
HONOLULU, HI 96819 — **Financial Assurance**

Click here for full text details

LUST
Facility Id: 9-101186
Facility Status: Active Remediation

UST
Facility Id: 9-101186
Tank Status: Permanently Out of Use
Tank Status: Permanently out of Use
Tank Status: Currently In Use
Tank Status: Currently in Use

24
NNE
1/4-1/2
0.423 mi.
2234 ft.

Relative: Higher

C&CH BOARD OF WATER SUPPLY KALIHI CORP YD — **LUST** — **U001235058**
2442 KINI PLACE — **UST** — **N/A**
HONOLULU, HI 96819 — **Financial Assurance**

Click here for full text details

LUST
Facility Id: 9-100119
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-100119
Tank Status: Currently in Use
Tank Status: Permanently Out of Use

25
West
1/4-1/2
0.441 mi.
2328 ft.

Relative: Lower

2343 NORTH KING STREET — **SHWS** — **S115488667**
2343 N KING ST — **INST CONTROL** — **N/A**
HONOLULU, HI 96819

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26
SSW
1/4-1/2
0.442 mi.
2335 ft.

Relative: Lower

MORRIS ANGELO — **LUST** — **U003711688**
905 FACTORY ST — **UST** — **N/A**
HONOLULU, HI 96819

Click here for full text details

LUST
Facility Id: 9-103511
Facility Status: Site Cleanup Completed (NFA)

UST

MORRIS ANGELO (Continued) — **U003711688**

Facility Id: 9-103511
Tank Status: Permanently Out of Use

---

27 NW 1/4-1/2 0.443 mi. 2339 ft. Relative: Higher

FORT SHAFTER
BLDG 422 TANK 7A 7B
FORT SHAFTER, HI 96858

LUST — U001235668
UST — N/A

Click here for full text details

LUST
Facility Id: 9-102007
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-102007
Tank Status: Permanently Out of Use

G28 South 1/4-1/2 0.447 mi. 2362 ft. Relative: Lower

C&CH KALIHI FIRE STATION
1742 N KING ST
HONOLULU, HI 96819

LUST — 1006843326
UST — N/A

Click here for full text details

LUST
Facility Id: 9-100079
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-100079
Tank Status: Permanently Out of Use

G29 South 1/4-1/2 0.463 mi. 2445 ft. Relative: Lower

KALIHI CHEVRON SELF SERVE 93183
1715 N KING ST
HONOLULU, HI 96819

LUST — U001235428
UST — N/A
Financial Assurance

Click here for full text details

LUST
Facility Id: 9-101236
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-101236
Tank Status: Currently in Use

30 NW 1/4-1/2 0.463 mi. 2446 ft. Relative: Higher

U.S. ARMY ADMINISTRAIVE FACILITY
BLDG 430
FORT SHAFTER, HI 96858

LUST — U003221841
UST — N/A

Click here for full text details

LUST
Facility Id: 9-102858
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-102858
Tank Status: Permanently Out of Use

---

31 SW 1/4-1/2 0.466 mi. 2462 ft. Relative: Lower

RAKUYO KEN U.S.A.
804 GULICK AVE
HONOLULU, HI 96819

LUST — U003346378
UST — N/A

Click here for full text details

LUST
Facility Id: 9-103254
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-103254
Tank Status: Permanently Out of Use

---

32 NNW 1/4-1/2 0.471 mi. 2486 ft. Relative: Higher

FORT SHAFTER
BLDG 535/EXCHANGE MAINTENANCE SHOP
FORT SHAFTER, HI 96858

LUST — U003541792
UST — N/A

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LUST
Facility Id: 9-102920
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-102920
Tank Status: Permanently Out of Use

---

33 WSW 1/4-1/2 0.486 mi. 2564 ft. Relative: Lower

SAFETY KLEEN CORP 7 183 04
723 UMI ST
HONOLULU, HI 96819

RCRA-TSDF — 1000224443
RCRA NonGen / NLR — HIT000614008

Click here for full text details

RCRA-TSDF
EPA Id: HIT000614008

SAFETY KLEEN CORP 7 183 04 (Continued) — **1000224443**

RCRA NonGen / NLR
EPA Id: HIT000614008

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34 SSW 1/4-1/2 0.490 mi. 2588 ft. Relative: Lower

KAPALAMA INCINERATOR
757 KOKEA ST
HONOLULU, HI 96817

Database(s): RCRA-SQG, SHWS, SPILLS, INST CONTROL
EDR ID Number / EPA ID Number: 1001116173 / HIR000001008

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RCRA-SQG
EPA Id: HIR000001008

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35 SSE 1/2-1 0.525 mi. 2770 ft. Relative: Lower

FARRINGTON HIGH SCHOOL
1564 N KING ST
HONOLULU, HI 96817

Database(s): FTTS, HIST FTTS, SHWS, SPILLS
EDR ID Number / EPA ID Number: 1007277849 / N/A

Click here for full text details

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36 West 1/2-1 0.658 mi. 3472 ft. Relative: Lower

OTS KALIHI-PALAMA BUS FACILITY
811 MIDDLE ST
HONOLULU, HI 96819

Database(s): SHWS, LUST, UST, Financial Assurance
EDR ID Number / EPA ID Number: U003541805 / N/A

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LUST
Facility Id: 9-102498
Facility Id: 9-101884
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-102498
Facility Id: 9-103189
Facility Id: 9-101884
Tank Status: Currently in Use
Tank Status: Permanently Out of Use

---

37 East 1/2-1 0.684 mi. 3613 ft. Relative: Higher

KAMEHAMEHA SCOOLS
1887 MAKUAKANE ST
HONOLULU, HI 96817

Database(s): RCRA-CESQG, FINDS, SHWS, SPILLS, ENG CONTROLS, INST CONTROL
EDR ID Number / EPA ID Number: 1000202706 / HID981616469

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RCRA-CESQG
EPA Id: HID981616469

38 SSW 1/2-1 0.721 mi. 3807 ft. Relative: Lower

DILLINGHAM BOULEVARD & MOKAUEA STREET
DILLINGHAM BLVD & MOKAUEA ST
HONOLULU, HI 96819

Database(s): SHWS, ENG CONTROLS, INST CONTROL
EDR ID Number / EPA ID Number: S106816881 / N/A

Click here for full text details

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39 West 1/2-1 0.730 mi. 3856 ft. Relative: Lower

FORT SHAFTER BOLLARD
1557 PASS ST
FORT SHAFTER, HI 96858

Database(s): SHWS, SPILLS
EDR ID Number / EPA ID Number: S108008801 / N/A

Click here for full text details

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40 SW 1/2-1 0.731 mi. 3859 ft. Relative: Lower

LENAKONA DEVELOPMENT, LTD
2305 KAMEHAMEHA HWY
HONOLULU, HI 96800

Database(s): SHWS, LUST, UST
EDR ID Number / EPA ID Number: U001237397 / N/A

Click here for full text details

LUST
Facility Id: 9-102588
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-102588
Tank Status: Permanently Out of Use

---

41 WSW 1/2-1 0.737 mi. 3890 ft. Relative: Lower

HAWAII MEAT COMPANY LTD
711 MIDDLE ST
HONOLULU, HI 96819

Database(s): SHWS, SPILLS, ENG CONTROLS, INST CONTROL
EDR ID Number / EPA ID Number: 1006820927 / N/A

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42 NE 1/2-1 0.775 mi. 4092 ft. Relative: Higher

2147 AOAO STREET
2147 AOAO ST
HONOLULU, HI 96819

Database(s): SHWS, SPILLS
EDR ID Number / EPA ID Number: S106815333 / N/A

Click here for full text details

43 WSW 1/2-1 0.787 mi. 4157 ft. — Relative: Lower

HAWAII DAIRY HOLDINGS, INC DBA FOREMOST DAIRIES
2277 KAMEHAMEHA HWY
HONOLULU, HI 96819

Database(s): SHWS, LUST, UST, VCP, Financial Assurance
EDR ID Number: 1000934769
EPA ID Number: N/A

Click here for full text details

LUST
Facility Id: 9-100210
Facility Status: Site Cleanup Completed (NFA)

UST
Facility Id: 9-100210
Tank Status: Permanently Out of Use

---

44 WSW 1/2-1 0.788 mi. 4160 ft. — Relative: Lower

YEE HOP PROPERTY
621 MIDDLE ST
HONOLULU, HI 96819

Database(s): SHWS, SPILLS
EDR ID Number: 1006819624
EPA ID Number: N/A

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45 WSW 1/2-1 0.823 mi. 4343 ft. — Relative: Lower

611 MIDDLE STREET WAREHOUSE
611 MIDDLE ST
HONOLULU, HI 96819

Database(s): SHWS, SPILLS, ENG CONTROLS, INST CONTROL
EDR ID Number: S106815670
EPA ID Number: N/A

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46 SSE 1/2-1 0.869 mi. 4589 ft. — Relative: Lower

TAKAMIYA PROPERTY
850 MOOWAA ST
HONOLULU, HI 96817

Database(s): SHWS, SPILLS
EDR ID Number: S106820561
EPA ID Number: N/A

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47 SSE 1/2-1 0.880 mi. 4647 ft. — Relative: Lower

ROSS TRUSTS
819 MOOWAA ST
HONOLULU, HI 96817

Database(s): SHWS, VCP
EDR ID Number: S103290154
EPA ID Number: N/A

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48 SSE 1/2-1 0.951 mi. 5021 ft. — Relative: Lower

GTE-HAWAIIAN TEL EMPLOYEES FEDERAL CREDIT UNION (HTEFCU)
1138 N KING ST
HONOLULU, HI 96817

Database(s): SHWS, ENG CONTROLS, INST CONTROL
EDR ID Number: 1006820922
EPA ID Number: N/A

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49 SSW 1/2-1 0.959 mi. 5065 ft. — Relative: Lower

PACIFIC POULTRY
1804 KANAKANUI ST
HONOLULU, HI 96819

Database(s): SHWS, SPILLS
EDR ID Number: 1006819073
EPA ID Number: N/A

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50 SW 1/2-1 0.975 mi. 5149 ft. — Relative: Lower

YUE-FUNG KWAN CONSTRUCTION SITE
2004-2008 REPUBLICAN ST
HONOLULU, HI 96819

Database(s): SHWS, SPILLS
EDR ID Number: S110061865
EPA ID Number: N/A

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GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
HI	AIRS	List of Permitted Facilities	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	BROWNFIELDS	Brownfields Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	CDL	Clandestine Drug Lab Listing	Department of Health	08/04/2010	09/10/2010	10/22/2010
HI	DRYCLEANERS	Permitted Drycleaner Facility Listing	Department of Health	12/31/2014	01/09/2015	02/11/2015
HI	ENG CONTROLS	Engineering Control Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	Financial Assurance	Financial Assurance Information Listing	Department of Health	12/01/2014	12/19/2014	01/28/2015
HI	INST CONTROL	Sites with Institutional Controls	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	LUST	Leaking Underground Storage Tank Database	Department of Health	12/16/2014	12/19/2014	01/28/2015
HI	RGA HWS	Recovered Government Archive State Hazardous Waste Facilitie	Department of Health		07/01/2013	01/08/2014
HI	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Health		07/01/2013	01/17/2014
HI	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	Department of Health		07/01/2013	01/03/2014
HI	SHWS	Sites List	Department of Health	12/02/2014	12/22/2014	01/27/2015
HI	SPILLS	Release Notifications	Department of Health	12/02/2014	12/22/2014	01/28/2015
HI	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	03/10/2012	01/03/2013	02/11/2013
HI	SWF/LF	Permitted Landfills in the State of Hawaii	Department of Health	09/17/2012	04/03/2013	05/10/2013
HI	UIC	Underground Injection Wells Listing	Department of Health	02/07/2013	02/12/2013	04/09/2013
HI	UST	Underground Storage Tank Database	Department of Health	12/18/2014	12/19/2014	01/28/2015
HI	VCP	Voluntary Response Program Sites	Department of Health	12/02/2014	12/22/2014	01/27/2015
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	04/22/2013	03/03/2015	03/09/2015
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2011	02/26/2013	04/19/2013
US	CERCLIS	Comprehensive Environmental Response, Compensation, and Liab	EPA	10/25/2013	11/11/2013	02/13/2014
US	CERCLIS-NFRAP	CERCLIS No Further Remedial Action Planned	EPA	10/25/2013	11/11/2013	02/13/2014
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	07/01/2014	09/10/2014	10/20/2014
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	01/23/2015	02/13/2015	03/09/2015
US	CORRACTS	Corrective Action Report	EPA	12/09/2014	12/29/2014	01/29/2015
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DELISTED NPL	National Priority List Deletions	EPA	12/16/2014	01/08/2015	02/09/2015
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	07/31/2012	08/07/2012	09/18/2012
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EDR US Hist Auto Stat	EDR Exclusive Historic Gas Stations	EDR, Inc.			
US	EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	09/29/2014	09/30/2014	11/06/2014
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	07/21/2014	10/07/2014	10/20/2014
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
US	FEMA UST	Underground Storage Tank Listing	FEMA	01/01/2010	02/16/2010	04/12/2010
US	FINDS	Facility Index System/Facility Registry System	EPA	08/16/2014	09/10/2014	10/20/2014
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	06/06/2014	09/10/2014	09/18/2014
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	12/29/2014	12/30/2014	03/09/2015
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	01/23/2015	02/06/2015	03/09/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	02/01/2013	05/01/2013	11/01/2013

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	01/30/2015	02/05/2015	03/09/2015
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/10/2015	03/13/2015
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	01/28/2015	01/30/2015	03/13/2015
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	01/08/2015	01/08/2015	02/09/2015
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2005	12/08/2006	01/11/2007
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	02/01/2013	05/01/2013	01/27/2014
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	02/03/2015	02/12/2015	03/13/2015
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	09/30/2014	03/03/2015	03/13/2015
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	01/30/2015	02/05/2015	03/13/2015
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	01/23/2015	02/13/2015	03/13/2015
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	01/29/2015	01/30/2015	03/13/2015
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	12/14/2014	02/13/2015	03/13/2015
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	09/29/2014	10/01/2014	11/06/2014
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	11/25/2014	11/26/2014	01/29/2015
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	02/18/2014	03/18/2014	04/24/2014
US	LUCIS	Land Use Control Information System	Department of the Navy	12/03/2014	12/12/2014	01/29/2015
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	12/29/2014	01/08/2015	01/29/2015
US	NPL	National Priority List	EPA	12/16/2014	01/08/2015	02/09/2015
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	07/01/2014	10/15/2014	11/17/2014
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	02/01/2011	10/19/2011	01/10/2012
US	PRP	Potentially Responsible Parties	EPA	10/25/2013	10/17/2014	10/20/2014
US	Proposed NPL	Proposed National Priority List Sites	EPA	12/16/2014	01/08/2015	02/09/2015
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	10/07/2014	10/08/2014	10/20/2014
US	RCRA NonGen / NLR	RCRA - Non Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	12/09/2014	12/29/2014	01/29/2015
US	RMP	Risk Management Plans	Environmental Protection Agency	08/01/2014	08/12/2014	11/06/2014
US	ROD	Records Of Decision	EPA	11/25/2013	12/12/2013	02/24/2014
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	03/07/2011	03/09/2011	05/02/2011
US	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2011	07/31/2013	09/13/2013
US	TSCA	Toxic Substances Control Act	EPA	12/31/2012	01/15/2015	01/29/2015
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	09/14/2010	10/07/2011	03/01/2012
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/16/2014	10/31/2014	11/17/2014
US	US AIRS MINOR	Air Facility System Data	EPA	10/16/2014	10/31/2014	11/17/2014

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	12/22/2014	12/22/2014	01/29/2015
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	11/19/2014	11/21/2014	01/29/2015
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	11/10/2014	12/01/2014	02/09/2015
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	09/18/2014	09/19/2014	10/20/2014
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	12/30/2014	12/31/2014	01/29/2015
US	Oil/Gas Pipelines	GeoData Digital Line Graphs from 1:100,000-Scale Maps	USGS			
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
US	USGS 7.5' Topographic Map	Scanned Digital USGS 7.5' Topographic Map (DRG)	USGS			

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

KUHIO PARK TERRACE HIGHRISE
1531 LINAPUNI ST.
HONOLULU, HI 96819

TARGET PROPERTY COORDINATES

Latitude (North):	21.3377 - 21˚ 20' 15.72''
Longitude (West):	157.8763 - 157˚ 52' 34.68''
Universal Tranverse Mercator:	Zone 4
UTM X (Meters):	616527.5
UTM Y (Meters):	2359799.5
Elevation:	79 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	21157-C8 PEARL HARBOR, HI
Most Recent Revision:	Not reported
East Map:	21157-C7 HONOLULU, HI
Most Recent Revision:	Not reported

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

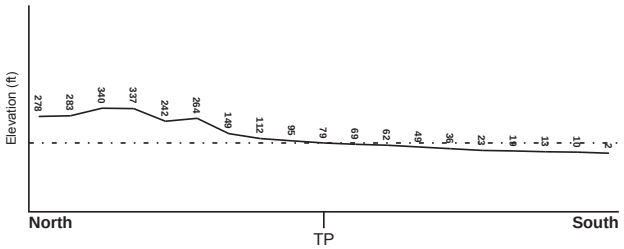
TOPOGRAPHIC INFORMATION

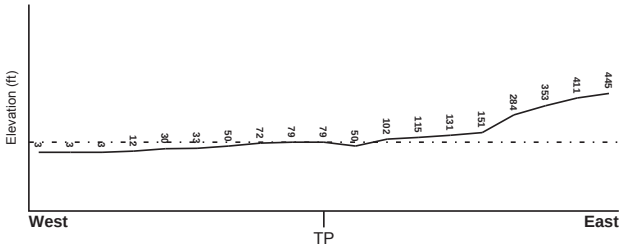
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SSW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 79 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
HONOLULU, HI	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 15003C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
NOT AVAILABLE	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

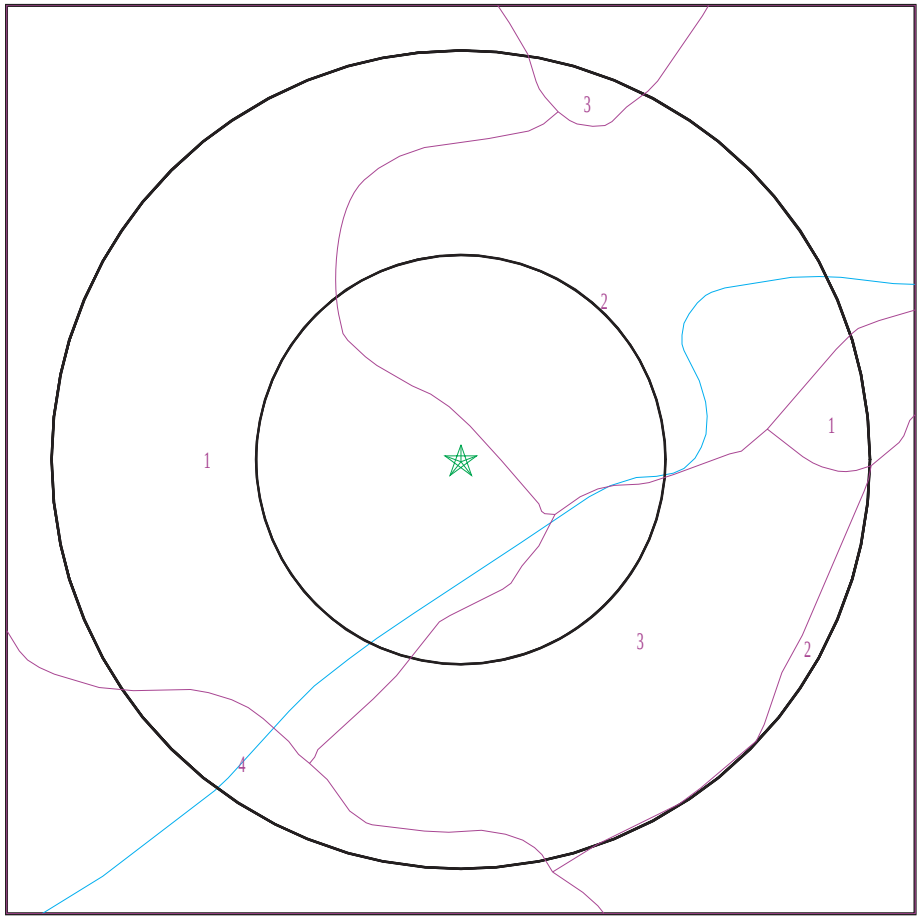
Era: -
System: -
Series: -
Code: N/A *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: -

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4237094.246s



★ Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME: Kuhio Park Terrace Highrise ADDRESS: 1531 Linapuni St. Honolulu HI 96819 LAT/LONG: 21.3377 / 157.8763	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.246s DATE: March 17, 2015 5:49 pm

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DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Makiki

Soil Surface Texture: stony clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	20 inches	stony clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	MH-A (proposed)	Max: 42 Min: 4.23	Max: 5.5 Min: 5.1
2	20 inches	29 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	MH-A (proposed)	Max: 14.11 Min: 4.23	Max: 6 Min: 5.6
3	29 inches	59 inches	paragravelly clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.14 Min: 14.11	Max: 6 Min: 5.6

Soil Map ID: 2

Soil Component Name: Kaena

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Poorly drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 107 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4.23 Min: 0.42	Max: 7.3 Min: 6.6
2	9 inches	37 inches	stony clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 7.3 Min: 6.6
3	37 inches	53 inches	stony clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 7.3 Min: 6.6

Soil Map ID: 3

Soil Component Name: Ewa

Soil Surface Texture: silty clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	18 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6
2	18 inches	59 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14 Min: 4.23	Max: 7.3 Min: 6.6

Soil Map ID: 4

Soil Component Name: Honouliuli

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	14 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4 Min: 0.42	Max: 7.3 Min: 6.6
2	14 inches	68 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.01	Max: 7.8 Min: 6.6

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A2	USGS40000269908	1/4 - 1/2 Mile SSW
B4	USGS40000269939	1/4 - 1/2 Mile WSW
C6	USGS40000269910	1/4 - 1/2 Mile SW
E11	USGS40000269889	1/2 - 1 Mile SSW
E14	USGS40000269880	1/2 - 1 Mile SSW
F15	USGS40000269900	1/2 - 1 Mile SE
G17	USGS40000269919	1/2 - 1 Mile ESE
H19	USGS40000269945	1/2 - 1 Mile West
F21	USGS40000269894	1/2 - 1 Mile SE
G24	USGS40000269923	1/2 - 1 Mile ESE
I25	USGS40000269913	1/2 - 1 Mile WSW

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
J26	USGS40000269998	1/2 - 1 Mile WNW
J27	USGS40000269999	1/2 - 1 Mile WNW
G31	USGS40000269937	1/2 - 1 Mile ESE
K32	USGS40000269977	1/2 - 1 Mile WNW
J35	USGS40000270000	1/2 - 1 Mile WNW
L39	USGS40000269940	1/2 - 1 Mile WSW
M41	USGS40000269893	1/2 - 1 Mile SE
N51	USGS40000269867	1/2 - 1 Mile SSE
N52	USGS40000269866	1/2 - 1 Mile SSE
N53	USGS40000269865	1/2 - 1 Mile SSE
N54	USGS40000269868	1/2 - 1 Mile SSE
N55	USGS40000269871	1/2 - 1 Mile SSE
N56	USGS40000269870	1/2 - 1 Mile SSE
N57	USGS40000269869	1/2 - 1 Mile SSE
N58	USGS40000269864	1/2 - 1 Mile SSE
59	USGS40000269904	1/2 - 1 Mile WSW
N61	USGS40000269855	1/2 - 1 Mile SSE
O64	USGS40000269881	1/2 - 1 Mile SW
Q65	USGS40000269899	1/2 - 1 Mile SE
66	USGS40000269997	1/2 - 1 Mile WNW
Q70	USGS40000269888	1/2 - 1 Mile SE
S72	USGS40000269856	1/2 - 1 Mile SW
S73	USGS40000269857	1/2 - 1 Mile SW
S74	USGS40000269858	1/2 - 1 Mile SW
T75	USGS40000270021	1/2 - 1 Mile NW
R77	USGS40000269834	1/2 - 1 Mile SSW
78	USGS40000269830	1/2 - 1 Mile SSW
U81	USGS40000269854	1/2 - 1 Mile SE
U82	USGS40000269863	1/2 - 1 Mile SE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
D9	HI0000331	1/4 - 1/2 Mile NNE

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

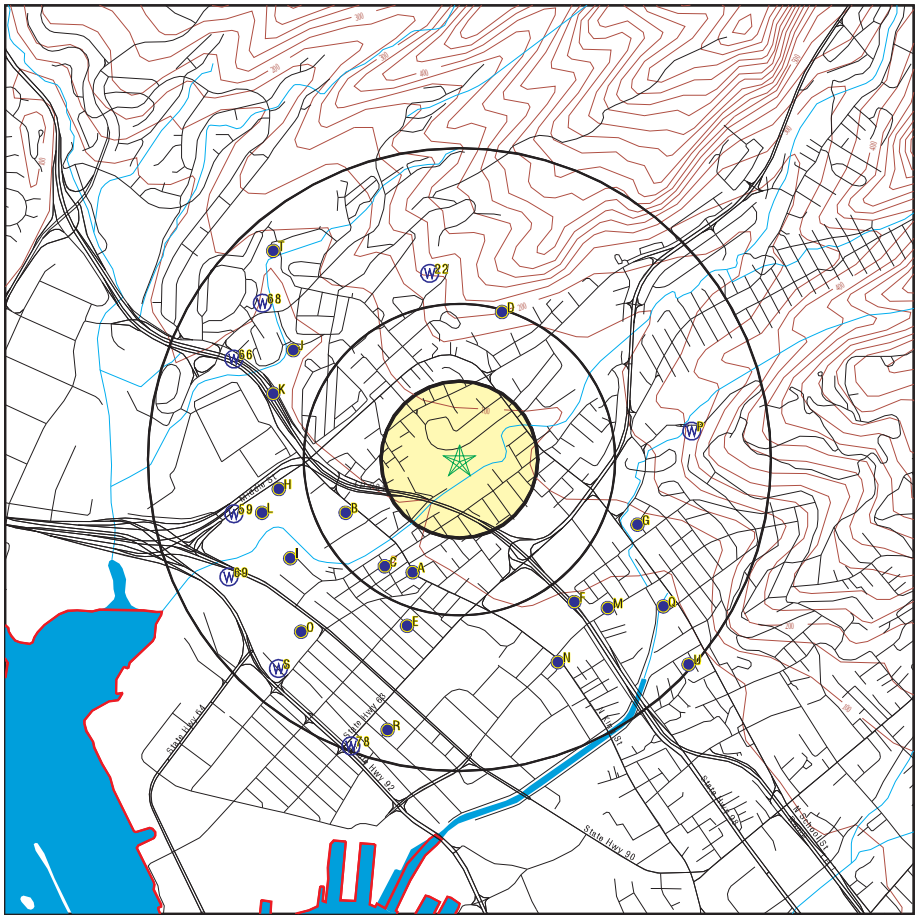
MAP ID	WELL ID	LOCATION FROM TP
A1	HI8000000002496	1/4 - 1/2 Mile SSW
B3	HI8000000002540	1/4 - 1/2 Mile WSW
C5	HI8000000002501	1/4 - 1/2 Mile SW
D7	HI8000000002622	1/4 - 1/2 Mile NNE
D8	HI8000000002625	1/4 - 1/2 Mile NNE
E10	HI8000000002471	1/2 - 1 Mile SSW
E12	HI8000000002461	1/2 - 1 Mile SSW
F13	HI8000000002484	1/2 - 1 Mile SE

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
G16	HI8000000002519	1/2 - 1 Mile ESE
H18	HI8000000002547	1/2 - 1 Mile West
F20	HI8000000002477	1/2 - 1 Mile SE
22	HI8000000002634	1/2 - 1 Mile North
G23	HI8000000002534	1/2 - 1 Mile ESE
I28	HI8000000002502	1/2 - 1 Mile WSW
J29	HI8000000002604	1/2 - 1 Mile WNW
G30	HI8000000002537	1/2 - 1 Mile ESE
K33	HI8000000002591	1/2 - 1 Mile WNW
J34	HI8000000002608	1/2 - 1 Mile NW
J36	HI8000000002603	1/2 - 1 Mile WNW
J37	HI8000000002605	1/2 - 1 Mile WNW
L38	HI8000000002539	1/2 - 1 Mile WSW
M40	HI8000000002478	1/2 - 1 Mile SE
N42	HI8000000002441	1/2 - 1 Mile SSE
N43	HI8000000002442	1/2 - 1 Mile SSE
N44	HI8000000002439	1/2 - 1 Mile SSE
N45	HI8000000002440	1/2 - 1 Mile SSE
N46	HI8000000002443	1/2 - 1 Mile SSE
N47	HI8000000002446	1/2 - 1 Mile SSE
N48	HI8000000002447	1/2 - 1 Mile SSE
N49	HI8000000002444	1/2 - 1 Mile SSE
N50	HI8000000002445	1/2 - 1 Mile SSE
O60	HI8000000002460	1/2 - 1 Mile SW
P62	HI8000000002565	1/2 - 1 Mile East
P63	HI8000000002579	1/2 - 1 Mile East
Q67	HI8000000002481	1/2 - 1 Mile SE
68	HI8000000002629	1/2 - 1 Mile NW
69	HI8000000002494	1/2 - 1 Mile WSW
R71	HI8000000002412	1/2 - 1 Mile SSW
T76	HI8000000002636	1/2 - 1 Mile NW
U79	HI8000000002435	1/2 - 1 Mile SE
U80	HI8000000002450	1/2 - 1 Mile SE

PHYSICAL SETTING SOURCE MAP - 4237094.246s



County Boundary
Major Roads
Contour Lines
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons

Groundwater Flow Direction
Indeterminate Groundwater Flow at Location
Groundwater Flow Varies at Location

SITE NAME: Kuhio Park Terrace Highrise ADDRESS: 1531 Linapuni St. Honolulu HI 96819 LAT/LONG: 21.3377 / 157.8763	CLIENT: Helber , Hastert, and Fee Planners CONTACT: Aaron Mann INQUIRY #: 4237094.246s DATE: March 17, 2015 5:49 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
A1 **SSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002496**
A2 **SSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269908**
B3 **WSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002540**
B4 **WSW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269939**
C5 **SW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002501**
C6 **SW** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269910**
D7 **NNE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002622**
D8 **NNE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002625**
D9 **NNE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FRDS PWS**	**HI0000331**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
E10 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002471**
E11 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269889**
E12 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002461**
F13 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002484**
E14 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269880**
F15 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269900**
G16 **ESE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002519**
G17 **ESE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269919**
H18 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002547**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
H19 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269945**
F20 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002477**
F21 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269894**
22 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002634**
G23 **ESE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002534**
G24 **ESE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269923**
I25 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269913**
J26 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269998**
J27 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269999**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
I28 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002502**
J29 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002604**
G30 **ESE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002537**
G31 **ESE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000269937**
K32 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269977**
K33 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002591**
J34 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002608**
J35 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270000**
J36 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002603**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
J37 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002605**
L38 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002539**
L39 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269940**
M40 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002478**
M41 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269893**
N42 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002441**
N43 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002442**
N44 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002439**
N45 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002440**

Map ID Direction Distance Elevation		Database	EDR ID Number
N46 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002443**
N47 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002446**
N48 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002447**
N49 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002444**
N50 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002445**
N51 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269867**
N52 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269866**
N53 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269865**
N54 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269868**

Map ID Direction Distance Elevation		Database	EDR ID Number
N55 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269871**
N56 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269870**
N57 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269869**
N58 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269864**
59 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269904**
O60 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002460**
N61 **SSE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269855**
P62 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002565**
P63 **East** **1/2 - 1 Mile** **Higher**	Click here for full text details	**HI WELLS**	**HI8000000002579**

Map ID Direction Distance Elevation		Database	EDR ID Number
O64 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269881**
Q65 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269899**
66 **WNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269997**
Q67 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002481**
68 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002629**
69 **WSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002494**
Q70 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269888**
R71 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002412**
S72 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269856**

Map ID Direction Distance Elevation		Database	EDR ID Number
S73 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269857**
S74 **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269858**
T75 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000270021**
T76 **NW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002636**
R77 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269834**
78 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269830**
U79 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002435**
U80 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**HI WELLS**	**HI8000000002450**
U81 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269854**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
U82 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000269863**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for HONOLULU County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 96819

Number of sites tested: 4

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	-0.475 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	0.050 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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EXHIBIT C

Section 106 Consultation &

Architectural Inventory Survey Information

DAVID Y. IGE
GOVERNOR OF HAWAII

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

KEKOA KALUHIWA
FIRST DEPUTY

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AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555

December 11, 2015

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
P.O. Box 17907
Honolulu, HI 96817

LOG: 2015.02939, 2015.03574
DOC: 1511JLP37
Architecture, Archaeology
History and Culture

SUBJECT: **Chapter 6E-8 and National Historic Preservation Act Section (NHPA) Section 106 Consultation – Department of Housing and Urban Development (HUD) Repair and Rehabilitation Project Department of Human Services, Hawai‘i Public Housing Authority (HPHA) Kuhio Park Terrace High Rise Rehabilitation Project – 1485, 1531 and 1545 Linapuni Street Honolulu Ahupua‘a, Kona District, Island of O‘ahu TMK: (1) 1-3-039:007, 009 and 010**

Thank you for your initial submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services (DHS), Hawaii Public Housing Authority (HPHA) consultation with SHPD in accordance with 36 CFR 800.3 and Hawaii Revised Statutes (HRS), Chapter 6E. We received your another submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience.

The submittal indicates that the HPHA is requesting the State Historic Preservation Officer's (SHPO) concurrence with a determination of "no effect" for the proposed HUD repair and rehabilitation improvement projects involving 43 existing public housing developments located throughout the State over the next five (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 consultation on their behalf.

This letter addresses Kuhio Park Terrace High Rises Rehabilitation Project, 1485 Linapuni Street, 1531 Linapuni Street and 1545 Linapuni Street. The HPHA has identified the area of potential effects (APE) as the 18.36 acre area parcel owned by the State (HPHA) which is identified as TMK: (1) 1-3-039:007, 009 and 010. DHS/HPHA have indicated at this stage of the planning process, they are unclear whether the subject 18.36-acre project area will require any ground disturbances.

Our records indicate that no archaeological inventory survey has been conducted within the subject parcel and that no historic properties have been identified. However, based on nearby studies potential exists to encounter subsurface traditional Hawaiian and/or historic properties within the subject parcel.

The SHPD has reviewed the undertaking at 1485 Linapuni Street, 1531 Linapuni Street and 1545 Linapuni Street, and the SHPO's determination is **no adverse effect** pursuant to NHPA Section 106 and **no historic properties affected** pursuant to HRS §6E-8 within the APE **provided the following conditions are met:**

- If ground disturbing activity is anticipated, DHS must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation;
- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;
- Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;

- Submit a TMK map showing the full extent of the project area within the affected parcel/s;
- Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Summary of land use history, such as previous intensive cultivation, grubbing or grading;
- Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions regarding archaeological resources or concerns please contact Susan Lebo at (808) 692-8019 or at Susan.A.Lebo@hawaii.gov. For any history and cultural concerns please contact Kaʻāhiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov. Please contact Jessica Puff at Jessica.L.Puff@hawaii.gov or (808) 692-8023 for any questions regarding architectural concerns or this letter.

Sincerely,

Susan A. Lebo

Signed for

Alan A. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

Appendix A
Historic Property Evaluation Update
for
Kuhio Park Terrace – Honolulu

Prepared by
Mason Architects, Inc
119 Merchant Street, Suite 501
Honolulu, HI 96813

for
HHF Planners
and the
Housing and Community Development Corporation of Hawaii

June 2015

Appendix A – Kuhio Park Terrace High-Rise Historic Evaluation Update and Low-rise Initial Historic Evaluation 2015.

Introduction

The following National Register of Historic Places (NRHP) evaluation of Kuhio Park Terrace (KPT) was undertaken by Mason Architects, Inc. (MAI) in 2015, at the request of HHF Planners on behalf of the Hawaii Public Housing Authority (HPHA), a Hawaii State agency. It serves as a follow-up to the report written by MAI in 2006. In the years since the previous report was written, Kuhio Park Terrace has reached the fifty-year historic threshold, and thus needs to be re-evaluated for NRHP significance. In keeping with the intent of the original 2006 report, the contents of this appendix provide historic eligibility evaluations of individual buildings. Recommendations are also included for potential historic districts, in accordance with the State Historic Preservation Division's (SHPD) guidelines for inventory surveys. National Register nomination-level research into possible historic districts is not within the scope of this document.

Kuhio Park Terrace Background

Kuhio Park Terrace was the State's first and last attempt to house low-income families in publicly-owned high-rise buildings. The project included both high-rise and low-rise buildings in a campus-like setting. The complex originally featured large grassy areas between buildings and numerous community amenities including a pool with bathhouse, park building, basketball and volleyball courts, a softball field, and a community building. An elementary school was also opened the same year the project was completed, adjacent to the low-rise buildings and across the street from high-rise building A.

The low-rise buildings that are a part of the Kuhio Park Terrace complex originally made up approximately 14% of the total unit count for the complex, containing 42 residential four-bedroom units. Currently, there are 41 low-rise buildings total, with 37 in use as residences, while two duplex buildings with four total units have been converted to office and storage space, and one of the two single-family buildings has been demolished. They were designed and built at the same time as the high rise buildings, and community buildings and features, as part of an overall campus. All of the complex's four bedroom units are located in these low-rise buildings. The high-rise was intended to house smaller families, with larger families located in the low-rise four-bedroom units, which have yards of their own. This compromise may have developed out of community input that questioned the ability of mothers to supervise children playing from high floors.[1]

Originally, the high-rise and low-rise buildings that make up the Kuhio Park Terrace complex were a part of a single property, owned and managed by HPHA. More recently, the buildings were divided into two Asset Management Properties (AMP), with Linapuni Street dividing the two AMPs. This means that, though the one single-family unit is stylistically part of the low-rise group (AMP 40), it is actually included with the high-rise buildings in AMP 52 due to its location. Because of this separation of AMPs, HPHA's building counts differ slightly than those used in this report. HPHA's AMP 40 includes

[1] Fung Associates, Inc. *Architectural Inventory Survey Hawaii Public Housing Authority (Federal Projects)*. May 2015.

40 low-rise units, in 12 duplex and row-house buildings. AMP 52 includes the 1 single-family 4-bedroom unit, and all of the high-rise units, (572 units total, with 347 under HPHA and the remainder used as rentals through Michaels Development Company).

Historic Context

See historic context in the 2006 report for overall context.

Table 1: Summary of NR Eligibility Evaluation

Building Type	Building	Year Built	National Register Significance	National Register Integrity	National Register Eligible
High-Rises	A and B	1965	Yes	Yes	Yes
Low-Rises	Row Houses C1-C8	1965	Yes	Yes	Yes
Low-Rises	Duplexes D1-D4	1965	Yes	Yes (D2-D4)	Yes (D2-D4)
Low-Rises	Single-Family E2	1965	Yes	Yes	Yes
Community Buildings	Community Building Family Education Resource Center	1965, 1976, unknown, 2003	1965 Yes, 1976 No Unknown No 2003 No	Yes Yes Yes Yes	1965 Yes, 1976 No Unknown No 2003 No

Description

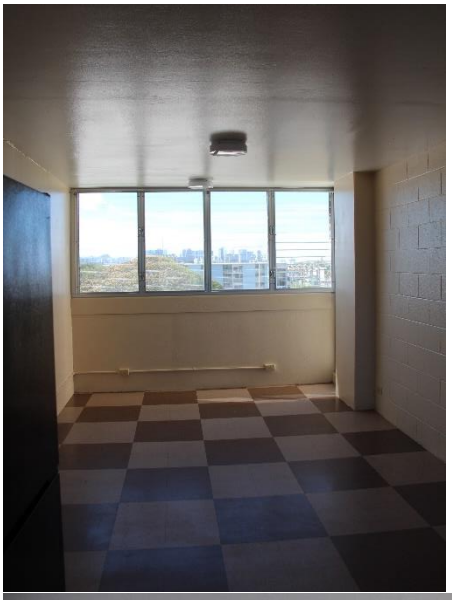
High-Rise Buildings:

The general description for the high-rise buildings remains similar to the 2006 report.

The following changes have been made to the building and apartments since the 2006 report was written:

- the original concrete masonry unit screens that sheltered the stairwells and central elevator lobbies have been removed and replaced with decorative metal railings;
- the original flat concrete entry awning has been replaced with an angled metal awning;
- the lanais on the opposite side of the buildings from the entry walkways have been enclosed as interior space in each apartment; and
- the apartments' kitchen windows have been replaced and their kitchen cabinets and counters have been renovated.

See the following page for the one-page historic assessment and photographs.



Project	Kuhio Park Terrace High-Rise Buildings
Date	1965
Significance	Kuhio Park Terrace is eligible for the NRHP under Criterion A as Hawaii's largest federally aided public housing complex, with 614 units, and illustrates the shift towards high-density high-rise projects, or "warehousing." KPT consisted of a mix of high-rise and low-rise housing with community amenities in a campus-like setting.
Character Defining Features	16-story high-rise buildings separated by large open grassy areas. 3-arm Radial plan, full length exterior walkways at apartment entrances side. Peg-board transoms above interior doors, tub/showers, jalousie windows.
Alterations	Concrete screens at stairwells and elevator lobbies removed, rear lanais enclosed, kitchen windows changed.
Integrity	Buildings have some alterations. Housing retains integrity of location, setting, feeling, and association. There have been changes to design, materials and workmanship.
National Register Eligibility	**Eligible**

Low-Rise Buildings

There are thirteen low-rise buildings including eight that are two-story row houses with four units, designated buildings C1 through C8, four that are one-story duplexes, designated D1-D4, and one that is one-story with only a single unit, E2. Originally there were two single-unit buildings, E1 and E2, but one was demolished sometime after 2010. The four bedroom units were laid out in six different floor plans in the original drawings; these were designated types 4-A though 4-F. The row houses include floor plan types 4-A through 4-D, while the duplexes include 4-E and 4F, and the single units appear to have been 4-E as well.

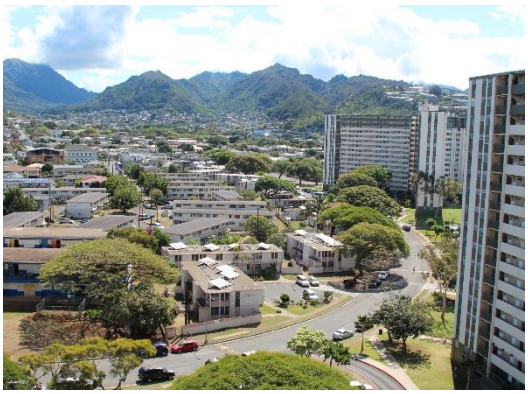
Row-House Buildings

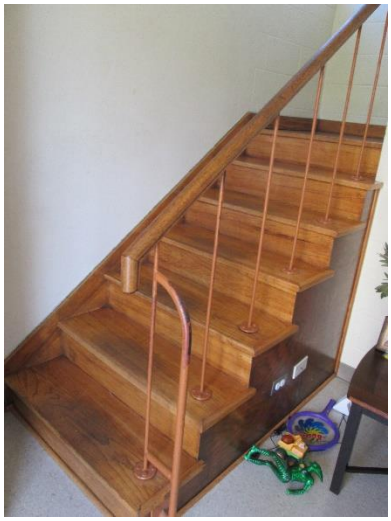
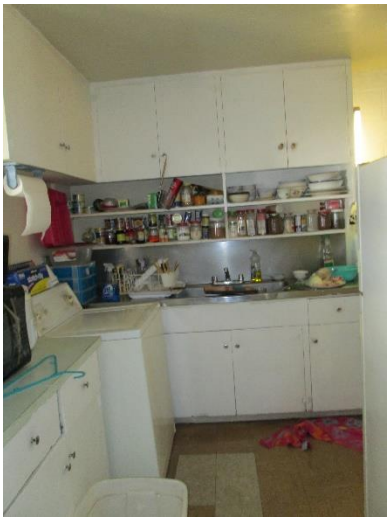
The two-story row-house buildings are rectangular in plan, with two protruding sections on the opposite side of the building from the units' entrances. Along the entry side of the buildings, there are concrete lanais, and at the back is an open, shared yard, typically with a free-standing concrete brick wall used to affix clotheslines from the back wall of the building. They have concrete slab foundations with concrete footings, walls that are a mix of cast concrete and concrete masonry units (CMU), and flat roofs that have wide, overhanging eaves. The four units at these buildings are divided by a vertical concrete wall at the open front lanais. Windows are mostly jalousie, with aluminum double-hung windows near the first floor front entrances. The exterior doors are flush wood and some have historic screen doors.

Each building includes one of each of the following unit types: 4-A, 4-B, 4-C and 4-D from left to right, respectively, with the center dividing wall between units 4B and 4C. Each building half is a mirror image of the other half (units 4-A and 4-B together are a mirror image of 4-C and 4-D together). Additionally, the two units at each half mirror one another, so, units 4-A and 4-B are mirror images, and units 4-C and 4-D are also mirror images. In all units, the living room, kitchen, dining area and half-bath are on the first floor of the units, while bedrooms and the main bathroom are upstairs.

Much of the historic interior fabric remains at these units, including kitchen cabinets and counters, bathroom fixtures and fittings such as shower/tubs and sinks, as well as wood staircases with metal and wood balustrades.

See the following page for the one-page historic assessment and photographs.



Project	Kuhio Park Terrace Row-House Buildings
Date	1965
Significance	Kuhio Park Terrace is eligible for the NRHP under Criterion A as Hawaii's largest federally aided public housing complex, with 614 units, and illustrates the shift towards high-density high-rise projects, or "warehousing." KPT consisted of a mix of high-rise and low-rise housing with community amenities in a campus-like setting.
Character Defining Features	Low-rise buildings separated by open grassy areas. Flat roofs, wide eaves, concrete wing walls at building corners, and as exterior dividers between units. Most set at 45 degree angle to street, and perpendicular to each other with shared yards. Glass jalousie windows, metal countertops and wood cabinets, wood staircases with wood and metal balustrades
Alterations	Some screen doors removed, two buildings re-roofed.
Integrity	Buildings are largely unaltered. Housing retains integrity of location, setting, design, feeling, and association. There have been minor changes to materials and workmanship, primarily at the interior.
National Register Eligibility	**Eligible**

Duplex Buildings

The four single-story, two-unit duplex buildings look similar to the four-unit buildings in plan. Their elevations are also somewhat similar to the four-unit buildings, albeit at only one story. Some still have an open lanai at the rear, and originally all had an enclosed area off of the lanai that was used for drying laundry, with a free-standing concrete brick wall used to affix the clothesline. Windows and doors are the same as well. The two units in each building are mirror images of one another with the living/dining rooms at the shared wall, and bedrooms arranged along the outer walls.

The interiors at three of these buildings (D2-D4) remain relatively intact, with remaining kitchen and bathroom elements including wood kitchen cabinets with stainless steel counters and integrated sinks, and tile shower/tubs in the bathrooms. Two buildings (D3 and D4), containing a total of four units remain in use as residences, while two other buildings (D1 and D2) have been converted for office and storage use. One unit in building D2 has become the management office for the low-rise buildings of Kuhio Park Terrace and Kuhio Homes, with minimal interior alterations, while the other unit in the same building has been converted for storage with minor alterations including removal of kitchen counters and cabinet doors. The two units in building D1 have been converted for use as storage, and have been more significantly altered, with removal of several interior walls at one of the units. Two of the duplex buildings, D2 and D3, have had the rear lanais enclosed as part of the interior space.

See the following pages for site plan and one-page historic assessment and photographs.

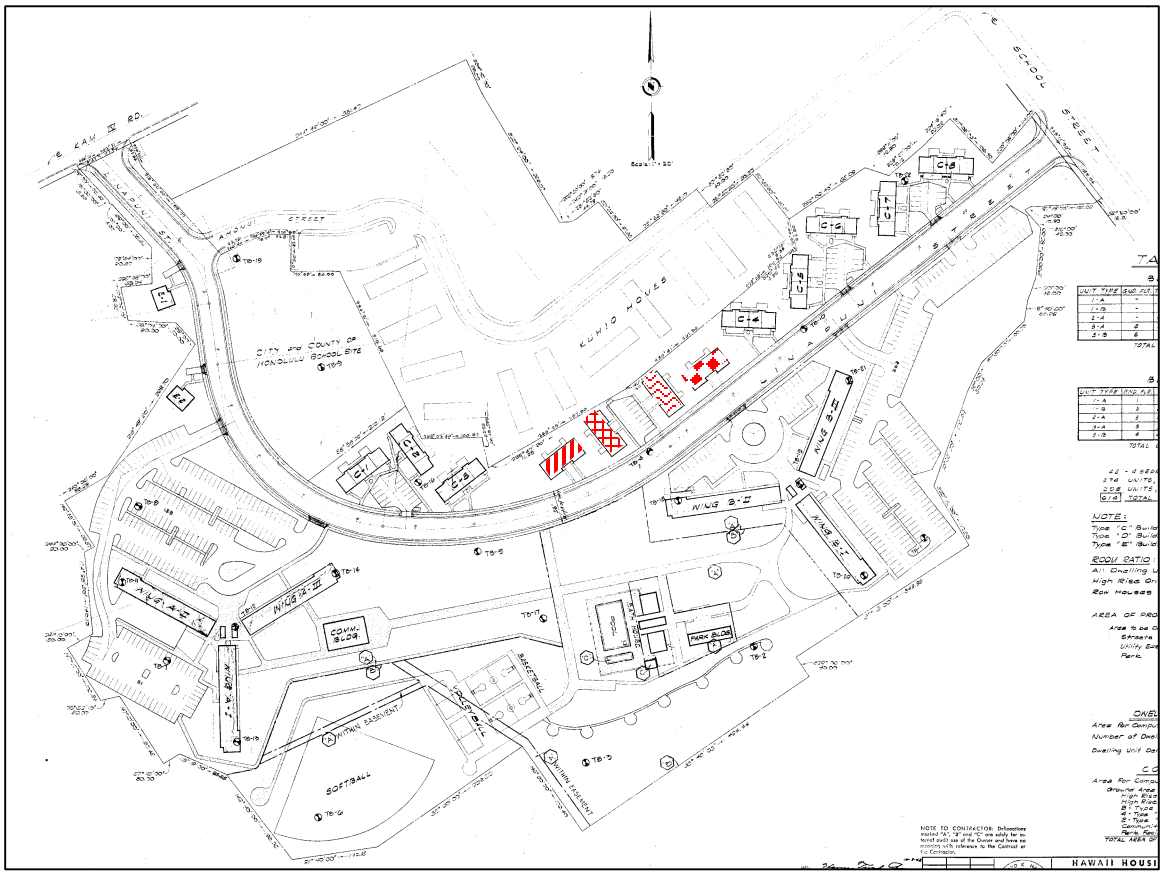


Figure 1: Original 1962 Site Plan showing location of Duplexes. D1 (diagonal lines) is converted for storage and has had interior walls removed, D2 (grid pattern) has been converted to office and storage, and along with residential D3 (zig-zag lines) has had rear lanais enclosed, D4 (checkerboard pattern) remains residential and retains open lanais.

Project	Kuhio Park Terrace Duplex Buildings
Date	1965
Significance	Kuhio Park Terrace is eligible for the NRHP under Criterion A as Hawaii's largest federally aided public housing complex, with 614 units, and illustrates the shift towards high-density high-rise projects, or "warehousing." KPT consisted of a mix of high-rise and low-rise housing with community amenities in a campus-like setting.
Character Defining Features	One-story buildings with flat roofs. Wide overhanging eaves and wing-walls, glass jalousie windows, metal countertops and wood cabinets.
Alterations	Some rear lanais have been incorporated into the units as interior space (D2 and D3), rear yard enclosures removed. Two buildings (D1 and D2) converted for office and storage use. One (D2) has minimal alterations, one unit in D1 has many interior walls removed.
Integrity	Most buildings have relatively minor alterations, retains integrity of location, setting, feeling, and association. Integrity of design, materials and workmanship have been compromised, most significantly at D1.
National Register Eligibility	**Buildings that retain interior walls D2 – D4 –Eligible** **All others D1 – Not Eligible**

Single-Family Building

The single remaining one-story, single unit building, E2 is a smaller version of the other two types of low-rise buildings. It is constructed of concrete, with a concrete slab foundation, a flat roof that has deep eaves, and wing walls at the corners of the buildings, and shielding the windows. Windows are glass jalousie. Doors are flush wood. The interior was not accessed, but is assumed to be similar to the duplex building units, as shown in the original building drawings.

See the following pages for site plan and one-page historic assessment and photographs.

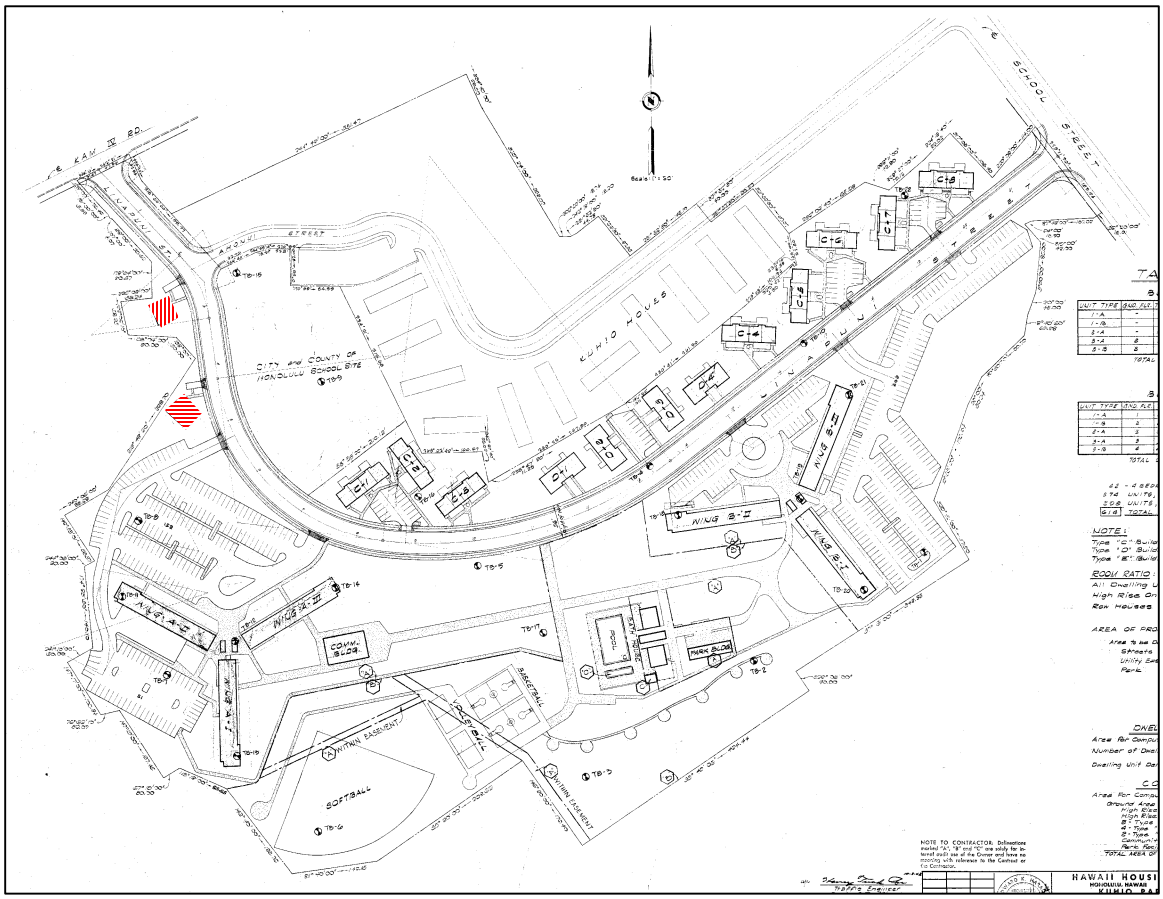
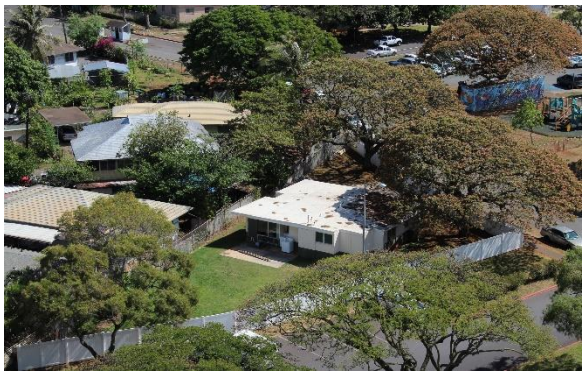


Figure 2: Original 1962 Site Plan showing location of remaining single-family, four bedroom building, E2 (horizontal stripes); and demolished single-family building E1 (vertical stripes).



Project	Kuhio Park Terrace Single-Family House
Date	1965
Significance	Kuhio Park Terrace is eligible for the NRHP under Criterion A as Hawaii's largest federally aided public housing complex, with 614 units, and illustrates the shift towards high-density high-rise projects, or "warehousing." KPT consisted of a mix of high-rise and low-rise housing with community amenities in a campus-like setting.
Character Defining Features	One-story buildings with flat roofs. Wide overhanging eaves and wing-walls, glass jalousie windows.
Alterations	None visible
Integrity	Building retains integrity of location, setting, materials design, workmanship, feeling, and association.
National Register Eligibility	**Eligible**

Community Buildings

There are four community buildings that are part of the Kuhio Park Terrace property. Only one of these was constructed at the same time as the residential buildings, while the other three were constructed in 1976, an unknown date, and 2003. The four are located between and to the southeast of the high rise buildings, approximately in a line. The three with later construction dates were evaluated only cursorily, as none are more than 50 years in age.

The 1965 community building (now Community Hall) was designed as part of the original Kuhio Park Terrace complex. It is a one story structure just to the southeast of high-rise building A, and overlooks the softball field that is just to its south, downhill from the buildings. It is constructed of concrete, with a slab foundation, and a flat roof with overhanging eaves on three sides. The eaves are widest on the side of the building facing the softball field, creating an open lanai. The roof is supported by large tapered, plus- or x-shaped concrete columns, as well as large horizontal concrete beams, whose ends are visible above the columns. There is an addition at the opposite side of the building that faces the street. The interior is comprised of one large room for community gatherings, with a smaller space at the building's rear that corresponds to the later addition, and acts as a prep and/or storage area. The street-facing addition was built in 1980, along with a concrete screen block wall that enclosed the open lanai on the opposite side. The screen block wall has since been removed.

The 1976 Family Education building is a two-tiered, one -story building constructed of concrete. It has a slab foundation, and a flat roof with a mansard surround. The walls are scored CMU, with sections of decorative concrete screen. Windows at the second tier are jalousie, and all windows and screens are further screened with metal mesh.

The PACT Head Start modular building is of an undetermined date, and is constructed of wood on a post and pier foundation with a gable roof. A section of the roof is extended on one side to provide an open lanai, and shelter the ramp up to the entrance. There are also wood awnings over the windows on the opposite side of the building. It has two adjacent play yards furnished with non-permanent playground equipment.

The 2003 Resource Center is centered between the two high-rise buildings with a large parking area between it and the street. It is a large concrete building with a complex hip roof that has a central extension toward the parking lot that forms an entrance. This large building appears as one-story from the street, but is sited on a hill, and has multiple stories as the hill allows.

1965 Community Hall

1976 Family Education Building

Unknown date PACT Head Start

2003 Resource Center

Project	Four Kuhio Park Terrace Community Buildings
Date	1965, 1976, unknown, 2003
Significance	1965 building only: Kuhio Park Terrace is eligible for the NRHP under Criterion A as Hawaii's largest federally aided public housing complex, with 614 units, and illustrates the shift towards high-density high-rise projects, or "warehousing." KPT consisted of a mix of high-rise and low-rise housing with community amenities in a campus-like setting.
Character Defining Features	One-story building with T-shaped concrete supports and large beams at 1965 building. Two levels and scored CMU at 1976 building. Wood construction and covered lanai and awnings at unknown date building. One-story concrete building with complex hip roof at 2003 building.
Alterations	Rear addition and windows changed at 1965 building, no exterior alterations to 1976 building, unknown date building, or 2003 building.
Integrity	The 1965 community center building retains integrity of location, setting, feeling, and association. There have been minor changes to design, materials and workmanship.
National Register Eligibility	**1965 Community Hall – Eligible** **All others – Not Eligible**

Integrity Summary

Integrity of design at the high-rise buildings has been somewhat compromised by the enclosure of all of the buildings' lanais, as well as the removal of the concrete grilles at the elevator core and stairwells, and replacement with metal railings. Nonetheless, the buildings retain integrity of location, setting, materials, workmanship, feeling and association.

The three other types of residential buildings that make up Kuhio Park Terrace retain integrity of location, setting, materials, workmanship, feeling and association. All of the original buildings remain in their original locations, with relationships to one another and the open spaces between them. The row houses and single-family house remain virtually unchanged since construction, also retaining integrity of design. The enclosure of the rear lanais at some of the duplex buildings, and loss of enclosed yards impacts their integrity of design somewhat. The materials have changed little, if at all, and in the majority of cases, their use has not changed, and where it has, the use has remained within the public housing mission.

Only one of the community buildings was constructed at the same time as the residential buildings at Kuhio Park Terrace. It is the building closest to high-rise building A. It retains its integrity of location, setting, feeling, and association. The alteration at the street side of the building has somewhat compromised the building's integrity of design, materials and workmanship. The other three buildings were built between 1976 and 2003, and retain all aspects of integrity. However, they are less than 50 years of age, and do not possess extraordinary significance under Criterion Consideration G, and so, are not eligible for the NRHP. They should be reevaluated when they reach 50 years of age.

The campus, as a cohesive group of buildings with associated landscaping, retains its integrity of location, setting, materials, feeling and association. The campus has lost some integrity of design due to the removal of a few of the community facilities, including the pool with adjacent bath house, and the park building, and the addition of three new community buildings. Despite the addition of these buildings, including a large central community building, the campus retains an open feeling. Much of the significant landscape features are retained as well, including large monkeypod trees shading the sidewalks and parking, eucalyptus trees around the high-rise buildings, as well as open grassy areas and the softball field at the rear of the complex.

Eligibility Summary

Many of the buildings at Kuhio Park Terrace have national register significance under Criterion A for their place in Hawaii's development of public housing. As Hawaii's largest federally aided public housing complex, with 614 units, the complex illustrates the shift towards high-density high-rise projects, or "warehousing." It was the state's first and last attempt to provide low-income family housing in publicly owned high-rise buildings. High-rise public housing had been a trend across the United States, and was regarded as an efficient and convenient way to provide low-income housing for a large number of families in a small footprint. Kuhio Park Terrace consisted of a mix of high-rise and low-rise housing with community amenities in a campus-like setting. It was able

to provide both a large number of units, and open space with recreational facilities for residents within a relatively small area.

Buildings that have significance and sufficient integrity to be considered eligible include both high-rise buildings, A and B; all row house buildings, C-1 through C-8, most duplex buildings including D-2 through D-4; the remaining single-family unit, E-2; and the 1965 Community Hall building located next to high-rise building A. Additionally, the campus overall has significance and appears to retain sufficient integrity to to be considered a historic district.

Building D1 has been significantly altered with the loss of a number of interior walls, and no longer has sufficient integrity to be considered eligible

ENVIRONMENTAL REVIEWS

APPENDICES

APPENDIX A

Section 106 Consultation

APPENDIX A-1

No Effect Determination

Ronald Sato

From: Ronald Sato
Sent: Thursday, September 24, 2015 2:47 PM
To: 'Jessica.L.Puff@hawaii.gov'
Cc: anna.e.broverman@hawaii.gov; Lisa Izumi (lisa.m.izumi@hawaii.gov); Scott Ezer
Subject: RE: HPHA PNA Projects - Section 106 No Effect Determination

Follow Up Flag: Follow up
Flag Status: Completed

Aloha Jess,

Just wanted to inquire on the status of this. HPHA hasn't received a SHPD response letter yet, but we did need to finish the ER reports this month.

We would like to include SHPD's response in the ER reports, but do understand the many requests your department gets on a daily basis. Let us know if you have any questions or need anything. We would greatly appreciate receiving SHPD's response by September 30th if possible, and appreciate your continued efforts.

Thanks.

Ronald

From: Jessica.L.Puff@hawaii.gov [mailto:Jessica.L.Puff@hawaii.gov]
Sent: Monday, August 24, 2015 12:28 PM
To: Ronald Sato <rsato@hhf.com>
Cc: anna.e.broverman@hawaii.gov; Lisa Izumi (lisa.m.izumi@hawaii.gov) <lisa.m.izumi@hawaii.gov>; Scott Ezer <sezer@hhf.com>
Subject: Re: HPHA PNA Projects - Section 106 No Effect Determination

Aloha Ronald,

We received the submittal on July 30, 2015. We will be responding the the request for Section 106 consultation with an official letter. I can email it out once a digital copy has been created.

Best,

Jess

Jessica Puff
Architectural Historian
Hawaii State Historic Preservation Division
601 Kamokila Blvd. Suite 555
Kapolei, HI 96707
#: 808.692.8023
@: jessica.l.puff@hawaii.gov

From: Ronald Sato <rsato@hhf.com>
To: "anna.e.broverman@hawaii.gov" <anna.e.broverman@hawaii.gov>, "Jessica Puff (jessica.l.puff@hawaii.gov)" <jessica.l.puff@hawaii.gov>,
Cc: "Lisa Izumi (lisa.m.izumi@hawaii.gov)" <lisa.m.izumi@hawaii.gov>, Scott Ezer <sezer@hhf.com>
Date: 08/24/2015 10:25 AM
Subject: HPHA PNA Projects - Section 106 No Effect Determination

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This message contains attachments delivered via ShareFile.

- SHPO HPHA No Effect Deter PKG FINAL 7-23-15.pdf (22.1 MB)

Download the attachments by clicking here.

Hello Jessica and Anna,

A letter with project information was submitted by the State HPHA on July 23, 2015 for various housing projects statewide as part of Section 106 consultation seeking SHPO/SHPD's comments or concurrence with a no effect determination. We just wanted to follow-up with SHPD to see if your agency will have any comments or will be sending a concurrence letter to HPHA. The 30-day comment period has recently ended.

The HPHA is conducting environmental reviews for their existing State housing projects as part of HUD funding requirements. The funding would be used for repair and rehabilitation improvements to the existing housing projects. This letter addressed 43 housing projects that were constructed fairly recently, and were not 50 years or older.

I've included a link to our ShareFile website where you can download the pdf file since it is fairly large.

We are completing the environmental review documentations for HPHA for these housing project due to their deadline in September. We understand the numerous requests your department has, but just wanted to follow-up with you regarding this.

Please let me know if you have any questions. Thanks.

Ronald A. Sato, AICP
Senior Associate
rsato@hhf.com

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DAVID Y. IGE
GOVERNOR

HAKIM OUANSAFI
EXECUTIVE DIRECTOR

BARBARA E. ARASHIRO
EXECUTIVE ASSISTANT

STATE OF HAWAII
DEPARTMENT OF HUMAN SERVICES
HAWAII PUBLIC HOUSING AUTHORITY
1002 NORTH SCHOOL STREET
POST OFFICE BOX 17907
Honolulu, Hawaii 96817

IN REPLY PLEASE REFER TO:

15:CMS/118

July 23, 2015

Ms. Suzanne Case, Director
Department of Land and Natural Resources
State of Hawai'i
Kalanimoku Building
1151 Punchbowl Street
Honolulu, Hawaii 96813

Dear Ms. Case:

Subject: Environmental Reviews for Federally-Subsidized Public Housing Projects
Statewide Section 106 Consultation – No Effect Determination

The State of Hawai'i, Hawai'i Public Housing Authority (HPHA) is proposing that it may conduct repair and rehabilitation improvement projects to 43 existing public housing projects located throughout the State over the next five (5) years (2015-2020). The State HPHA subsequently conducting environmental reviews for these existing public housing projects in conformance with U.S. Department of Housing and Urban Development (HUD) requirements specified under 24 CFR Part 58 should Federal funds be used.

One of the environmental review requirements is conducting Section 106 consultation with the State Historic Preservation Officer under the National Historic Preservation Act, as amended (NHPA) (16 U.S.C. 470(f)). Repair and rehabilitation improvements using Federal funds is considered an "undertaking" under these regulations, and the State HPHA is serving as the Agency Official initiating this Section 106 consultation process for this project. A "no historic properties affected" determination is proposed for repair and rehabilitation improvements that would be implemented at the 43 existing public housing project sites. Further information justifying this determination is provided with this letter.

Project Description

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements

implemented for housing projects are not considered a "major construction activity" and would involve one or a combination of the following actions identified below.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent.
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons.
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland.
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation.
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls).
7. Interior and exterior renovations and rehabilitation.
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site.
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Area of Potential Effect and Identification of Historic Properties

A listing of the 43 housing projects included under this Section 106 consultation is provided in Exhibit A along with information on existing land use. The "area of potential effect" (APE) on historic properties was established based upon the improvements that would occur which consist of repair and renovation work to existing buildings, units, and common area facilities. Utility repair or rehabilitation work would occur within the project site. The APE was therefore determined to consist of the property boundary associated with each housing project. Exhibit B includes a summary of each housing project, a location map, and an APE boundary map.

There are no known historic properties present within the properties of housing projects listed in Exhibit A. This is based upon; 1)similar HUD required environmental reviews conducted by HPHA in 2010 and prior which included site visits; 2) information on the State's listing of historic sites included on the State and National Registers of Historic Places; and 3) HPHA's experience with prior repair and renovation work occurring at these housing project sites. All of these properties have been extensively altered as part of prior construction of housing projects. Exhibit A also includes the year the housing projects were completed and initially occupied, and none of these projects have buildings 50 years old or older.

Determination of Effect

Based upon these efforts and review of each existing housing project, no historic properties were identified. Therefore, HPHA has determined that no historic properties would be affected by the various repair and rehabilitation improvements that may be implemented for these housing projects.

We are soliciting your review and concurrence with this no historic properties affected determination. We would greatly appreciate your written response within 30 days of receipt of this letter, or sooner if possible.

Please contact Ms. Becky Choi, State Housing Development Administrator at 832-6020 or via email at Becky.L.Choi@hawaii.gov if you have any questions.

Sincerely,

HakimOuansafi
Executive Director

Enclosures – Exhibit A & Exhibit B
cc: Alan Downer, Administrator, SHPD
Becky Choi, State Housing Development Administrator, HPHA
Ronald Sato, HHF Planners

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EXHIBIT A
LISTING OF HOUSING PROJECTS

HPHA Project No.	Housing Project Name	Street Address	City/Town	Island	Zip Code	Tax Map Key	Year Completed & Occupied
Kaua‘i County (6 Projects)							
1019	Hale Hoolulu (Eld)	4264 Ala Muku Place	Kilauea	Kauai	96754	5-2-08:56	1974
	APE Acreage: 1.00	Land Use: Used as residential housing project			Historic Properties Present: No		
1055	Hale Hoonanea (Eld)	4401 Waialo Road	Eleele	Kauai	96705	2-1-03:17	1976
	APE Acreage: 2.51	Land Use: Used as residential housing project			Historic Properties Present: No		
1054	Hale Nani Kai O'Kea (Eld)	4850 Kawaihau Rd.	Kapaa	Kauai	96746	4-6-14:105	1977
	APE Acreage: 3.47	Land Use: Used as residential housing project			Historic Properties Present: No		
1023	Home Nani (Eld)	Moana & Laau Rd.	Waimea	Kauai	96796	1-6-07:31	1970
	APE Acreage: 0.45	Land Use: Used as residential housing project			Historic Properties Present: No		
1086	Kawailehua (Federal)	5230 Paanau Rd.	Koloa	Kauai	96756	2-6-04:58	1993
	APE Acreage: 2.10	Land Use: Used as residential housing project			Historic Properties Present: No		
1064	Kekaha Ha'aheo	8238 Iwipolena St.	Kekaha	Kauai	96752	1-3-08:20 & 26	1982
	APE Acreage: 9.25	Land Use: Used as residential housing project			Historic Properties Present: No		
Maui County (4 Projects)							
1092	Makani Kai Hale I	35 Koapaka Ln.	Waiehu	Maui	96793	3-3-01:10	1995
	APE Acreage: 3.45 (Combined with Phase II)	Land Use: Used as residential housing project			Historic Properties Present: No		
1097	Makani Kai Hale II	35 Koapaka Ln.	Waiehu	Maui	96793	4-6-10:31	1998
	APE Acreage: 3.45 (Combined with Phase I)	Land Use: Used as residential housing project			Historic Properties Present: No		
1044	Piilani Homes	1028 Wainee St.	Lahaina	Maui	96761	4-5-07:05	1970
	APE Acreage: 2.62	Land Use: Used as residential housing project			Historic Properties Present: No		
1088	Kahale Mua (Federal)	P.O. Box 30	Maunaloa	Molokai	96770	5-1-02:39	1993
	APE Acreage: 1.88	Land Use: Used as residential housing project			Historic Properties Present: No		
Hawai‘i County (13 Projects)							
1051	Hale Aloha O'Puna (Eld)	16-189 Pili Mua St.	Keaau	Hawaii	96749	1-6-143:35	1977
	APE Acreage: 1.90	Land Use: Used as residential housing project			Historic Properties Present: No		
1031	Hale Hauoli	45-540 Kaniaka Pl.	Honokaa	Hawaii	96727	4-5-10:78	1970
	APE Acreage: 2.43	Land Use: Used as residential housing project			Historic Properties Present: No		
1053	Hale Hookipa (Eld)	81-1038 Nani Kupuna Place	Kealakekua	Hawaii	96750	8-1-02:49	1976
	APE Acreage: 6.11	Land Use: Used as residential housing project			Historic Properties Present: No		
1052	Hale Olaloa	144 Kamana St.	Hilo	Hawaii	96720	2-4-56:21	1976
	APE Acreage: 6.51	Land Use: Used as residential housing project			Historic Properties Present: No		

EXHIBIT A
LISTING OF HOUSING PROJECTS (Continued)

HPHA Project No.	Housing Project Name	Street Address	City/Town	Island	Zip Code	Tax Map Key	Year Completed & Occupied
Hawai'i County (Continued)							
1061	Ka Hale Kahaluu	78-6725 Makolea St.	Kona	Hawaii	96740	7-8-10:04	1981
	APE Acreage: 3.37	Land Use: Used as residential housing project			Historic Properties Present: No		
1032	Kaimalino	74-5060 Kealakaa St.	Kona	Hawaii	96740	7-4-17:29	1971
	APE Acreage: 5.53	Land Use: Used as residential housing project			Historic Properties Present: No		
1097	Kauhale O'Hanakahi	19 Pamala St.	Hilo	Hawaii	96720	2-4-51:01	1997
	APE Acreage: 3.20	Land Use: Used as residential housing project			Historic Properties Present: No		
1097	Ke Kumu 'Ekolu	68-3385 Ke Kumu Pl.	Waikoloa	Hawaii	96738	6-8-02:43	1997
	APE Acreage: 6.47	Land Use: Used as residential housing project			Historic Properties Present: No		
1070	Kealakehe	74-991 Manawale'a St.	Kailua-Kona	Hawaii	96740	7-4-17:58	1985
	APE Acreage: 3.29	Land Use: Used as residential housing project			Historic Properties Present: No		
1063	Nani Olu	81-1011 Nani Kupuna Pl.	Kona	Hawaii	96740	8-1-02:47 & 48	1981
	APE Acreage: 0.99	Land Use: Used as residential housing project			Historic Properties Present: No		
1071	Noelani I	65-1191 Opelo Road	Kamuela	Hawaii	96743	6-5-09:29	1983
	APE Acreage: 0.69	Land Use: Used as residential housing project			Historic Properties Present: No		
1078	Noelani II	65-1191 Opelo Rd.	Kamuela	Hawaii	96743	6-5-09:25	1983
	APE Acreage: 0.70	Land Use: Used as residential housing project			Historic Properties Present: No		
1045	Pahala (Eld)	96-1169 Holei St.	Pahala	Hawaii	96720	9-6-17:37	1972
	APE Acreage: 1.44	Land Use: Used as residential housing project			Historic Properties Present: No		
City and County of Honolulu (20 Projects)							
1027	Hale Laulima	1184 Waimano Home Road	Pearl City	Oahu	96782	9-7-94:25	1981
	APE Acreage: 3.96	Land Use: Used as residential housing project			Historic Properties Present: No		
1072	Hookipa Kahaluu	47-330 Ahuimanu Rd.	Kaneohe	Oahu	96744	4-7-37:16	1983
	APE Acreage: 3.60	Land Use: Used as residential housing project			Historic Properties Present: No		
1062	Kalakaua Homes	1545 Kalakaua Ave.	Honolulu	Oahu	96826	2-3-19:04	1983
	APE Acreage: 4.80	Land Use: Used as residential housing project			Historic Properties Present: No		
1099	Kamehameha Homes	1541 Haka Dr.	Honolulu	Oahu	96817	1-5-01:01	1996
	APE Acreage: 16.00	Land Use: Used as residential housing project			Historic Properties Present: No		
1069	Kaneohe Apartments	45-507 & 45-513 Pahia Rd.	Kaneohe	Oahu	96744	4-5-19:26	1984
	APE Acreage: 0.43	Land Use: Used as residential housing project			Historic Properties Present: No		
1056	Kauhale Nani	310 N. Cane St.	Wahiawa	Oahu	96786	7-4-7:14	1980
	APE Acreage: 3.46	Land Use: Used as residential housing project			Historic Properties Present: No		
1090	Kauhale Ohana	41-1260 Kalanianaole Hwy.	Waimanalo	Oahu	96795	4-1-9:286	1995
	APE Acreage: 2.52	Land Use: Used as residential housing project			Historic Properties Present: No		

EXHIBIT A
LISTING OF HOUSING PROJECTS (Continued)

HPHA Project No.	Housing Project Name	Street Address	County	Island	Zip Code	Tax Map Key	Year Completed & Occupied
City and County of Honolulu (Continued)							
1091	Kau'iokalani	85-658 Farrington Hwy.	Waianae	Oahu	96792	8-5-28:044	1995
	APE Acreage: 4.04	Land Use: Used as residential housing project			Historic Properties Present: No		
1050	Kupuna Home O'Waialua (Eld)	67-088 Goodale Ave.	Waialua	Oahu	96791	6-7-16:28	1977
	APE Acreage: 3.27	Land Use: Used as residential housing project			Historic Properties Present: No		
1046	Makamae (Eld)	21 South Kuakini St.	Honolulu	Oahu	96813	2-2-01: 20	1971
	APE Acreage: 1.08	Land Use: Used as residential housing project			Historic Properties Present: No		
1036	Paoakalani (Eld)	1583 Kalakaua Ave.	Honolulu	Oahu	96826	2-3-19:4	1970
	APE Acreage: 1.80	Land Use: Used as residential housing project			Historic Properties Present: No		
1047	Pumehana (Eld)	1212 Kinau St.	Honolulu	Oahu	96814	2-4-11:39	1972
	APE Acreage: 0.46	Land Use: Used as residential housing project			Historic Properties Present: No		
1066	Salt Lake Apts.	2907 Ala Ilima St.	Honolulu	Oahu	96818	1-1-62:07	1982
	APE Acreage: 0.47	Land Use: Used as residential housing project			Historic Properties Present: No		
1073	Spencer House	1035 Spencer St.	Honolulu	Oahu	96822	2-4-16:08	1968
	APE Acreage: 0.32	Land Use: Used as residential housing project			Historic Properties Present: No		
1057	Waimaha-Sunflower	85-186 McArthur St.	Waianae	Oahu	96792	8-5-10:029, 063, 067	1980
	APE Acreage: 3.77	Land Use: Used as residential housing project			Historic Properties Present: No		
1025	Waimanalo Homes I	Humuniki St. & Humuna Pl.	Waimanalo	Oahu	96795	4-1-22:100; 4-1-23:050-064, 068; 4-1-28:005-022 and 107-122	1998
	APE Acreage: 8.34 (Combined with Phase II)	Land Use: Used as residential housing project			Historic Properties Present: No		
1107	Waimanalo Homes II	Humuniki St. & Humuna Pl.	Waimanalo	Oahu	96795	4-1-22:100; 4-1-23:050-064; 4-1-28:05-22 and 107-122	1998
	APE Acreage: 8.34 (Combined with Phase I)	Land Use: Used as residential housing project			Historic Properties Present: No		
1038	Waipahu I	94-111 Pupuole Pl.	Waipahu	Oahu	96797	9-4-39:19	1970
	APE Acreage: 0.26	Land Use: Used as residential housing project			Historic Properties Present: No		
1039	Waipahu II	94-132 Pupupuhi St.	Waipahu	Oahu	96797	9-4-39:76	1970
	APE Acreage: 0.26	Land Use: Used as residential housing project			Historic Properties Present: No		
1108	Maili II	87-171 Keliikipi St.	Waianae	Oahu	96792	8-7-01:01	1999
	APE Acreage: 1.73	Land Use: Used as residential housing project			Historic Properties Present: No		

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EXHIBIT B

Housing Project Summaries

HAWAIʻI PUBLIC HOUSING AUTHORITY
Environmental Reviews 2015

AMP 38

#1019 HALE HOʻOLULU

4264 Ala Muku Place / Kilauea, Kauaʻi, Hawaiʻi / 96754

I. PROJECT INFORMATION

Tax Map Key: (4) 5-2-008:056

Occupancy Year: 1974

Acres:	1.00	**Buildings:**	4
		Units:	12
Studios:	4	1-Bedroom:	8
2-Bedrooms:	0	3-Bedrooms:	0
4-Bedrooms:	0	5-Bedrooms:	0

The Hale Hoʻolulu elderly housing project is located in the town of Kilauea on the island of Kauaʻi. Kīlauea is a rural community located along Kauaʻiʻs northern shoreline.

It is positioned east of Princeville and south of the Kīlauea Point National Wildlife Refuge. The housing site is in the heart of Kilauea town, just to the south of Kong Lung Historic Market Square. A project location map (Figure 1) is provided.

Hale Hoʻolulu was first occupied in 1974 and has a street address of 4264 Ala Muku Place. The property is one acre, and it is identified as Tax Map Key (TMK) No. (4) 5-2-008:056. The housing project is comprised of two single-story duplexes with studio units, and two single story quadruplexes with one-bedroom units. The State land use designation for the property is the "Urban District." The County zoning for the parcel is R-10/P-D Residential District. Figure 2 includes a site map showing the area of potential effect.

Source: State of Hawaiʻi GIS Data and Google Earth Pro - 1/12/13

HPHA No. 1019 - Hale Hoʻolulu (AMP 38)

Figure 1 - Project Location Map

Kilauea, Kauaʻi

1,000 FT

HHF PLANNERS
places for people

HPHA No. 1019 - Hale Ho'olulu (AMP 38)

Figure 2 - Project Site & APE Map

Kilauea, Kaua'i

30 FEET

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

AMP 38

#1055 HALE HO'ONANEA

4401 Waialo Road / Ele'ele, Kaua'i, Hawai'i / 96705

I. PROJECT INFORMATION

Tax Map Key: (4) 2-1-003:017

Occupancy Year: 1976

Acres:	2.51	**Buildings:**	21
		Units:	40
Studios:	24	1-Bedroom:	16
2-Bedrooms:	0	3-Bedrooms:	0
4-Bedrooms:	0	5-Bedrooms:	0

The Hale Ho'onanea elderly housing project is located in the town of 'Ele'ele on the island of Kaua'i. Ele'ele is a rural community situated along Kauai's southern shoreline.

The housing project site is directly east of Hanapēpē and to the north of Port Allen Small Boat Harbor. The housing site is bordered by Okupu Street to the north and Waialo Road to the east. Kaua'i Medical Clinic is located directly across Waialo Street from the housing site. A project location map (Figure 1) is provided.

Hale Ho'onanea was first occupied in 1976 and has a street address of 4401 Waialo Road. The property consists of 2.51 acres, and is identified as Tax Map Key (TMK) No. (4) 2-1-003:017. The housing project is comprised of 20 single-story duplexes with studio and 1-bedroom units. One single-story common area building serves as a community center. Figure 2 includes a site plan and area of potential effect for this housing project. The State's land use designation for the property is the "Urban District." The County's zoning for the parcel is R-20 Residential District.

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

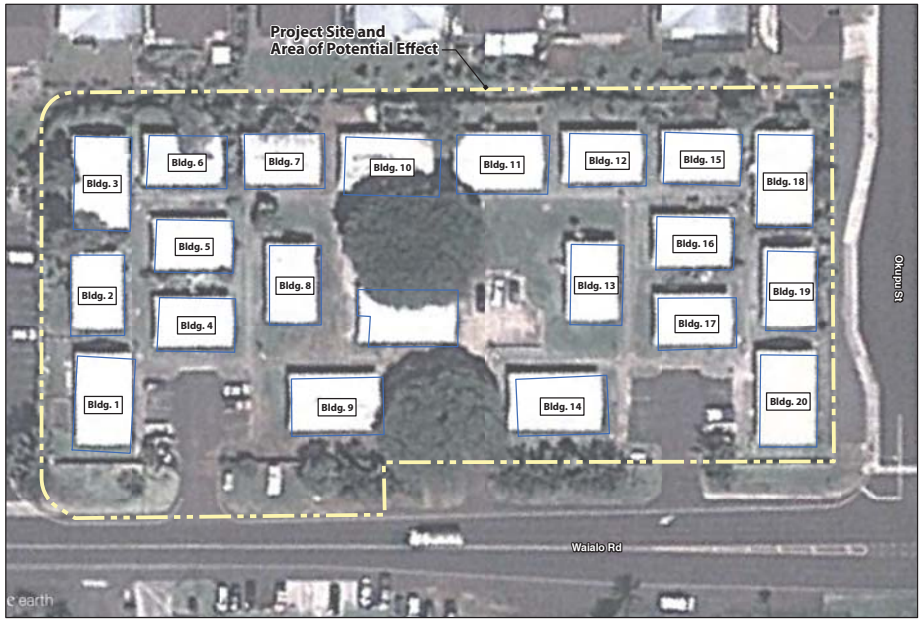
HPHA No. 1055 - Hale Ho'onanea (AMP 38)

Figure 1 - Project Location Map

'Ele'ele, Kaua'i

1,000 FT

HHF PLANNERS
places for people



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1055 - Hale Ho'onanea (AMP 38)

Figure 2 - Project Site & APE Map

'Ele'ele, Kaua'i

40 FEET

HHF PLANNERS
places for people

AMP 38

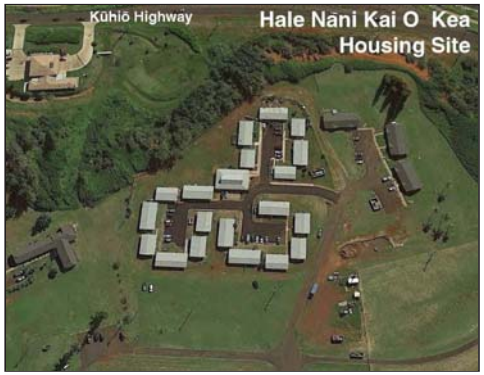
#1054 HALE NANI KAI O KEA

4850 Kawaihau Road / Kapaʻa, Kauaʻi, Hawaiʻi / 96746

I. PROJECT INFORMATION

Tax Map Key: (4) 4-6-0014:105

Occupancy Year:	1977		
Acres:	3.47	**Buildings:**	20
		Units:	38
Studios:	20	1-Bedroom:	18
2-Bedrooms:	0	3-Bedrooms:	0
4-Bedrooms:	0	5-Bedrooms:	0



The Hale Nani Kai O Kea housing project is located in the town of Kapaʻa on the island of Kauaʻi. Kapaʻa is situated along Kauaʻiʻs eastern shoreline, south of Anahola and north of Wailua.

The housing site is positioned between Mahelona Medical Center and Kūhiō Highway. Access to the medical center and housing site is provided from Kawaihau Road. A project location map (Figure 1) is provided.

Hale Nani Kai O Kea was first occupied in 1977 and has a street address of 4850 Kawaihau Road. The property consists of 3.47 acres, and is identified as Tax Map Key (TMK) No. (4) 4-6-014:105. The housing project is comprised of 19 single-story duplexes with studio and one-bedroom units. One single-story common area building serves as a community center and laundry facility. Figure 2 includes a site plan and area of potential effect for this housing project. The State's land use designation for the property is the "Urban District." The County's zoning for the parcel is R-1/ST-P Residential District.

Source: State of Hawaiʻi GIS Data and Google Earth Pro - 1/12/13

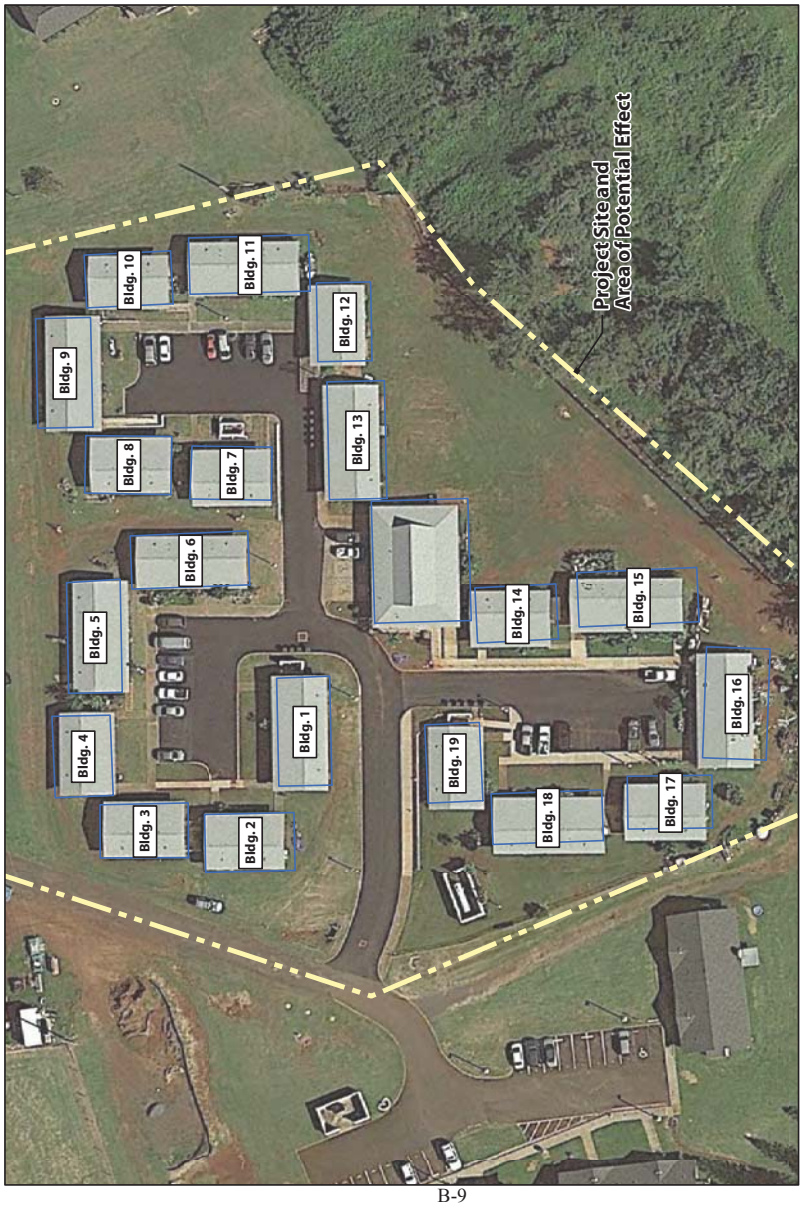
HPHA No. 1054 - Hale Nana Kai Oʻ Kea (AMP 38)

Figure 1 - Project Location Map

Kapaʻa, Kauaʻi

1,500 FT

HHF PLANNERS
places for people



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1054 - Hale Nana Kai O'Kea (AMP 38)

Figure 2 - Project Site & APE Map

Kapa'a, Kaua'i

50 FEET

HHF PLANNERS
places for people

AMP 38

#1023 HOME NANI

Moana Rd. & Lā'au Rd. / Waimea, Kaua'i, Hawai'i / 96796

I. PROJECT INFORMATION

Tax Map Key: (4) 1-6-007: 031

Occupancy Year: 1970

Acres:	0.45	**Buildings:**	**2**
		Units:	**14**
Studios:	10	1-Bedroom:	4
2-Bedrooms:	0	3-Bedrooms:	0
4-Bedrooms:	0	5-Bedrooms:	0

Home Nani is located in the town of Waimea on the island of Kaua'i. Waimea is a rural community situated at the mouth of the Waimea River along Kaua'i's southwest shoreline. The housing site is positioned just south of Kamuali'i Highway at the intersection of Moana Road and Lā'au Road. A project location map (Figure 1) is provided.

Home Nani was constructed in 1970 and has a street address of Moana Road and La'au Road. The property consists of 0.45 acres, and it is identified as Tax Map Key (TMK) No. (4) 1-06-007: 031. The housing project is comprised of 2 single-story apartment buildings with studio and 1-bedroom units. Figure 2 includes a Site Plan and area of potential effect for this housing project. The State's land use designation for the property is the "Urban District." The County's zoning for the parcel is General Commercial (C-G).

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

HPHA No. 1023 - Home Nani (AMP 38)

Figure 1 - Project Location Map

Waimea, Kaua'i

500 FT

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1023 - Home Nani (AMP 38)

Figure 2 - Project Site & APE Map

Waimea, Kaua'i

20 FEET

HHF PLANNERS
places for people

AMP 38

#1086 KAWAILEHUA

5320 Paʻanau Road / Kōloa, Kauaʻi, Hawaiʻi / 96756

I. PROJECT INFORMATION

Tax Map Key: (4) 2-6-004:046

Occupancy Year: 1993

Acres:	2.10	**Buildings:**	4
		Units:	25
Studios:	0	1-Bedroom:	0
2-Bedrooms:	0	3-Bedrooms:	25
4-Bedrooms:	0	5-Bedrooms:	0

The Kawailehua housing project is located in the community of Kōloa community on the island of Kauaʻi. Kōloa is situated directly north of the resort area of Poʻipū on the south shore of Kauaʻi

The housing site is positioned between Poʻipū Road and Ala Kalanikaumaka Street with access provided by Paʻanau Road. A project location map (Figure 1) is provided.

Kawailehua was first occupied in 1993 and has a street address of 5320 Paʻanau Road. The property consists of 2.10 acres, and it is identified as Tax Map Key (TMK) No. (4) 2-6-004:046. The housing project is comprised of three two-story apartment buildings with three-bedroom units and one single-story duplex with handicap accessible three-bedroom units. Figure 2 includes a site plan and area of potential effect for this housing project. The State's land use designation for the property is the "Urban District." The County's zoning for the parcel is R-20 Residential.

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

HPHA No. 2204 - Kawailehua (AMP 38)

Figure 1 - Project Location Map

Koloa, Kaua'i

2,000 FT

HHF PLANNERS
places for people

HPHA No. 2204 - Kawailehua (AMP 38)

Figure 2 - Project Site & APE Map

Koloa, Kaua'i

50 FEET

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

AMP 38

#1064 KEKAHA HA'AHEO

8238 Iwipolena Road / Kekaha, Kaua'i, Hawai'i / 96752

I. PROJECT INFORMATION

Tax Map Key:

(4) 1-3-008:020 & 026

Occupancy Year: 1982

Acres:	9.25	**Buildings:**	30
		Units:	78
Studios:	0	1-Bedroom:	42
2-Bedrooms:	12	3-Bedrooms:	24
4-Bedrooms:	0	5-Bedrooms:	0

The Kekaha Ha'aheo housing project is located in the community of Kekaha community on the island of Kaua'i. Kekaha is a rural community situated directly west from the town of Waimea.

The housing site is positioned between the former site of the Kekaha Sugar Mill to the east and HP Faye Park to the west. A project location map (Figure 1) is provided.

Kekaha Ha'aheo was first occupied in 1982 and has a street address of 8238 Iwipolena Road. The property consists of two parcels, Tax Map Key (TMK) No. (4) 1-3-008:020 (Phase I) and (4) 1-3-008:026 (Phase II), with a combined area of 9.25 acres. The housing project is comprised of 29 single-story townhouses with one, two, and three bedroom units. One single-story common area building houses administrative offices and a community center. Figure 2 includes a site plan and area of potential effect for this housing project. The State's land use designation for the property is the "Urban District." The County's zoning for the parcel is R-6 Residential.

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

HPHA No. 1064 - Kekaha Ha'aheo (AMP 38)

Figure 1 - Project Location Map

Kekaha, Kaua'i

1,500 FT

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1064 - Kekaha Ha'aheo (AMP 38)

Figure 2 - Project Site & APE Map

Kekaha, Kaua'i

80 FEET

HHF PLANNERS
places for people

AMP 39

#1092 & 1097 MAKANI KAI HALE I & II

35 Koapaka Ln. / Waiehu, Maui, Hawaiʻi / 96793

I. PROJECT INFORMATION

Tax Map Key: (2) 3-3-015: 001

Occupancy Year: 1995 (Phase II 1998)

Acres:	3.45	**Buildings:**	**9**
		Units:	**29**
Studios:	0	1-Bedroom:	0
2-Bedrooms:	0	3-Bedrooms:	29
4-Bedrooms:	0	5-Bedrooms:	0

The Makani Kai Hale I & II housing project is located in the community of Waiehu on the island of Maui. Waiehu is situated north of Wailuku along Maui's north shore. The housing site is bordered by Makaʻala Drive to the west, and Waiehu Terrace Park to the north. Access is provided off of Kūhiō Place by Koapaka Lane and Papali Lane. A project location map (Figure 1) is provided.

Makani Kai Hale I was initially occupied in 1995 and Phase II was initially occupied in 1998. The property consists of 3.45 acres and is identified as Tax Map Key (TMK) No. (2) 3-3-015: 001. The housing project is comprised of 8 two-story apartment buildings with 3-bedroom units. One single-story common area building serves as a community center for both phases. Figure 2 includes a Site Plan and area of potential effect for this housing project. The State's land use designation for the property is the "Urban District." The parcel is zoned "Agriculture" by Maui County.

Source: State of Hawaiʻi GIS Data and Google Earth Pro - 1/12/13

HPHA No. 1092 - Makani Kai Hale I & II (AMP 39)

Figure 1 - Project Location Map

Waiehu, Maui

1,500 FT

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1097 - Makani Kai Hale II (AMP 39)

Figure 2 - Project Site & APE Map

Wailuku, Maui

50 FEET

HHF PLANNERS
places for people

AMP 39

#1044 PI'ILANI HOMES

1028 Waine'e Street / Lahaina, Maui, Hawai'i / 96761

I. PROJECT INFORMATION

Tax Map Key: (2) 4-05-007:005

Occupancy Year: 1970

Acres:	2.62	**Buildings:**	9
		Units:	42
Studios:	32	1-Bedroom:	10
2-Bedrooms:	0	3-Bedrooms:	0
4-Bedrooms:	0	5-Bedrooms:	0

The Pi'ilani Homes elderly housing project is located in the community of Lahaina on the island of Maui. Lahaina is situated south of Kā'anapali along Maui's west shore. The housing site is bordered by Honoapi'ilani Highway to the northeast, and access is provided off of Waine'e Street. A project location map (Figure 1) is provided.

Pi'ilani Homes was first occupied in 1970 and has a street address of 1028 Waine'e Street. The property consists of 2.62 acres and is identified as Tax Map Key (TMK) No. (2) 4-05-007:005. The housing project is comprised of eight single-story apartment buildings with studio and one-bedroom units. One single-story common area building serves as a community center. Figure 2 includes a site plan and area of potential effect for this housing project. The State land use designation for the property is the "Urban District," and the County zoning for the site is A-1 Apartment District.

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1044 - Pi'ilani Homes (AMP 39)

Figure 1 - Project Location Map

Lahaina, Maui

1,000 FT

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No.1044 - Pi'ilani Homes (AMP 39)

Figure 2 - Project Site & APE Map

Lahaina, Maui

50 FEET

HHF PLANNERS
places for people

AMP 39

#1088 KAHALE MUA

P.O. Box 30 / Maunaloa, Molokaʻi, Hawaiʻi / 96770

I. PROJECT INFORMATION

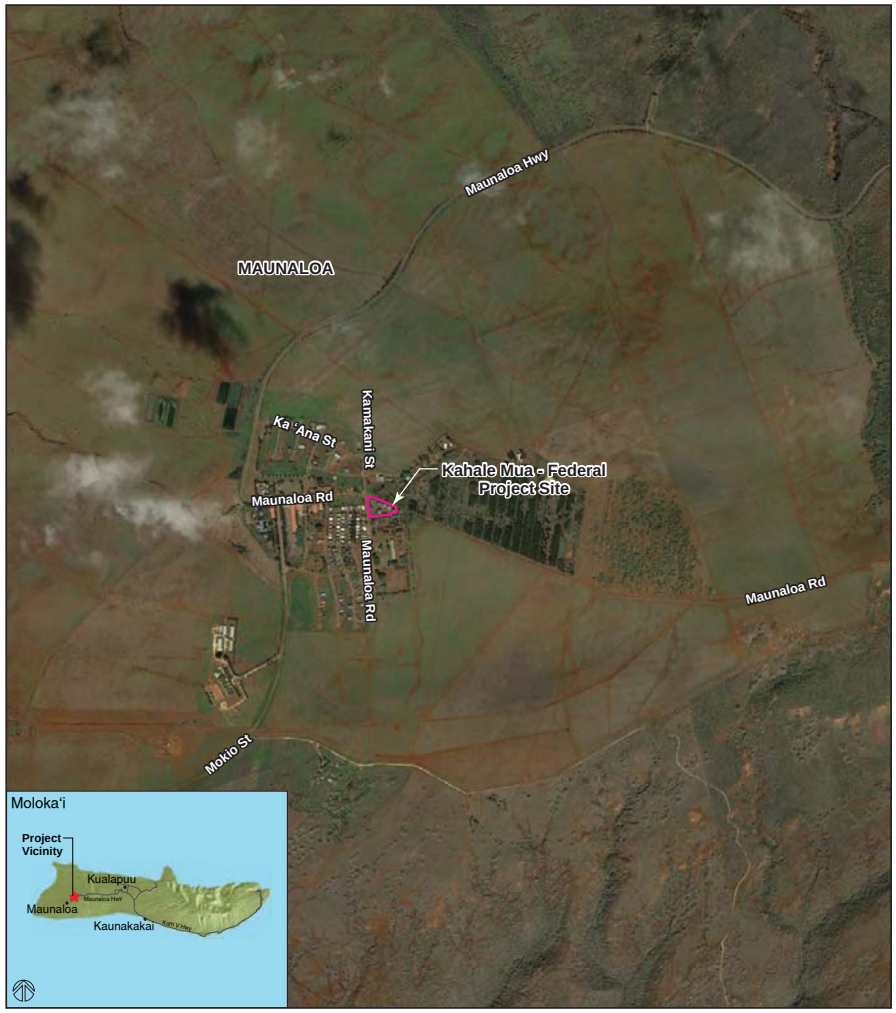
Tax Map Key: (2) 5-1-002: 039

Occupancy Year: 1993

Acres:	1.88	**Buildings:**	**9**
		Units:	**25**
Studios:	0	1-Bedroom:	0
2-Bedrooms:	0	3-Bedrooms:	25
4-Bedrooms:	0	5-Bedrooms:	0

The Kahale Mua housing project is located in the community of Maunaloa on the island of Molokaʻi. Maunaloa is a rural community situated in West Molokaʻi. Access to the project site is provided off of Maunaloa Highway to the west. A project location map (Figure 1) is provided.

Kahale Mua was constructed in 1993 and has a street address of P.O. Box 30. The property consists of 1.88 acres and is identified as Tax Map Key (TMK) No. (2) 5-1-002: 039. The housing project is comprised of 3 single-story townhouses and 5 double-story townhouses with 3 bedroom units. One single-story common area houses a community center and laundry area. Figure 2 includes a site plan and area of potential effect for this housing project. The property is located in two different State land use designations. The west half of the property is located in the "Urban District," and the east half of the property is located in the "Agricultural District." The parcel is zoned "Interim" by the county.



Source: State of Hawaiʻi GIS Data and Google Earth Pro - 1/12/13

HPHA No. 1088 - Kahale Mua - Federal (AMP 39)

Figure 1 - Project Location Map

Maunaloa, Molokaʻi

1,500 FT

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1088 - Kahale Mua - Federal (AMP 39)

Figure 2 - Project Site & APE Map

Maunaloa, Moloka'i

40 FEET

HHF PLANNERS
places for people

AMP 37

#1051 HALE ALOHA O`PUNA

16-189 Pili Mua St. / Kea'au, Hawai'i / 96749

I. PROJECT INFORMATION

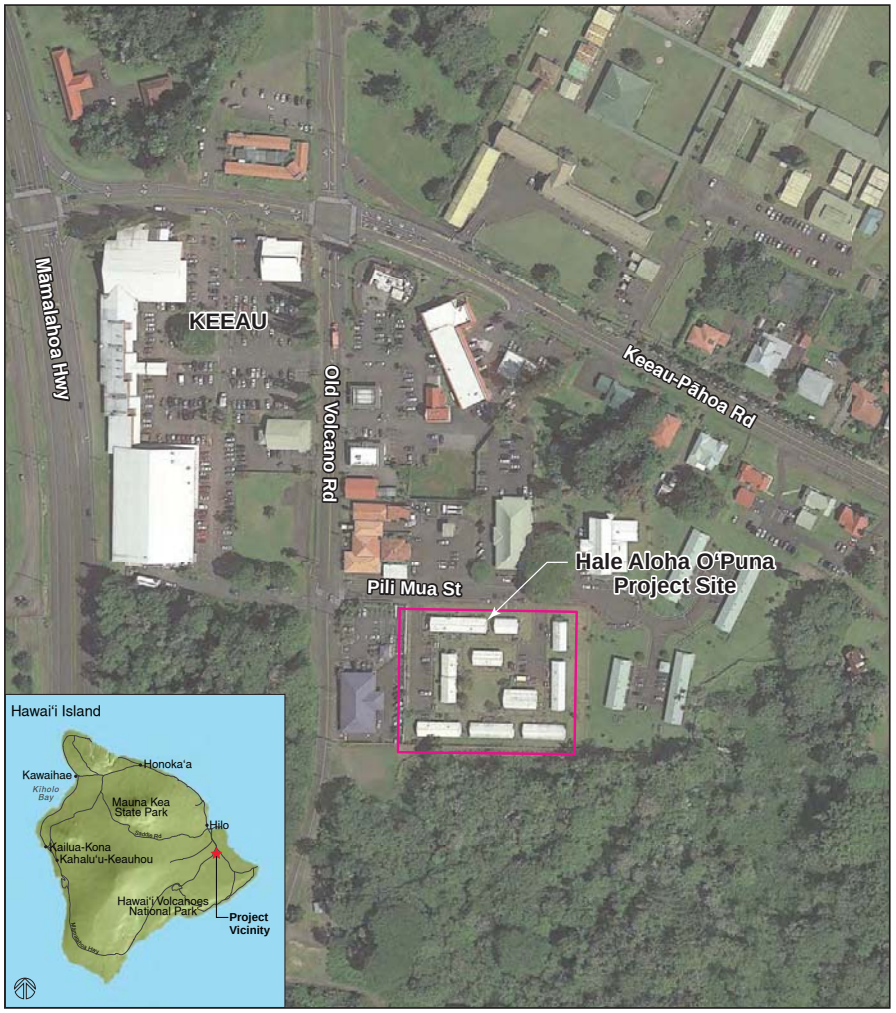
Tax Map Key: (3) 1-6-143: 035

Occupancy Year: 1977

Acres:	1.9	**Buildings:**	**10**
		Units:	**40**
Studios:	24	1-Bedroom:	16
2-Bedrooms:	0	3-Bedrooms:	0
4-Bedrooms:	0	5-Bedrooms:	0

The Hale Aloha O'Puna elderly housing project is located in the Kea'au community of the Puna district on the island of Hawai'i. Kea'au is a rural community situated approximately eight miles to the south of Hilo. The housing site is positioned along Pili Mua Street generally between Māmalahoa Highway and Kea'au-Pāhoa Road. A project location map (Figure 1) is provided. The housing project site is bordered by Pili Mua Street to the northeast and Old Volcano Road to the north.

Hale Aloha O'Puna was constructed in 1977 and has a street address of 16-189 Pili Mua Street. The property consists of 1.9 acres, and it is identified as Tax Map Key (TMK) No. (3) 1-6-143: 035. The housing project is comprised of nine single-story apartment buildings with studio and one-bedroom units, and a community building. Figure 2 includes a Site Plan and area of potential effect for this housing project. The State's land use designation for the property is the "Urban District." The County's zoning for the parcel is RS-15 Single-Family Residential District.



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

HPHA No. 1051 - Hale Aloha O'Puna (AMP 37)

Figure 1 - Project Location Map

Keeau, Hawaii Island

0 150 300 FEET

HHF PLANNERS places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1051 - Hale Aloha O'Puna (AMP 37)

Figure 2 - Project Site & APE Map

Keeau, Hawaii Island

40 FEET

HHF PLANNERS places for people

AMP 46

#1031 HALE HAUʻOLI

45-540 Koniaka Pl. / Honokaʻa, Hawaiʻi / 96727

I. PROJECT INFORMATION

Tax Map Key: (3) 4-5-010:078

Occupancy Year: 1970

Acres:	2.43	**Buildings:**	3
		Units:	40
Studios:	24	1-Bedroom:	16
2-Bedrooms:	0	3-Bedrooms:	0
4-Bedrooms:	0	5-Bedrooms:	0

The Hale Hauʻoli housing project is located in the Honokaʻa community on the island of Hawaiʻi. Honokaʻa is situated in the Hamakua District east of Waimea. The housing site is bordered to the south by Akia Street and Honokaʻa Park. A project location map (Figure 1) is provided.

Hale Hauʻoli was first occupied in 1970 and has a street address of 45-540 Koniaka Place. The property consists of 2.43 acres and is identified as Tax Map Key (TMK) No. (3) 4-5-010:078. The housing project is comprised of ten single-story townhouses with studios and one bedroom units. One single-story common area building serves as a Community Center. Figure 2 includes a site plan and area of potential effect for this housing project. The State land use designation for the property is the "Urban District." The County zoning for the parcel is (A-1a) Agricultural District.

Source: State of Hawaiʻi GIS Data and Google Earth Pro - 1/12/13

HPHA No. 1031 - Hale Hauʻoli (AMP 46)

Figure 1 - Project Location Map

Honokaʻa, Hawaiʻi Island

500 FT

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No.1031 - Hale Hau'oli (AMP 46)

Figure 2 - Project Site & APE Map

Honoka'a, Hawai'i Island

40 FEET

HHF PLANNERS
places for people

AMP 43

#1053 HALE HO'OKIPA

81-1038 Nani Kūpuna Pl. / Kealakehkua, Hawai'i / 96750

I. PROJECT INFORMATION

Tax Map Key: (3) 8-1-002:049

Occupancy Year:	1976		
Acres:	6.11	**Buildings:**	8
		Units:	32
Studios:	20	1-Bedroom:	12
2-Bedrooms:	0	3-Bedrooms:	0
4-Bedrooms:	0	5-Bedrooms:	0

The Hale Ho'okipa elderly housing project is located in the community of Kealakekua on the island of Hawai'i. Kealakekua is a rural community situated in the South Kona District. The housing site is positioned east of Māmalahoa Highway and the Nani Olu housing project with access provided off of Nani Kupuna Place. A project location map (Figure 1) is provided.

Hale Ho'okipa was first occupied in 1976 and has a street address of 81-1038 Nani Kupuna Place. The property consists of 6.11 acres and is identified as Tax Map Key (TMK) No. (3) 8-1-002:049. The housing project is comprised of 7 single-story apartment buildings with studio and 1-bedroom units. One single-story common area houses a community center. Figure 2 includes a Site Plan and area of potential effect for this housing project. The State's land use designation for the property is the "Urban District," and the County's zoning for the parcel is RS-15 Single-Family Residential District.

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

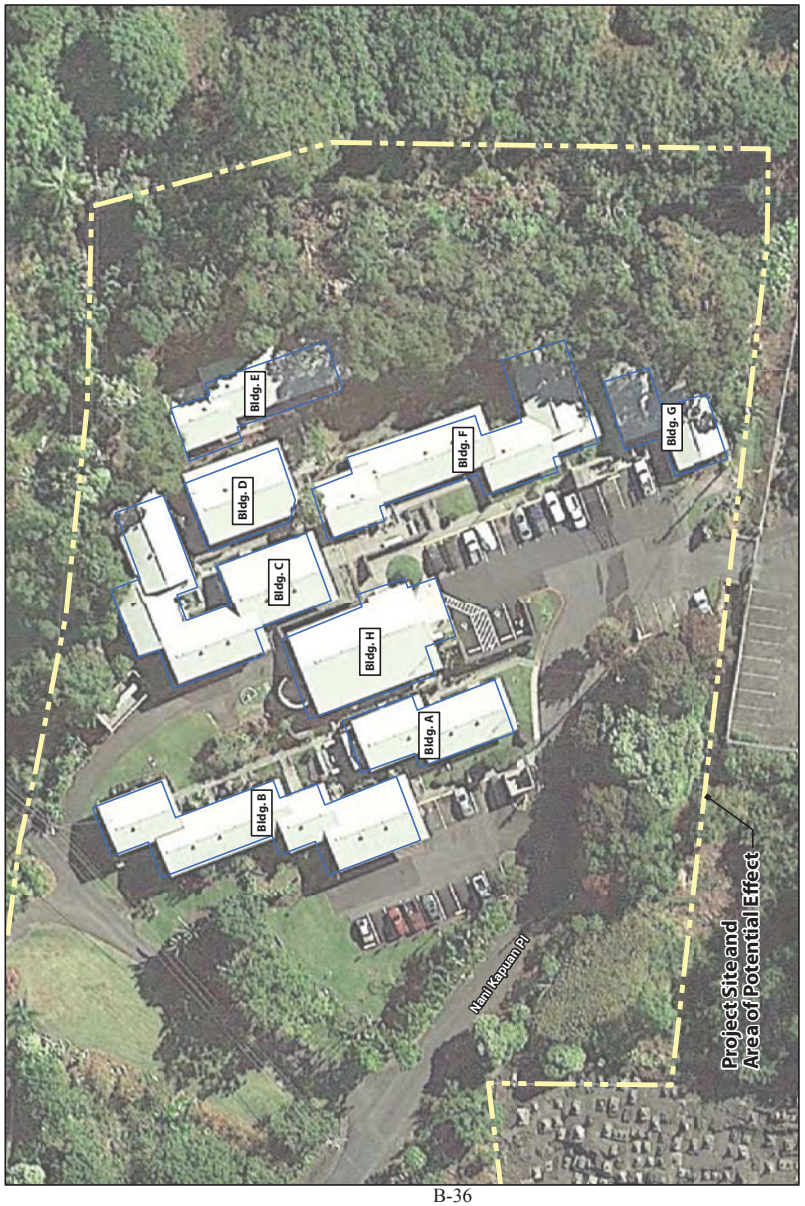
HPHA No. 1053 - Hale Ho'okipa (AMP 43)

Figure 1 - Project Location Map

Kealakekua, Hawai'i Island

1,500 FT

HHF PLANNERS
places for people



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No.1053 - Hale Ho'okipa (AMP 43)

Figure 2 - Project Site & APE Map

Kealakekua, Hawai'i

40 FEET

HHF PLANNERS
places for people

AMP 37

#1052 HALE OLALOA

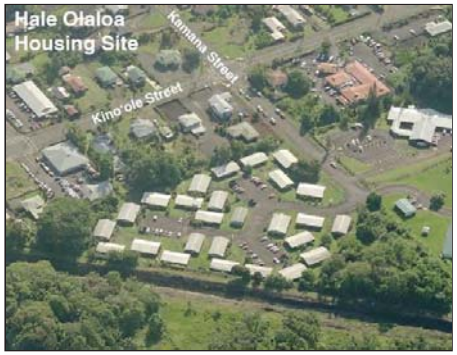
144 Kamana Street / Hilo, Hawai'i / 96720

I. PROJECT INFORMATION

Tax Map Key: (3) 2-4-056:021

Occupancy Year: 1976

Acres:	6.51	**Buildings:**	26
		Units:	50
Studios:	30	1-Bedroom:	20
2-Bedrooms:	0	3-Bedrooms:	0
4-Bedrooms:	0	5-Bedrooms:	0



The Hale Olaloa housing project is located in the Waiākea neighborhood of Hilo on the island of Hawai'i. Waiākea is a suburban community located to the east of downtown Hilo. The housing site is situated along Kamana Street, and bordered to the east by Waiākea Stream. A project location map (Figure 1) is provided.

Hale Olaloa was first occupied in 1976 and has a street address of 144 Kamana Street. The property consists of 6.51 acres, and it is identified as Tax Map Key (TMK) No. (3) 2-4-056:021. The housing project is comprised of 25 single-story duplexes with 50 studio and one-bedroom units and one single-story community building. Figure 2 includes a Site Plan and area of potential effect for this housing project. The State land use designation for the property is the "Urban District." The County zoning for the parcel is RS-10 Single-Family Residential District.

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

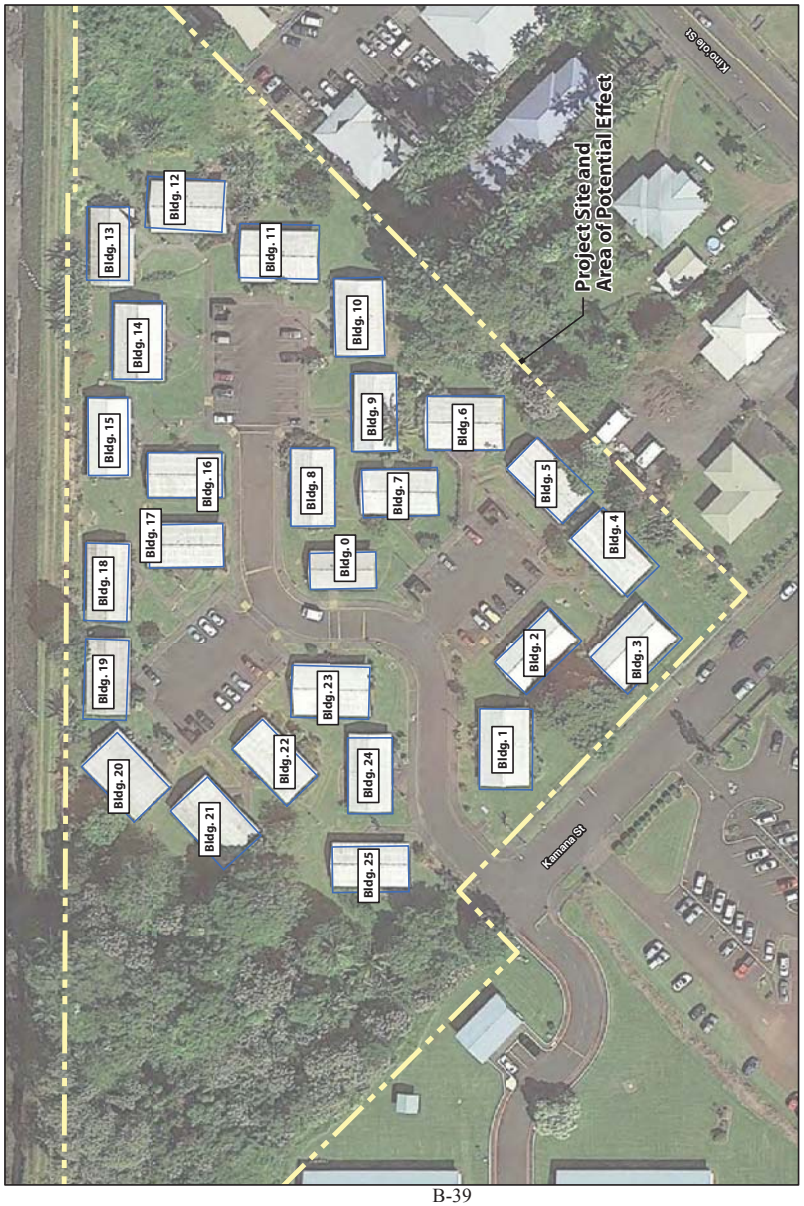
HPHA No. 1052 - Hale Olaloa (AMP 37)

Figure 1 - Project Location Map

Hilo, Hawai'i Island

1,500 FT

HHF PLANNERS
places for people



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1052 - Hale Olaloa (AMP 37)

Figure 2 - Project Site & APE Map

Hilo, Hawai'i Island

60 FEET

HHF PLANNERS
places for people

HAWAI'I PUBLIC HOUSING AUTHORITY
Environmental Reviews 2015

AMP 43

#1061 KA HALE KAHALU'U

78-6725 Makolea St. / Kailua-Kona, Hawai'i / 96740

I. PROJECT INFORMATION

Tax Map Key: (3) 7-8-010:070

Occupancy Year: 1981

Acres:	3.37	**Buildings:**	4
		Units:	50
Studios:	0	1-Bedroom:	8
2-Bedrooms:	12	3-Bedrooms:	22
4-Bedrooms:	8	5-Bedrooms:	0

The Ka Hale Kahalu'u housing project is located in the Kahalu'u community of the North Kona District on the island of Hawai'i. Kahalu'u is situated south of Kailua-Kona along Ali'i Drive. The housing site is positioned east of Kahalu'u Beach Park and Ali'i Drive with access provided by Mākole'ā Street. A project location map (Figure 1) is provided.

Ka Hale Kahalu'u was first occupied in 1981 and has a street address of 78-6725 Mākole'ā Street. The property consists of 3.37 acres and is identified as Tax Map Key (TMK) No. (3) 7-8-010:070. The housing project is comprised of 4 double-story apartment buildings with 1, 2, 3, and 4-bedroom units. One single-story common area houses a community center. Figure 2 includes a Site Plan and area of potential effect for this housing project. The State's land use designation for the property is the "Urban District." The County's zoning for the parcel is RM-3 Multiple-Family Residential District.

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

HPHA No. 1061 - Ka Hale Kahalu'u (AMP 43)

Figure 1 - Project Location Map

Kailua-Kona, Hawai'i Island

1,000 FT

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No.1061 - Ka Hale Kahalu'u (AMP 43)

Figure 2 - Project Site & APE Map

Kailua-Kona, Hawai'i Island

50 FEET

HHF PLANNERS
places for people

AMP 43

#1032 KAIMALINO

74-5060 Kealaka'a St. / Kailua-Kona, Hawai'i / 96740

I. PROJECT INFORMATION

Tax Map Key: (3) 7-4-017:029

Occupancy Year: 1971

Acres:	5.53	**Buildings:**	12
		Units:	50
Studios:	0	1-Bedroom:	0
2-Bedrooms:	0	3-Bedrooms:	50
4-Bedrooms:	0	5-Bedrooms:	0

The Kaimalino housing project is located in the Kealakehe community of the North Kona District on the island of Hawai'i. Kealakehe is situated north of Kailua-Kona along Palani Road. The housing site is positioned north of Kealakehe Elementary School and south of the Kealakehe housing project with access provided off of Kealaka'a Street. A project location map (Figure 1) is provided.

Kaimalino was constructed in 1971 and has a street address of 74-5060 Kealaka'a Street. The property consists of 5.53 acres and is identified as Tax Map Key (TMK) No. (3) 7-04-017: 029. The housing project is comprised of 7 single-story townhouses and 4 double-story apartment buildings with 1-, 2-, 3-, and 4-bedroom units. One single-story common area houses a community center. Figure 2 includes a Site Plan and area of potential effect for this housing project. The State's land use designation for the property is the "Urban District." The County's zoning for the parcel is RM-5 Multiple-Family Residential District.

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

HPHA No. 1032 - Kaimalino (AMP 43)

Figure 1 - Project Location Map

Kailua-Kona, Hawai'i Island

1,500 FT

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1032 - Kaimalino (AMP 43)

Figure 2 - Project Site & APE Map

Kailua-Kona, Hawai'i Island

67 FEET

HHF PLANNERS
places for people

HAWAI'I PUBLIC HOUSING AUTHORITY
Environmental Reviews 2015

AMP 37

#1097 KAUHALE 'O HANAKAHI

19 Pamala Place / Hilo, Hawai'i / 96720

I. PROJECT INFORMATION

Tax Map Key: (3) 2-4-052:001

Occupancy Year: 1997

Acres:	3.2	**Buildings:**	6
		Units:	20
Studios:	0	1-Bedroom:	0
2-Bedrooms:	0	3-Bedrooms:	20
4-Bedrooms:	0	5-Bedrooms:	0

The Kauhale 'O Hanakahi housing project is located in the Waiākea neighborhood of Hilo on the island of Hawai'i. Waiākea is a suburban community located to the east of downtown Hilo. The housing site is positioned along Pamala Place and is bordered to the east by Waiākea Elementary School. A project location map (Figure 1) is provided.

Kauhale 'O Hanakahi was first occupied in 1997 and has a street address of 19 Pamala Place. The property consists of 3.2 acres, and it is identified as Tax Map Key (TMK) No. (3) 2-04-052:001. The housing project is comprised of five two-story duplexes with three-bedroom units and one single-story community building. Figure 2 includes a site plan and area of potential effect for this housing project. The State land use designation for the vast majority of the property is in the "Urban District," and the eastern border of the property falls in the "Agricultural District." The County zoning for the parcel is RD 3.75 Double-Family Residential District.

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

HPHA No. 1097 - Kauhale 'O Hanakahi (AMP 37)

Figure 1 - Project Location Map

Hilo, Hawai'i Island

2,000 FT

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1097 - Kauhale 'O Hanakahi (AMP 37)

Figure 2 - Project Site & APE Map

Hilo, Hawai'i Island

50 FEET

HHF PLANNERS
places for people

HAWAI'I PUBLIC HOUSING AUTHORITY
Environmental Reviews 2015

AMP 46

#1097 KE KUMU 'EKOLU

68-3385 Ke Kumu Pl. / Waikoloa, Hawai'i / 96738

I. PROJECT INFORMATION

Tax Map Key: (3) 6-8-042: 027

Occupancy Year: 1997

Acres:	6.47	**Buildings:**	**3**
		Units:	**20**
Studios:	0	1-Bedroom:	0
2-Bedrooms:	0	3-Bedrooms:	20
4-Bedrooms:	0	5-Bedrooms:	0

The Ke Kumu 'Ekolu housing project is located in the Waikoloa community on the island of Hawai'i. Waikoloa is situated in the South Kohala District southwest of Waimea. The housing site is positioned north of Waikoloa Elementary School and adjacent to the Ke Kumu 'Elua state housing project. A project location map (Figure 1) is provided.

Ke Kumu 'Ekolu was constructed in 1997 and has a street address of 68-3385 Ke Kumu Place. The property consists of 6.47 acres and is identified as Tax Map Key (TMK) No. (3) 6-8-042: 027. The housing project is comprised of 3 double-story townhouses with 3-bedroom units. Figure 2 includes a Site Plan and area of potential effect for this housing project. The State land use designation for the property is the "Urban District." The County zoning for the parcel is Single-Family Residential District (RS-10).

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

HPHA No. 1097 - Ke Kumu 'Ekolu (AMP 46)

Figure 1 - Project Location Map

Waikoloa, Hawai'i Island

1,000 FT

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No.1097 - Ke Kumu 'Ekolu (AMP 46)

Figure 2 - Project Site & APE Map

Waikoloa, Hawai'i Island

40 FEET

HHF PLANNERS
places for people

AMP 43

#1070 KEALAKEHE

74-991 Manawale'a St. / Kailua-Kona, Hawai'i / 96740

I. PROJECT INFORMATION

Tax Map Key: (3) 7-4-017:058

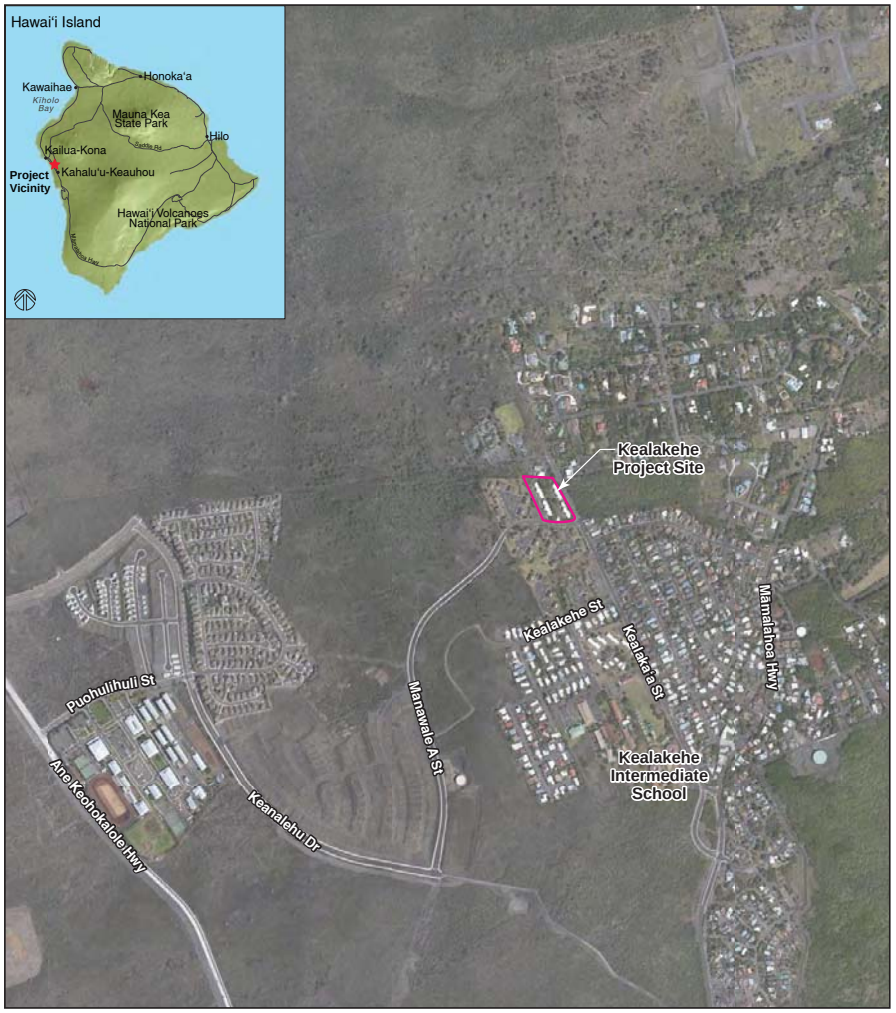
Occupancy Year: 1985

Acres:	3.29	**Buildings:**	5
		Units:	48
Studios:	0	1-Bedroom:	16
2-Bedrooms:	16	3-Bedrooms:	16
4-Bedrooms:	0	5-Bedrooms:	0

The Kealakehe housing project is located in the Kealakehe community of the North Kona District on the island of Hawai'i. The community is situated north of Kailua-Kona along Palani Road. The housing site is positioned north of the Kaimalino housing project with access provided from Manawale'a Street. A project location map (Figure 1) is provided.

]

Kealakehe was first occupied in 1985 and has a street address of 74-991 Manawale'a Street. The property consists of 3.29 acres and is identified as Tax Map Key (TMK) No. (3) 7-4-017:058. The housing project is comprised of 4 two-story townhouses with 1, 2, and 3-bedroom units. One single-story common area houses a laundry area. Figure 2 includes a site plan and area of potential effect for this housing project. The State's land use designation for the property is the "Urban District." The County's zoning for the parcel is RM-5 Multiple-Family Residential District.



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

HPHA No. 1070 - Kealakehe (AMP 43)

Figure 1 - Project Location Map

Kailua-Kona, Hawai'i Island

1,500 FT

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1070 - Kealakehe (AMP 43)

Figure 2 - Project Site & APE Map

Kailua-Kona, Hawai'i Island

50 FEET

HHF PLANNERS
places for people

AMP 43

#1063 NANI OLU

81-1011 Nani Kupuna Pl. / Kealakekua, Hawai'i / 96750

I. PROJECT INFORMATION

Tax Map Key: (3) 8-1-002:048

Occupancy Year: 1981

Acres:	0.99	**Buildings:**	4
		Units:	32
Studios:	0	1-Bedroom:	32
2-Bedrooms:	0	3-Bedrooms:	0
4-Bedrooms:	0	5-Bedrooms:	0

Nani Olu is an elderly housing project located in the Kealakekua community of the South Kona district on the island of Hawai'i. Kealakekua is a developed rural community situated south of rural residential Honalo and the more resort oriented Keauhou community, and north of the Captain Cook community. The housing project site is situated inland (mauka) of Māmalahoa Highway in the center of Kealakekua town. The Kona Community Hospital and Federal District courthouse are located in the vicinity to the north, and Konawaena High School is to the south. A project location map (Figure 1) is provided.

Nani Olu was initially occupied in 1981 and has a street address of 81-1011 Nani Kupuna Place. The property consists of 0.99 acres and is constructed on a parcel identified as Tax Map Key (TMK) No. (3) 8-1-002:048. The housing project is comprised of four two-story low-rise apartment buildings with a fifth building consisting of a community center. This elderly housing project has a total of 32 one-bedroom units. Figure 2 includes a Site Plan and area of potential effect for this housing project. The State's land use designation for the property is the "Urban District," and the County's zoning for the parcel is CV-10 Village Commercial District (minimum land area of 10,000 square feet).

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1063 - Nani Olu (AMP 43)

Figure 1 - Project Location Map

Kealakekua, Hawai'i Island

1,000 FT

HHF PLANNERS
places for people

HPHA No.1063 - Nani Olu (AMP 43)

Figure 2 - Project Site & APE Map

Kealakekua, Hawai'i Island

30 FEET

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

AMP 46

#1071 NOELANI I

65-1189 Opelo Road. / Kamuela, Hawai'i / 96743

I. PROJECT INFORMATION

Tax Map Key: (3) 6-5-009:025

Occupancy Year: 1983

Acres:	0.69	**Buildings:**	2
		Units:	19
Studios:	0	1-Bedroom:	7
2-Bedrooms:	12	3-Bedrooms:	0
4-Bedrooms:	0	5-Bedrooms:	0

The Noelani I housing project is located in the Kamuela community on the island of Hawai'i. Kamuela is situated in the South Kohala District northeast of Waikoloa. The housing site is positioned south of Kawaihae Avenue, north of Waikoloa Stream and adjacent to the Noelani II housing project. A project location map (Figure 1) is provided.

Noelani I was first occupied in 1983 and has a street address of 65-1189 Opelo Road. The property consists of 0.69 acres and is identified as Tax Map Key (TMK) No. (3) 6-05-009: 025. The housing project is comprised of two double-story apartment buildings with 1- and 2-bedroom units. Figure 2 includes a site plan and area of potential effect for this housing project. The State land use designation for the property is the "Urban District." The County zoning for the parcel is CV-7.5 Village Commercial District.

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

HPHA No. 1071 - Noelani I (AMP 46)

Figure 1 - Project Location Map

Kamuela, Hawai'i Island

1,000 FT

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1071/1078 - Noelani I/II (AMP 46)

Figure 2 - Project Site & APE Map

Kamuela, Hawai'i Island

30 FEET

HHF PLANNERS
places for people

AMP 46

#1078 NOELANI II

65-1191 Opelo Road. / Kamuela, Hawai'i / 96743

I. PROJECT INFORMATION

Tax Map Key: (3) 6-5-009:026

Occupancy Year: 1988

Acres:	0.70	**Buildings:**	2
		Units:	24
Studios:	0	1-Bedroom:	0
2-Bedrooms:	0	3-Bedrooms:	24
4-Bedrooms:	0	5-Bedrooms:	0

The Noelani II housing project is located in the Kamuela community on the island of Hawai'i. Kamuela is situated in the South Kohala District northeast of Waikoloa. The housing site is positioned south of Kawaihae Avenue, north of Waikoloa Stream and adjacent to the other Noelani I housing project. A project location map (Figure 1) is provided.

Noelani II was first occupied in 1988 and has a street address of 65-1191 Opelo Road. The property consists of 0.70 acres and is identified as Tax Map Key (TMK) No. (3) 6-05-009: 026. The housing project is comprised of 2 three-story apartment buildings with 24 three bedroom units. Figure 2 includes a Site Plan and area of potential effect for this housing project. The State land use designation for the property is the "Urban District." The County zoning for the parcel is CV-7.5 Village Commercial District.

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

HPHA No. 1078 - Noelani II (AMP 46)

Figure 1 - Project Location Map

Kamuela, Hawai'i Island

1,000 FT

HHF PLANNERS
places for people

HPHA No. 1071/1078 - Noelani I/II (AMP 46)

Figure 2 - Project Site & APE Map

Kamuela, Hawai'i Island

30 FEET

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

AMP 37

#1045 PĀHALA

96-1169 Hōlei St. / Pāhala, Hawai'i / 96777

I. PROJECT INFORMATION

Tax Map Key: (3) 9-6-017: 037

Occupancy Year: 1972

Acres:	1.44	**Buildings:**	**6**
		Units:	**24**
Studios:	16	1-Bedroom:	8
2-Bedrooms:	0	3-Bedrooms:	0
4-Bedrooms:	0	5-Bedrooms:	0

The Pāhala elderly housing project is located in the Pāhala community of the Ka'u district on the island of Hawai'i. Pāhala is a rural community located approximately 50 miles southwest from Hilo along Māmalahoa Highway. The housing site is bordered by Hōlei Street to the north, and 'Ōhi'a Street to the east. A project location map (Figure 1) is provided.

Pāhala was constructed in 1972 and has a street address of 96-1169 Hōlei Street. The property consists of 1.44 acres, and it is identified as Tax Map Key (TMK) No. (3) 9-6-017: 037. The housing project is comprised of five single-story apartment buildings with studio and one-bedroom units. There is also a single-story common area building that houses an administrative office, laundry area, and the community center. Figure 2 includes a Site Plan and area of potential effect for this housing project. The State's land use designation for the property is the "Urban District." The County's zoning for the majority of the parcel is RM-1.5 Multi-Family Residential District.

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1045 - Pāhala (AMP 37)

Figure 1 - Project Location Map

Pāhala, Hawai'i Island

1,000 FT

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1045 - Pāhala (AMP 37)

Figure 2 - Project Site & APE Map

Pāhala, Hawai'i Island

40 FEET

HHF PLANNERS
places for people

AMP 30

#1027 HALE LAULIMA

1184 Waimano Home Rd. / Pearl City, O'ahu, Hawai'i / 96782

I. PROJECT INFORMATION

Tax Map Key: (1) 9-7-094:025
Occupancy Year: 1981

Acres:	3.96	**Buildings:**	**10**
		Units:	36
Studios:	0	1-Bedroom:	0
2-Bedrooms:	20	3-Bedrooms:	16
4-Bedrooms:	0	5-Bedrooms:	0

The Hale Laulima housing project is located in the Pearl City district on the island of O'ahu. Pearl City is located between the residential communities of Waipio to the west, and 'Aiea to the east. The housing project site is situated off Waimano Home Road with access provided by Ho'omalu Street. The property is bordered by the Pearl City Bus Complex to the north, the Henry and Jeanette Weinberg Pearl City Complex to the east, and a residential area to the south. A project location map (Figure 1) is provided.

Hale Laulima was constructed in 1981 and has a street address of 1184 Waimano Home Road. This property consists of 3.96 acres, and it is identified as Tax Map Key (TMK) No. (1) 9-7-094:025. The housing project is comprised of nine 2-story townhome buildings providing a total of 36 housing units having a range of 2-bedrooms and 3-bedrooms per unit, and a one-story common area building which houses administrative offices and management operations. Figure 2 includes a Site Plan and area of potential effect for this housing project. The State's land use designation for the property is the "Urban District," and the City's zoning for the site is A-1 Low-Density Apartment.

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

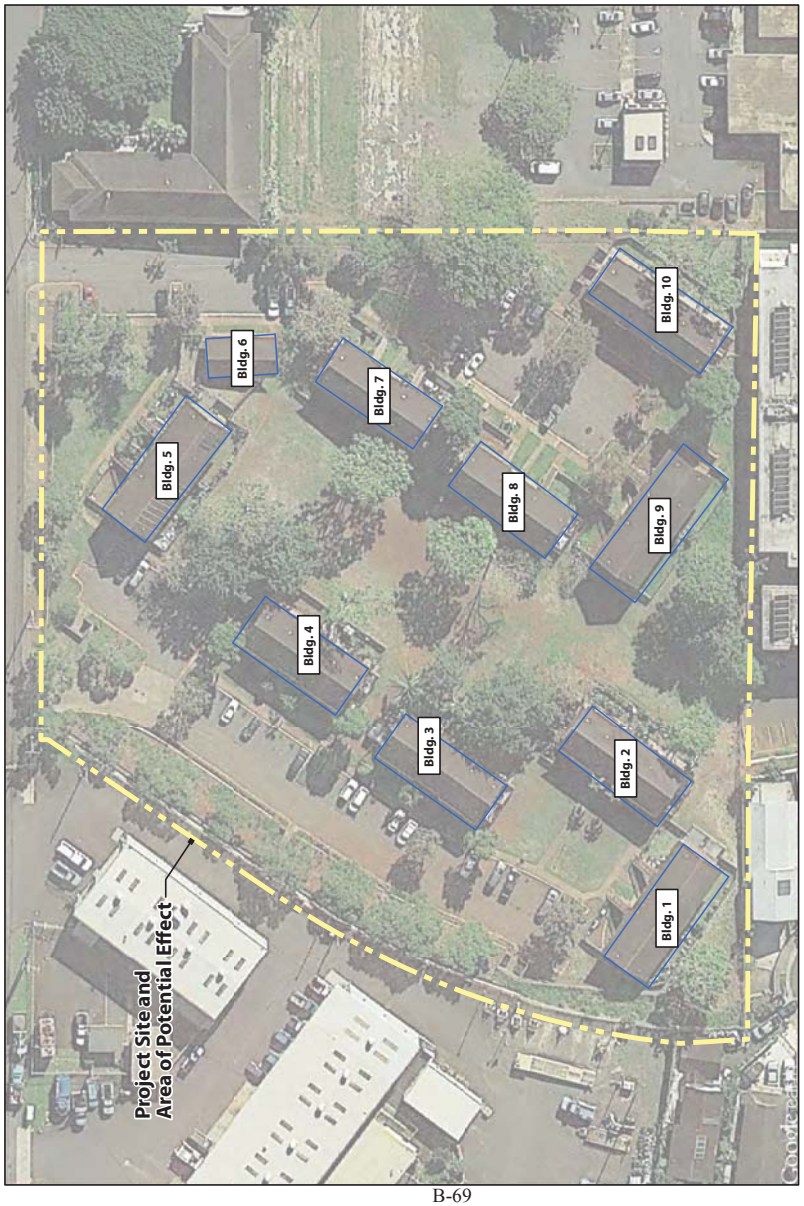
HPHA No. 1027 - Hale Laulima (AMP 30)

Figure 1 - Project Location Map

Pearl City, O'ahu

1,000 FT
FEET

HHF PLANNERS
places for people



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1027 - Hale Laulima (AMP 30)

Figure 2 - Project Site & APE Map

Pearl City, O'ahu

50 FEET

HHF PLANNERS
places for people

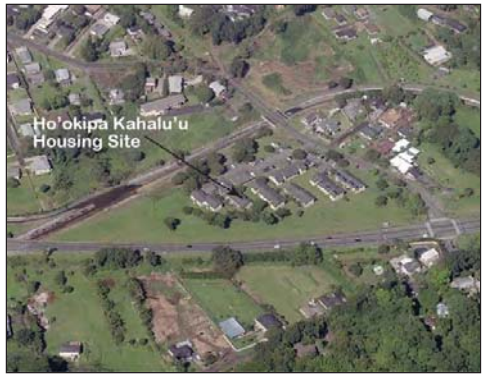
AMP 45

#1072 HO'OKIPA KAHALU'U

47-330 'Āhuimanu Road / Kāne'ohe, O'ahu, Hawai'i / 96744

I. PROJECT INFORMATION

Tax Map Key:	(1) 4-7-037: 016		
Occupancy Year:	1983		
Acres:	3.603	**Buildings:**	9
		Units:	56
Studios:	0	1-Bedroom:	8
2-Bedrooms:	32	3-Bedrooms:	16
4-Bedrooms:	0	5-Bedrooms:	0



The Ho'okipa Kahalu'u housing project is located in the 'Āhuimanu community of the Kāne'ohe district on the island of O'ahu. This community is located between the urbanized center of Kāne'ohe and the rural community of Kahalu'u. The housing project site is situated along Kahekili Highway at the intersection of 'Āhuimanu Road. The property is bordered by the highway to the east, 'Āhuimanu Road to the north, and the channelized 'Āhuimanu Stream in the rear of the property (west). A project location map (Figure 1) is provided.

Ho'okipa Kahalu'u was constructed in 1983 and has a street address of 47-330 'Āhuimanu Road. This property consists of 3.603 acres, and it is identified as Tax Map Key (TMK) No. (1) 4-7-037: 016. The housing project is comprised of 7 two-story townhome buildings providing a total of 56 housing units having a range of 1-bedroom up to 3-bedrooms per unit. There is also one community building and one storage building on site. Figure 2 includes a Site Plan and area of potential effect for this housing project. The State's land use designation for the property is the "Urban District", and the City's zoning for the site is R-10, Residential.

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

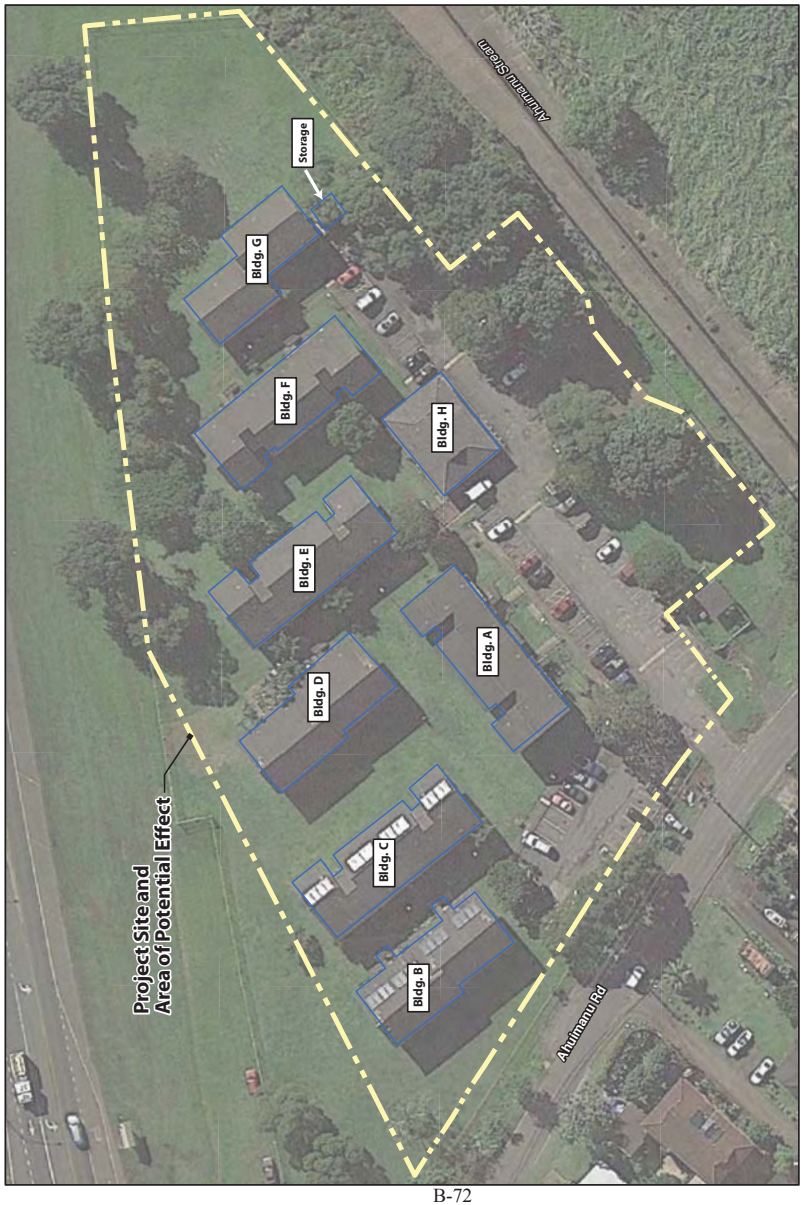
HPHA No. 1072 - Ho'okipa Kahalu'u (AMP 45)

Figure 1 - Project Location Map

Kāne'ohe, O'ahu

1,000 FT

HHF PLANNERS
places for people



Source: • State of Hawai'i GIS Data, Google Earth Pro - 1/12/2014

HPHA No. 1072 - Ho'okipa Kahalu'u (AMP 45)

Figure 2 - Project Site & APE Map

Kāne'ohe, O'ahu

0 25 50 FEET

HHF PLANNERS
places for people

AMP 34

#1062 KALĀKAUA HOMES

1545 Kalākaua Avenue / Honolulu, Oʻahu, Hawaiʻi / 96826

I. PROJECT INFORMATION

Tax Map Key: (1) 2-3-019:004

Occupancy Year:	1983		
Acres: 4.8		**Buildings:**	10
		Units:	221
Studios:	0	1-Bedroom:	127
2-Bedrooms:	58	3-Bedrooms:	36
4-Bedrooms:	0	5-Bedrooms:	0

A Green Physical Needs Assessment (GPNA) study was conducted for the Kalākaua Homes housing project in the year 2013 for the State of Hawaiʻi, Hawaiʻi Public Housing Authority (HPHA). The Kalākaua Homes housing project is located in the McCully-Moʻiliʻili community of the Honolulu district on the island of Oʻahu. McCully-Moʻiliʻili is located in urban Honolulu, north east of the Ala Moana Shopping Center. The housing project site is situated off of Kalākaua Avenue and is located on the same tax parcel as the Makua Aliʻi and Paoakalani housing projects. The property is located less than a quarter mile west from Washington Middle School. A project location map (Figure 1) is provided.

Kalākaua Homes was established in 1983 and has a street address of 1545 Kalākaua Avenue. This property consists of 4.8 acres, and it is identified as Tax Map Key (TMK) No. (1) 2-03-019:004. The housing project is comprised of 8 three-story townhome buildings (low-rise) and 1 ten-story mid-rise building providing a total of 221 housing units having a range of 1, 2, and 3-bedrooms per unit. One single-story common area building serves as a community center. Figure 2 includes a Site Plan and area of potential effect for this housing project. The State's land use designation for the property is the "Urban District," and the City's zoning for the site is A-3 High-density Apartment.

Source: State of Hawaiʻi GIS Data and Google Earth Pro - 1/12/13

HPHA No. 1062 - Kalākaua Homes (AMP 34)

Figure 1 - Project Location Map

Honolulu, Oʻahu

2,000 FT

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1062 - Kalākaua Homes (AMP 34)

Figure 2 - Project Site & APE Map

Honolulu, O'ahu

80 FEET

HHF PLANNERS
places for people

AMP 33

#1099 KAMEHAMEHA HOMES

1541 Haka Drive / Honolulu, O'ahu, Hawai'i / 96817

I. PROJECT INFORMATION

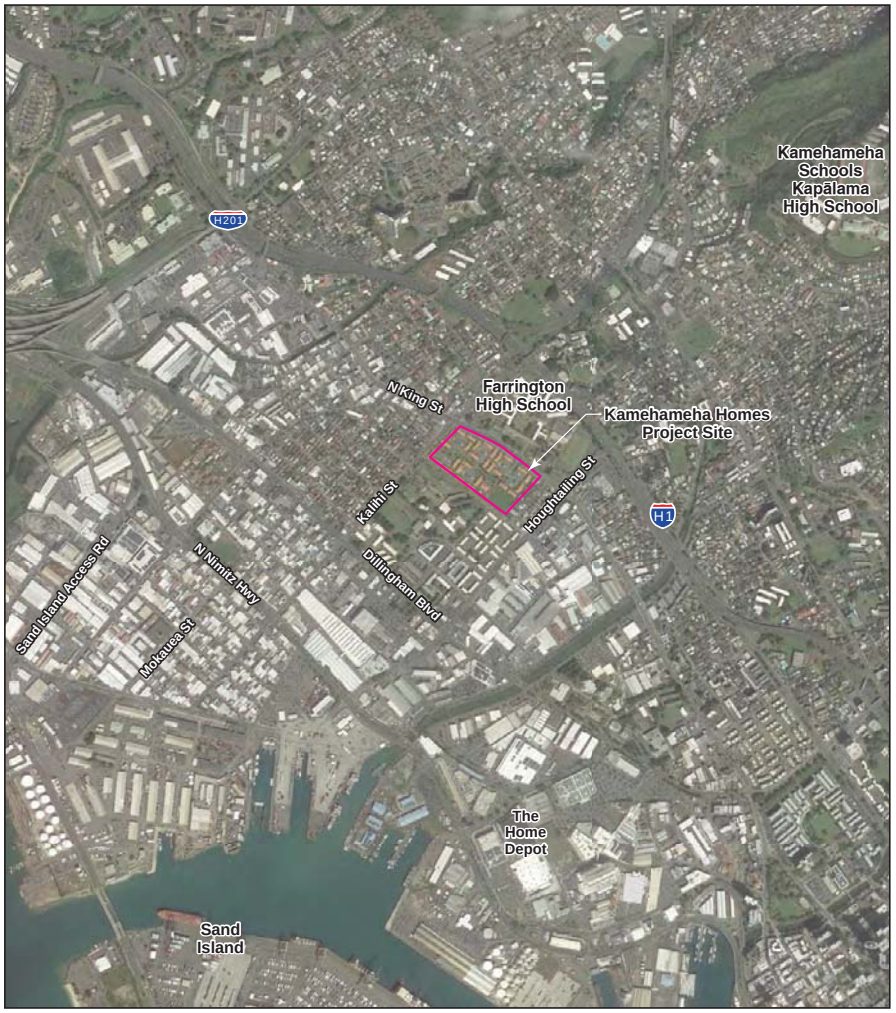
Tax Map Key: (1) 1-5-001:001

Occupancy Year: 1996

Acres:	16	**Buildings:**	29
		Units:	221
Studios:	0	1-Bedroom:	62
2-Bedrooms:	123	3-Bedrooms:	36
4-Bedrooms:	0	5-Bedrooms:	0

The Kamehameha Homes housing project is located in the Kalihi-Pālama district on the island of O'ahu. This community is located in the urbanized center of downtown Honolulu. The property is bordered by King Street to the north, Liliha Street to the west, and Kalākaua Middle School to the south. A project location map (Figure 1) is provided.

Kamehameha Homes was redeveloped in 1996 and has a street address of 1541 Haka Drive. This property consists of 16 acres, and it is identified as Tax Map Key (TMK) No. (1) 1-5-001:001. The housing project is comprised of 28 two-story townhome buildings providing a total of 221 housing units having a range of 1-bedroom up to 3-bedrooms per unit and one community building. Figure 2 includes a Site Plan and area of potential effect for this housing project. The State's land use designation for the property is the "Urban District," and the City's zoning for the site is A-1 Low-Density Apartment.



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

HPHA No. 1099 - Kamehameha Homes (AMP 33)

Figure 1 - Project Location Map

Honolulu, O'ahu

1,500 FT

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1099 - Kamehameha Homes (AMP 33)

Figure 2 - Project Site & APE Map

Honolulu, O'ahu

50 FEET

HHF PLANNERS
places for people

AMP 45

#1069 KĀNEʻOHE APARTMENTS

45-507 & 45-513 Pahia Rd. / Kāneʻohe, Oʻahu, Hawaiʻi / 96744

I. PROJECT INFORMATION

Tax Map Key: (1) 4-5-019:026

Occupancy Year:	1984		
Acres:	0.43	**Buildings:**	2
		Units:	24
Studios:	0	1-Bedroom:	5
2-Bedrooms:	19	3-Bedrooms:	0
4-Bedrooms:	0	5-Bedrooms:	0

The Kāneʻohe Apartments housing project is located in the Kāneʻohe community on the island of Oʻahu. Kāneʻohe is situated in Windward Oʻahu, to the west of Kailua and the Kāneʻohe Marine Corps Base. The housing site is positioned just west of Kamehameha Highway and along a drainage canal. Access is provided by Pahia Drive. A project location map (Figure 1) is provided.

The property consists of 0.43 acres, and is identified as Tax Map Key (TMK) No. (1) 4-5-019:026. The housing project is comprised of two low-rise apartment buildings with 1- and 2-bedroom units. Building A was constructed in 1965 and has a street address of 45-513 Pahia Road. Building B was constructed in 1972 and has a street address of 45-507 Pahia Road. Both buildings underwent a rehabilitation project completed in 1984, and thus 1984 is the current year of initial occupancy used by HPHA. Building A is comprised of both 1- and 2-bedroom units, and Building B only has 2-bedroom units. Figure 2 includes a Site Plan and area of potential effect for this housing project. The State's land use designation for the property is the "Urban District." The City's zoning for the parcel is A-2 Medium-Density Apartment.

Source: State of Hawaiʻi GIS Data and Google Earth Pro - 1/12/13

HPHA No. 1069 - Kāneʻohe Apartments (AMP 45)

Figure 1 - Project Location Map

Kāneʻohe, Oʻahu

1,500 FT

HHF PLANNERS
places for people

HPHA No. 1069 - Kāne'ohe Apartments (AMP 45)

Figure 2 - Project Site & APE Map

Kāne'ohe, O'ahu

20 FEET

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

AMP 49

#1056 KAUHALE NANI

310 North Cane Street / Wahiawā, O'ahu, Hawai'i / 96786

I. PROJECT INFORMATION

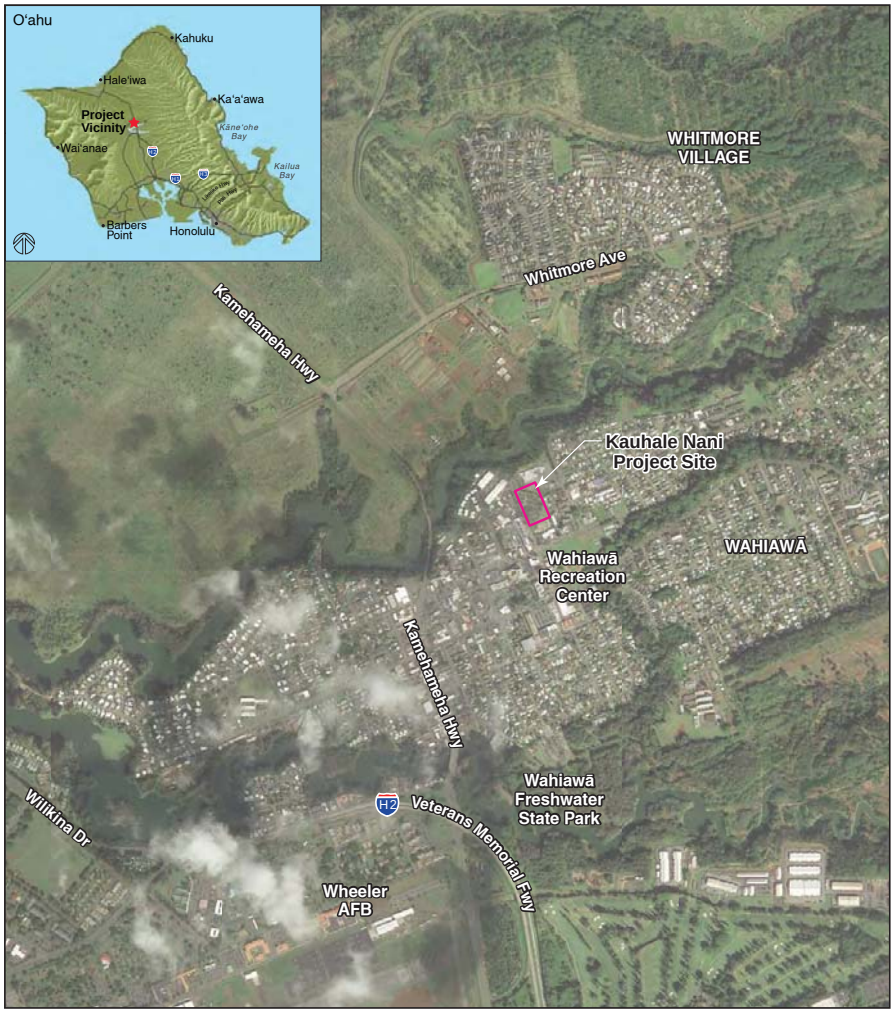
Tax Map Key: (1) 7-4-007:014

Occupancy Year: 1980

Acres:	3.46	**Buildings:**	10
		Units:	50
Studios:	0	1-Bedroom:	14
2-Bedrooms:	16	3-Bedrooms:	20
4-Bedrooms:	0	5-Bedrooms:	0

The Kauhale Nani housing project is located in the Wahiawā community on the island of O'ahu. Wahiawā is situated in Central O'ahu to the east of Schofield Barracks Army Base. The housing project site is situated along North Cane Street to the north of Wahiawā District Park and to the east of the Wahiawā Terrace housing project. A project location map (Figure 1) is provided.

Kauhale Nani was constructed in 1980 and has a street address of 310 North Cane Street. The property consists of 3.46 acres, and it is identified as Tax Map Key (TMK) No. (1) 7-4-007:014. The housing project consists of nine 1- and 2-story townhouses with a range of one, two, and three-bedrooms per unit. An additional single-story Common Building serves as a community center. Figure 2 includes a site plan and area of potential effect for this housing project. The State's land use designation for the property is the "Urban District." The City's zoning for the parcel is A-2 Medium-Density Apartment.



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

HPHA No. 1056 - Kauhale Nani (AMP 49)

Figure 1 - Project Location Map

3/3/2014

Wahiawā, O'ahu

2,000 FT

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1056 - Kauhale Nani (AMP 49)

Figure 2 - Project Site & APE Map

Wahiawā, O'ahu

40 FEET

HHF PLANNERS
places for people

AMP 45

#1090 KAUHALE 'OHANA

41-1260 Kalaniana'ole Highway / Waimānalo, O'ahu, Hawai'i / 96795

I. PROJECT INFORMATION

Tax Map Key: (1) 4-01-009: 286

Occupancy Year:	1995		
Acres:	2.52	**Buildings:**	**5**
		Units:	25
Studios:	0	1-Bedroom:	0
2-Bedrooms:	0	3-Bedrooms:	25
4-Bedrooms:	0	5-Bedrooms:	0

The Kauhale 'Ohana housing project is located in the Waimānalo community on the island of O'ahu. Waimānalo is situated in the eastern most end of Windward O'ahu, east of Kailua, and north of Hawai'i Kai.

The housing site is situated inland (south) of Kalaniana'ole Highway on property positioned between Waimānalo Elementary and Intermediate School and Waimānalo District Park. As a result, vehicle access to the housing site is off of a driveway from the highway leading to the district park. A residential subdivision is located immediately east of the housing project site, Bellows Air Force Station is to the north along with Waimānalo Bay State Recreational Area across the highway. An unlined drainageway runs along the project site's southern boundary. A project location map (Figure 1) is provided.

The property consists of 2.52 acres, and is identified as Tax Map Key (TMK) No. (1) 4-01-009: 286. The housing project was completed in 1995, and is comprised of five two-story low-rise townhome buildings with 3-bedroom units. Figure 2 includes a Site Plan and area of potential effect for the Kauhale 'Ohana housing project. The State's land use designation for the property is the "Urban District." The City's zoning for the parcel is R-5, Residential District.

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

HPHA No. 1090 - Kauhale 'Ohana (AMP 45)

Figure 1 - Project Location Map

Waimānalo, O'ahu

1,500 FT

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1090 - Kauhale 'Ohana (AMP 45)

Figure 2 - Project Site & APE Map

Waimānalo, O'ahu

40 FEET

HHF PLANNERS
places for people

AMP 44

#1091 KAU'IOKALANI

85-658 Farrington Hwy. / Wai'anae, O'ahu, Hawai'i / 96792

I. PROJECT INFORMATION

Tax Map Key: (1) 8-5-028:045

Occupancy Year:	1995		
Acres:	4.04	**Buildings:**	13
		Units:	50
Studios:	0	1-Bedroom:	0
2-Bedrooms:	0	3-Bedrooms:	50
4-Bedrooms:	0	5-Bedrooms:	0

The Kau'iokalani housing project is located in the Wai'anae community on the island of O'ahu. Wai'anae is situated between the communities of Mākaha to the North and Ma'ili to the south. The housing site is positioned southeast of Wai'anae Intermediate School with access provided by Kau'iokalani Place. A project location map (Figure 1) is provided.

The Kau'iokalani housing project was constructed in 1995 and has a street address of 85-658 Farrington Highway. This property consists of 4.04 acres, and it is identified as Tax Map Key (TMK) No. (1) 8-5-028:045. The housing project is comprised of 12 two-story townhouses with 3-bedroom units and one single-story common area building that serves as a community center. Figure 2 includes a Site Plan and area of potential effect for this housing project. The State's land use designation for the property is the "Urban District." The City's zoning for the parcel is R-5 Residential.

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

HPHA No. 1091 - Kau'iokalani (AMP 44)

Figure 1 - Project Location Map

Wai'anae, O'ahu

1,500 FT

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1091 - Kau'iokalani (AMP 44)

Figure 2 - Project Site & APE Map

Wai'anae, O'ahu

50 FEET

HHF PLANNERS
places for people

AMP 49

#1050 KUPUNA HOME OʻWAIALUA

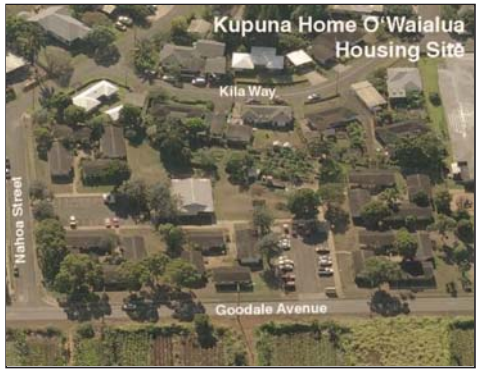
67-088 Goodale Avenue / Waialua, Oʻahu, Hawaiʻi / 96791

I. PROJECT INFORMATION

Tax Map Key: (1) 6-7-016:028

Occupancy Year: 1977

Acres:	3.27	**Buildings:**	**21**
		Units:	**40**
Studios:	24	1-Bedroom:	16
2-Bedrooms:	0	3-Bedrooms:	0
4-Bedrooms:	0	5-Bedrooms:	0



The Kupuna Home OʻWaialua elderly housing project is located in the Waialua community on the island of Oʻahu. Waialua is located between the communities of Mokulēʻia to the west and Haleʻiwa to the east. The housing project site is bordered by Goodale Avenue to the east and Nahoa Avenue to the north. A project location map (Figure 1) is provided.

Kupuna Home OʻWaialua was first occupied in 1977 and has a street address of 67-088 Goodale Avenue. The property consists of 3.27 acres, and it is identified as Tax Map Key (TMK) No. (1) 6-7-016:028. The housing project consists of 20 single-story, studio and one-bedroom duplexes. One additional single-story common Building and a community garden is provided for residents on site. Figure 2 includes a site plan and area of potential effect for this housing project. The State's land use designation for the property is the "Urban District." The City's zoning for the parcel is R-5 Residential.

Source: State of Hawaiʻi GIS Data and Google Earth Pro - 1/12/13

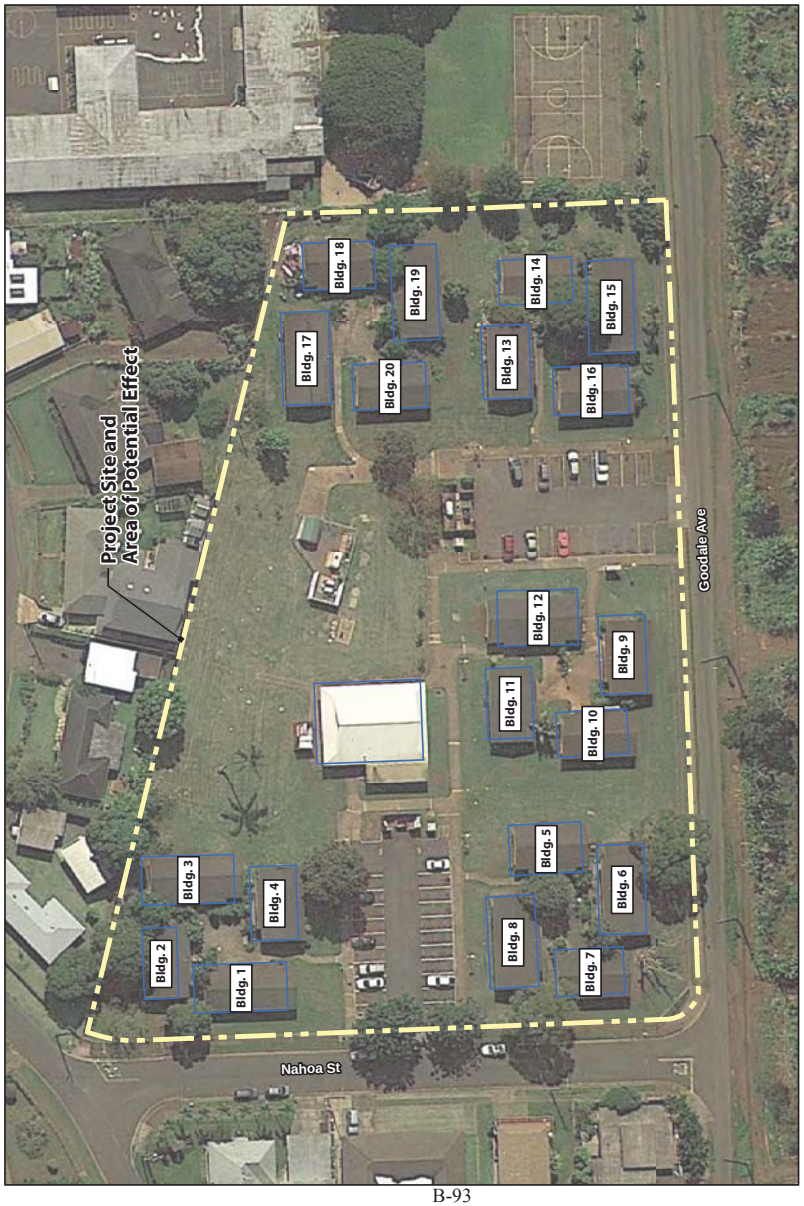
HPHA No. 1050 - Kupuna Home OʻWaialua (AMP 49)

Figure 1 - Project Location Map

Waialua, Oʻahu

2,000 FT

HHF PLANNERS
places for people



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1050 - Kupuna Home O'Waialua (AMP 49)

Figure 2 - Project Site & APE Map

Waialua, O'ahu

50 FEET

HHF PLANNERS
places for people

AMP 35

#1046 MAKAMAE

21 S. Kuakini St. / Honolulu, O'ahu, Hawai'i / 96813

I. PROJECT INFORMATION

Tax Map Key: (1) 2-2-001:020

Occupancy Year: 1971

Acres:	1.08	**Buildings:**	1
		Units:	124
Studios:	108	1-Bedroom:	16
2-Bedrooms:	0	3-Bedrooms:	0
4-Bedrooms:	0	5-Bedrooms:	0

The Makamae elderly housing project is located in the Nu'uanu community of urban Honolulu on the island of O'ahu. Nu'uanu is situated northeast of Downtown Honolulu. The housing site is bordered by Kuakini Street to the northeast, and access is provided from Nu'uanu Avenue. The property is located directly across Kuakini Street from Kawānanakoa Middle School and Neighborhood Park. A project location map (Figure 1) is provided.

Makamae was established in 1971 and has a street address of 21 S. Kuakini Street. The property consists of 1.08 acres, and it is identified as Tax Map Key (TMK) No. (1) 2-2-001:020. The housing project is comprised of a single four-story mid-rise apartment building with both studio and one-bedroom units. Figure 2 includes a Site Plan and area of potential effect for this housing project. The State's land use designation for the property is the "Urban District." The City's zoning for the majority of the parcel is A-1 Low-Density Apartment, however the driveway fronting Nu'uanu Avenue falls within the B-1 Neighborhood Business District.

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

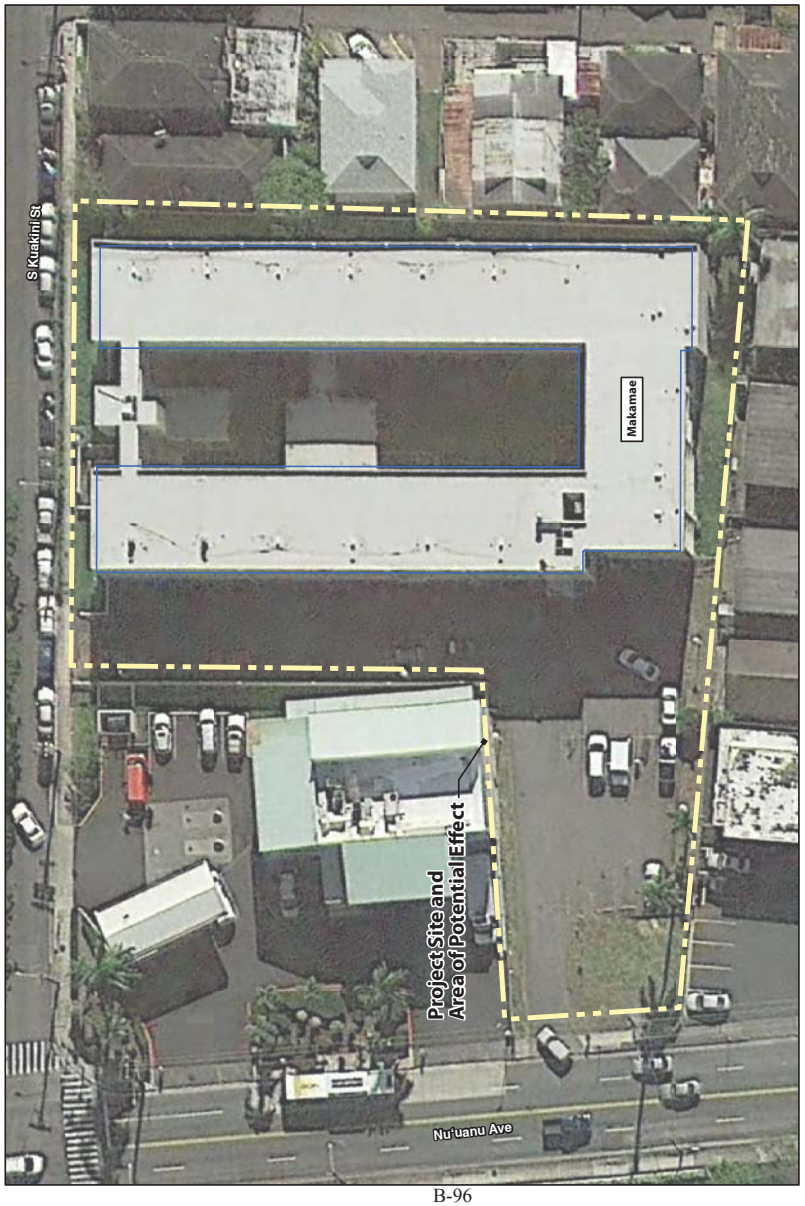
HPHA No. 1046 - Makamae (AMP 35)

Figure 1 - Project Location Map

Honolulu, O'ahu

1,500 FT

HHF PLANNERS
places for people



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1046 - Makamae (AMP 35)

Figure 2 - Project Site & APE Map

Honolulu, O'ahu

30 FEET

HHF PLANNERS
places for people

AMP 34

#1036 PAOAKALANI

1583 Kalākaua Avenue / Honolulu, Oʻahu, Hawaiʻi / 96826

I. PROJECT INFORMATION

Tax Map Key: (1) 2-3-019:004

Occupancy Year:	1970		
Acres:	1.8	**Buildings:**	1
		Units:	151
Studios:	90	1-Bedroom:	60
2-Bedrooms:	0	3-Bedrooms:	1
4-Bedrooms:	0	5-Bedrooms:	0

The Paoakalani housing project is located in the McCully-Moʻiliʻili community of the Honolulu district on the island of Oʻahu. McCully-Moʻiliʻili is located in urban Honolulu, north east of Ala Moana Shopping Center. The housing project site is situated off of Kalākaua Avenue and is located on the same tax parcel as the Kalākaua Homes and Makua Aliʻi housing projects. The property is located less than a quarter mile west from Washington Middle School. A project location map (Figure 1) is provided.

Paoakalani was constructed in 1967 and has a street address of 1583 Kalākaua Avenue. This property consists of 1.8 acres, and it is identified as Tax Map Key (TMK) No. (1) 2-03-019:004. The housing project is comprised of a single 16-story high-rise apartment building with 90 studio units, 60 one-bedroom units, and 1 three-bedroom unit for live-in maintenance staff. Figure 2 includes a Site Plan and area of potential effect for this housing project. The State's land use designation for the property is the "Urban District," and the City's zoning for the site is A-3 High-Density Apartment.

Source: State of Hawaiʻi GIS Data and Google Earth Pro - 1/12/13

HPHA No. 1036 - Paoakalani Homes (AMP 34)

Figure 1 - Project Location Map

Honolulu, Oʻahu

2,000 FT

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1036 - Paokalani Homes (AMP 34)

Figure 2 - Project Site & APE Map

Honolulu, O'ahu

40 FEET

HHF PLANNERS
places for people

AMP 35

#1047 PUMEHANA

1212 Kinau St. / Honolulu, O'ahu, Hawai'i / 96814

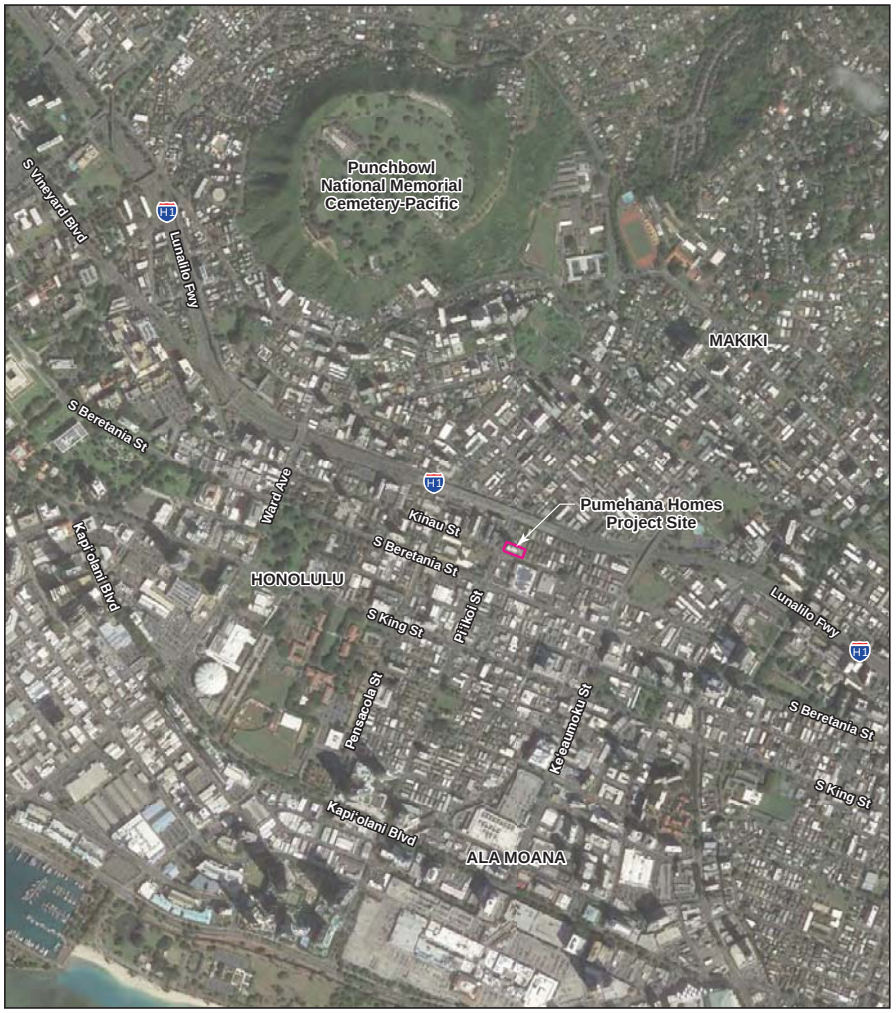
I. PROJECT INFORMATION

Tax Map Key: (1) 2-4-011:039

Occupancy Year:	1972		
Acres:	0.46	**Buildings:**	1
		Units:	139
Studios:	98	1-Bedroom:	40
2-Bedrooms:	1	3-Bedrooms:	0
4-Bedrooms:	0	5-Bedrooms:	0

The Pumehana elderly housing project is located in the Makiki community of Honolulu on the island of O'ahu. Makiki is an urban neighborhood situated at the base of Tantalus and bordered by Punchbowl Crater to the west. The housing site is positioned at the corner of Kinau Street and Pi'ikoi Street opposite from Ka'ahumanu Elementary School. A project location map (Figure 1) is provided.

Pumehana was first occupied in 1972 and has a street address of 1212 Kinau Street. The property consists of 0.46 acres, and it is identified as Tax Map Key (TMK) No. (1) 2-4-011:039. The housing project is comprised of a single 21-story high-rise apartment building with a variety of studio and one-bedroom units, and a single two-bedroom unit. Figure 2 includes a Site Plan and area of potential effect for this housing project. The State's land use designation for the property is the "Urban District." The City's zoning for the parcel is A-2 Medium-density Apartment.



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

HPHA No. 1047 - Pumehana Homes (AMP 35)

Figure 1 - Project Location Map

Honolulu, O'ahu

1,000 FT

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1047 - Pumehana Homes (AMP 35)

Figure 2 - Project Site & APE Map

Honolulu, O'ahu

20 FEET

HHF PLANNERS
places for people

AMP 30

#1066 SALT LAKE APARTMENTS

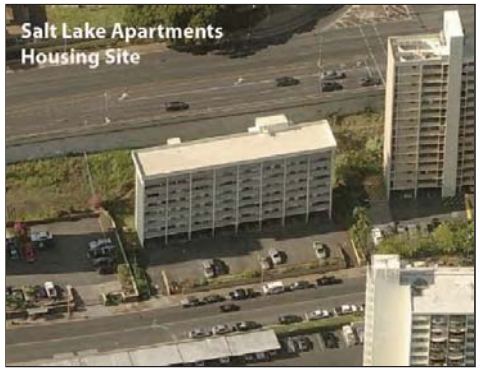
2907 Ala Llima St. / Honolulu, O'ahu, Hawai'i / 96818

I. PROJECT INFORMATION

Tax Map Key: (1) 1-1-062:007

Occupancy Year: 1982

Acres:	0.47	**Buildings:**	1
		Units:	28
Studios:	0	1-Bedroom:	28
2-Bedrooms:	0	3-Bedrooms:	0
4-Bedrooms:	0	5-Bedrooms:	0



The Salt Lake Apartments housing project is located in the Salt Lake community of the Honolulu district on the island of O'ahu. Salt Lake is located between the urban center of Honolulu to the east and Joint Base Pearl Harbor-Hickam to the west. The housing project site is situated off of Salt Lake Boulevard with access provided by Ala Ilima Street. The property is bordered by Salt Lake Boulevard to the south and Moanalua High School is located approximately one quarter mile to the east. A project location map (Figure 1) is provided.

The Salt Lake Apartments were first occupied in 1982 and has a street address of 2907 Ala Ilima Street. This property consists of 0.47 acres, and it is identified as Tax Map Key (TMK) No. (1) 1-1-062:007. The housing project is comprised of 1 eight-story apartment building providing a total of 28 one-bedroom housing units. The ground level of the structure serves as covered parking stalls for tenants. Figure 2 includes a Site Plan and area of potential effect for this housing project. The State's land use designation for the property is the "Urban District," and the City's zoning for the site is A-2 Medium-Density Apartment.

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

HPHA No. 1066 - Salt Lake Apartments (AMP 30)

Figure 1 - Project Location Map

Honolulu, O'ahu

1,000 FT

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1066 - Salt Lake Apartments (AMP 30)

Figure 2 - Project Site & APE Map

Honolulu, O'ahu

20 FEET

HHF PLANNERS
places for people

AMP 35

#1073 SPENCER HOUSE

1035 Spencer St. / Honolulu, O'ahu, Hawai'i / 96822

I. PROJECT INFORMATION

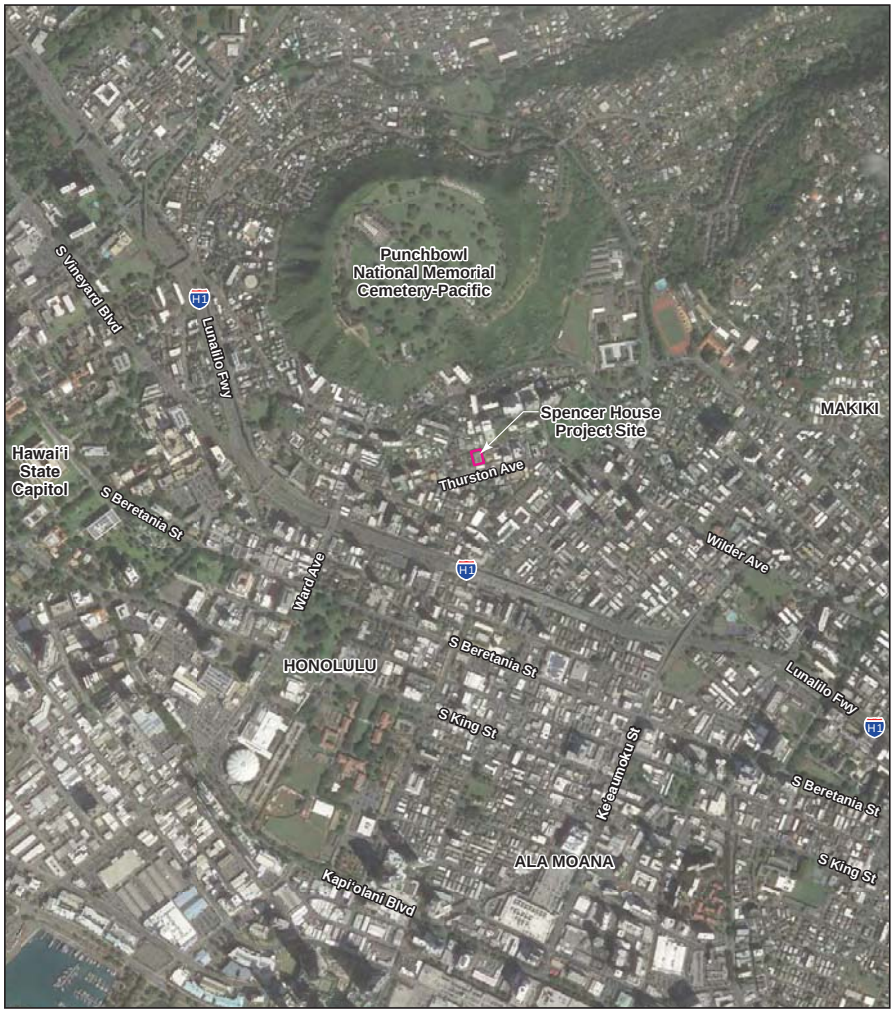
Tax Map Key: (1) 2-4-016:008

Occupancy Year: 1986

Acres:	0.32	**Buildings:**	1
		Units:	17
Studios:	0	1-Bedroom:	0
2-Bedrooms:	1	3-Bedrooms:	16
4-Bedrooms:	0	5-Bedrooms:	0

The Spencer House project is located in the Makiki community of the Honolulu district on the island of O'ahu. This predominantly higher density residential community is located makai (south) of the National Memorial Cemetery of the Pacific (Punchbowl Crater) and mauka (north) of the developing mixed use Kaka'ako community. The housing site is situated along Spencer Street surrounded by existing higher density residential buildings. A project location map (Figure 1) is provided.

Spencer House was constructed in 1986 and has a street address of 1035 Spencer Street. The property consists of 0.32 acres, and it is identified as Tax Map Key (TMK) No. (1) 2-04-016: 008. The housing project is comprised of a single three-story low-rise apartment building with a single two-bedroom unit and 16 three-bedroom units. Figure 2 includes a Site Plan and area of potential effect for this housing project. The State's land use designation for the property is the "Urban District." The City's zoning for the parcel is A-2 Medium-Density Apartment.



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

HPHA No. 1073 - Spencer House (AMP 35)

Figure 1 - Project Location Map

Honolulu, O'ahu

1,000 FT

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1073 - Spencer House (AMP 35)

Figure 2 - Project Site & APE Map

Honolulu, O'ahu

20 FEET

HHF PLANNERS
places for people

AMP 44

#1057 WAIMAHA SUNFLOWER

85-186 McArthur St. / Waiʻanae, Oʻahu, Hawaiʻi / 96792

I. PROJECT INFORMATION

Tax Map Key: (1) 8-5-010:029 & 063

Occupancy Year:	1980		
Acres:	3.77	**Buildings:**	10
		Units:	130
Studios:	0	1-Bedroom:	52
2-Bedrooms:	46	3-Bedrooms:	32
4-Bedrooms:	0	5-Bedrooms:	0

The Waimaha Sunflower housing project is located in the Waiʻanae community on the island of Oʻahu. Waiʻanae is situated between the communities of Mākaha to the North and Maʻili to the south. The housing site is positioned at the intersection of Mill Street and McArthur Street to the west of Waiʻainae Elementary School. A project location map (Figure 1) is provided.

Waimaha Sunflower was first occupied in 1980 and has a street address of 85-186 McArthur Street. The property consists of a combined area of 3.77 acres and encompasses two parcels, Tax Map Key (TMK) No. (1) 8-5-010:029 (Waimaha) and TMK No. (1) 8-5-010:030 (Sunflower). The housing project is comprised of 9 three-story townhouses with a range of 1, 2, and 3-bedroom units, and one single-story common area building that serves as a community center. Figure 2 includes a Site Plan and area of potential effect for this housing project. The State's land use designation for the property is the "Urban District," and the City's zoning for the parcel is A-2 Medium-Density Apartment.

Source: State of Hawaiʻi GIS Data and Google Earth Pro - 1/12/13

HPHA No. 1057 - Waimaha Sunflower (AMP 44)

Figure 1 - Project Location Map

Waiʻanae, Oʻahu

1,000 FT

HHF PLANNERS
places for people

HPHA No. 1057 - Waimaha Sunflower (AMP 44)

Figure 2 - Project Site & APE Map

Wai'anae, O'ahu

67 FEET

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

AMP 45

#1025 & 1107 WAIMĀNALO HOMES I & II

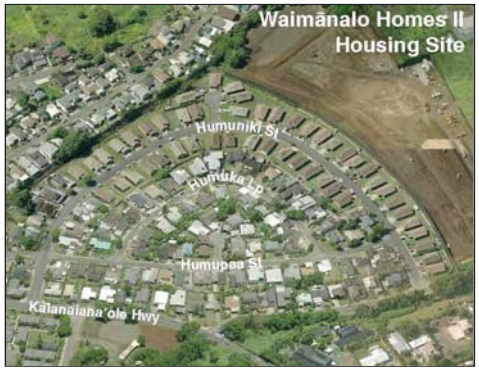
Humuniki St. & Humuna Pl. / Waimānalo, O'ahu, Hawai'i / 96795

I. PROJECT INFORMATION

Tax Map Key:
(1) 4-1-023 & (1) 4-1-028

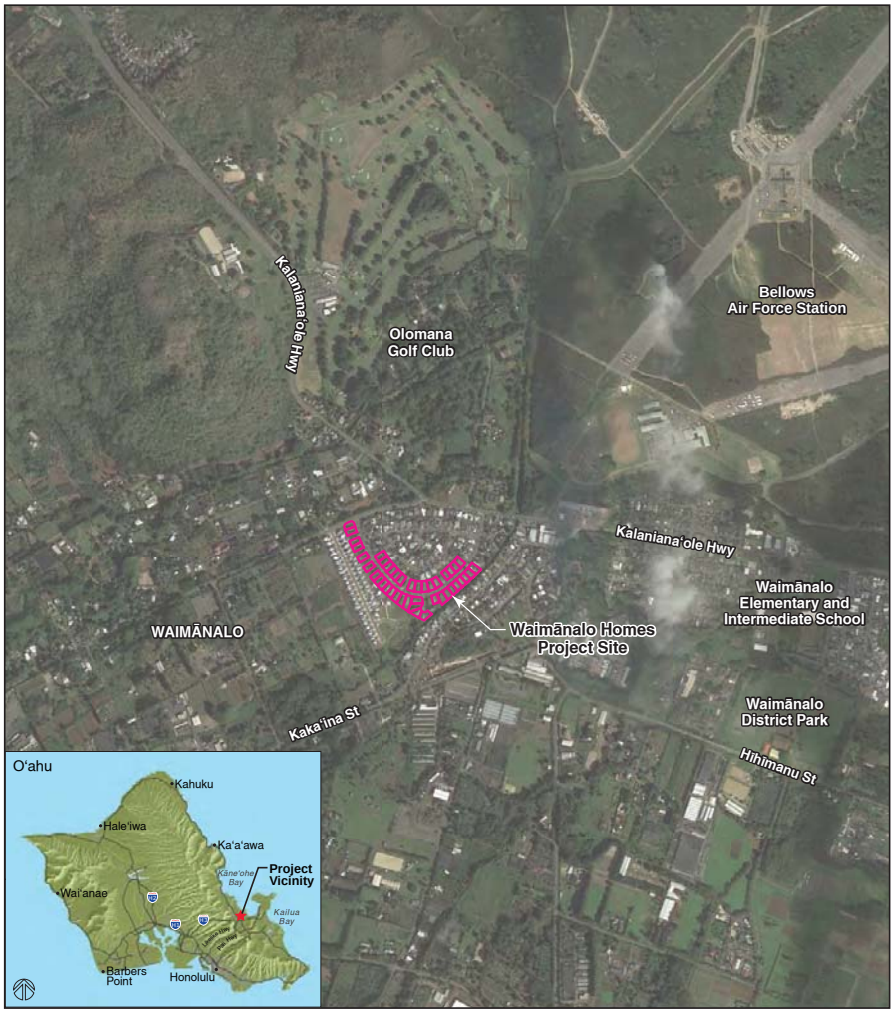
Occupancy Year: 2001

Acres:	8.34	**Buildings:**	41
		Units:	41
Studios:	0	1-Bedroom:	0
2-Bedrooms:	20	3-Bedrooms:	17
4-Bedrooms:	4	5-Bedrooms:	0



Waimānalo Homes I and II are located in the Waimānalo community on the island of O'ahu. Waimānalo is situated in Windward O'ahu, to the south of Kailua. The two housing projects are intermixed at a single site, with no distinct boundary separating the Waimānalo I homes from the Waimānalo II homes. The combined housing projects consist of 41 single family homes positioned to the south of Kalaniana'ole Highway along Humuniki Street and Humuna Place. A project location map (Figure 1) is provided.

Waimānalo Homes were constructed in 2001. These two projects combined consist of 41 parcels for a total of 8.34 acres. These properties are located in two separate Tax Map Plats, No. (1) 4-01-023 & (1) 4-01-028. The housing projects are comprised of 41 single family homes with a mix of 2-, 3-, and 4-bedroom homes. Figure 2 includes a Site Plan and area of potential effect for these housing projects. The State's land use designation for the property is the "Urban District." The City's zoning for these parcels are R-5, Residential.



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

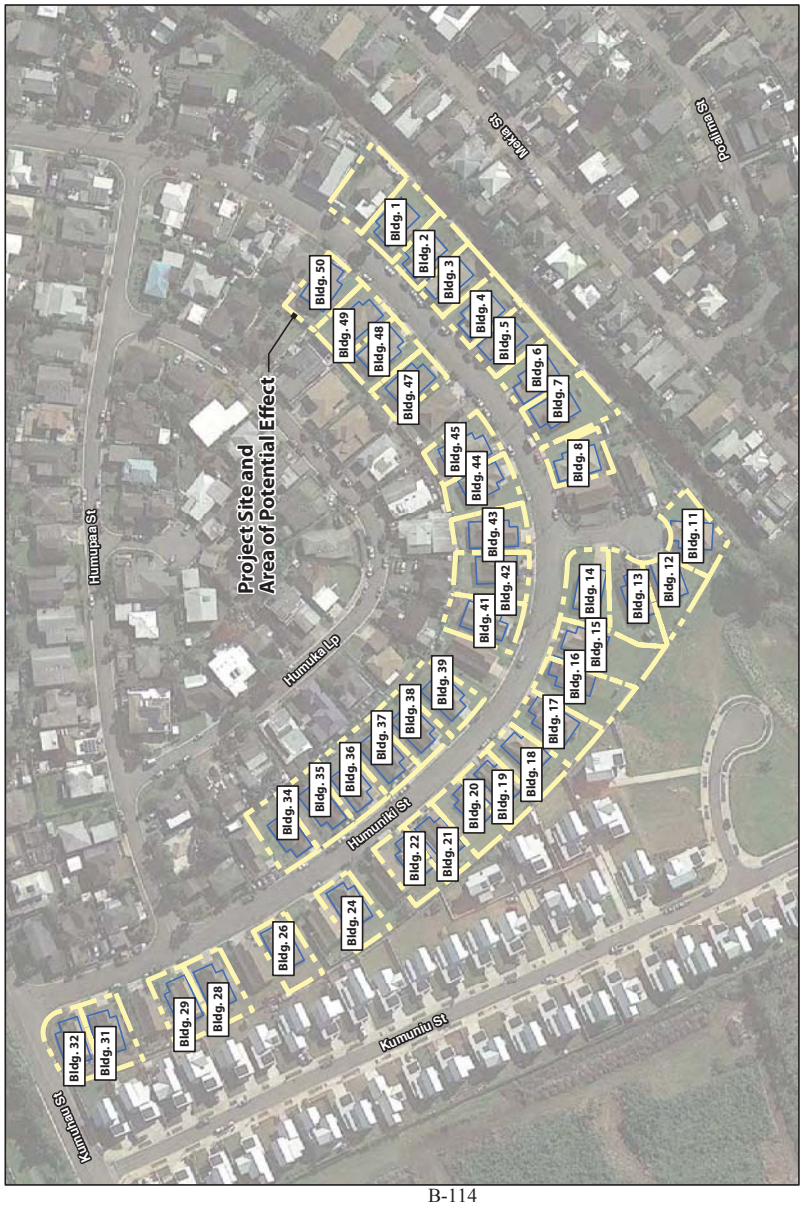
HPHA No. 1025 & 1107- Waimānalo Homes I & II (AMP 45)

Figure 1 - Project Location Map

Waimānalo, O'ahu

1,000 FT

HHF PLANNERS
places for people



Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1025/1107 - Waimānalo Homes (AMP 45)

Figure 2 - Project Site & APE Map

Waimānalo, O'ahu

120 FEET

HHF PLANNERS
places for people

AMP 30

#1038 WAIPAHU I

94-111 Pupuole Pl. / Waipahu, O'ahu, Hawai'i / 96797

I. PROJECT INFORMATION

Tax Map Key: (1) 9-4-039:019

Occupancy Year: 1970

Acres:	0.26	**Buildings:**	1
		Units:	19
Studios:	0	1-Bedroom:	0
2-Bedrooms:	13	3-Bedrooms:	6
4-Bedrooms:	0	5-Bedrooms:	0

The Waipahu I housing project is located in the Waipahu district on the island of O'ahu. The Waipahu community is generally located east of Pearl City, and bounded by the H-1 Freeway to the north and Pearl Harbor's West Loch to the South. The housing project site is situated off of Pupuole Street with vehicle access to the ground floor parking lot provided from Pupuole Place. The property is bordered by low-rise apartment buildings and is located approximately one quarter mile southwest from Waipahu Intermediate School. A project location map (Figure 1) is provided.

Waipahu I was constructed in 1970 and has a street address of 94-111 Pupuole Place. This property consists of 0.26 acres, and it is identified as Tax Map Key (TMK) No. (1) 9-4-039:019. The housing project is comprised of one four-story apartment building providing a total of 19 housing units of both 2- and 3-bedrooms per unit. Figure 2 includes a Site Plan and area of potential effect for the Waipahu I project. The State's land use designation for the property is the "Urban District", and the City's zoning for the site is A-2 Medium-Density Apartment.

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

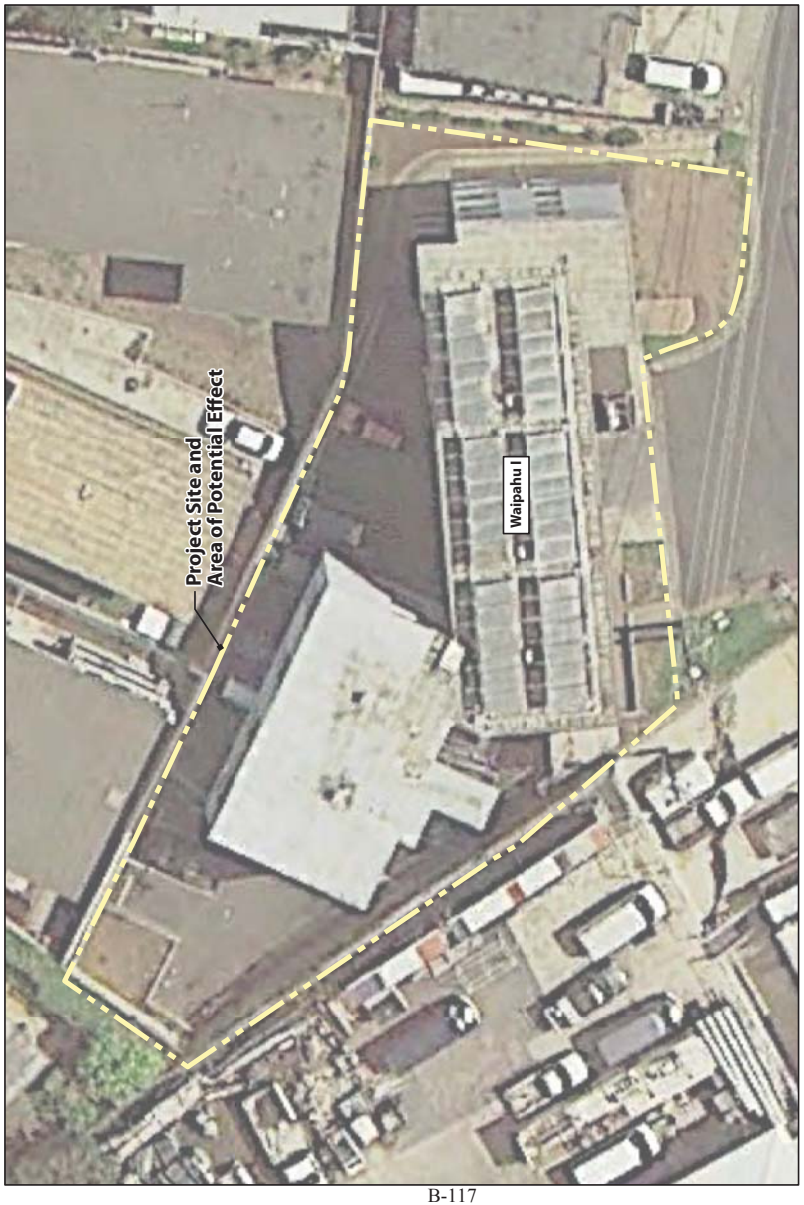
HPHA No. 1038 - Waipahu I (AMP 30)

Figure 1 - Project Location Map

Waipahu, O'ahu

1,000 FT

HHF PLANNERS
places for people



HPHA No. 1038 - Waipahu I (AMP 30)

Figure 2 - Project Site & APE Map

Waipahu, O'ahu

20 FEET

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

AMP 30

#1039 WAIPAHU II

94-132 Pupupuhi St. / Waipahu, O'ahu, Hawai'i / 96797

I. PROJECT INFORMATION

Tax Map Key:	(1) 9-4-039:076		
Occupancy Year:	1970		
Acres:	0.26	**Buildings:**	1
		Units:	20
Studios:	0	1-Bedroom:	0
2-Bedrooms:	16	3-Bedrooms:	4
4-Bedrooms:	0	5-Bedrooms:	0

The Waipahu II housing project is located in the Waipahu district on the island of O'ahu. The Waipahu community is generally located east of Pearl City, and bounded by the H-1 Freeway to the north and Pearl Harbor's West Loch to the south. The housing project site is situated on the western corner of Pupupuhi and Pupumomi Streets. The property is bordered by other low-rise apartment buildings and Waipahu Intermediate School to the east. Farrington Highway is located one block away to the north (mauka). A project location map (Figure 1) is provided.

Waipahu II was constructed in 1969 with occupancy starting in January 1970. This project's street address is 94-132 Pupupuhi Street, and consists of 0.37 acres that is identified as Tax Map Key (TMK) No. (1) 9-4-039:076. The housing project is comprised of one three-story apartment building providing a total of 20 housing units having a range of 2- and 3-bedrooms per unit. Figure 2 includes a Site Plan and area of potential effect for the Waipahu II project. The State's land use designation for the property is the "Urban District," and the City's zoning for the site is A-2 Medium-Density Apartment.

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

HPHA No. 1038 - Waipahu II (AMP 30)

Figure 1 - Project Location Map

Waipahu, O'ahu

1,000 FT

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1039 - Waipahu II (AMP 30)

Figure 2 - Project Site & APE Map

Waipahu, O'ahu

20 FEET

HHF PLANNERS
places for people

AMP 44

#1108 MĀʻILI II

87-159 Keliʻikipi Street / Waiʻanae, Oʻahu, Hawaiʻi / 96792

I. PROJECT INFORMATION

Tax Map Key:

(1) 8-7-001:001 & 037

Occupancy Year: 1999

Acres:	2.32	**Buildings:**	18
		Units:	24
Studios:	0	1-Bedroom:	0
2-Bedrooms:	12	3-Bedrooms:	0
4-Bedrooms:	12	5-Bedrooms:	0

The Māʻili II housing project is located in the Māʻili community of the Waiʻanae Coast on the island of Oʻahu. Māili is situated between the communities of Waiʻanae to the North and Nānākuli to the south. The housing site straddles an existing drainage channel with access to the west portion of the site provided by Keliʻikipi Street (Phase I). The east portion of the site fronts Kulaʻaupuni Street (Phase II). A project location map (Figure 1) is provided.

Māʻili II was first occupied in 1999 and has a street address of 87-159 Keliʻikipi Street. The property consists of a combined area of 2.32 acres and encompasses two parcels, Tax Map Key (TMK) No. (1) 8-07-001:001 (Phase I) and TMK No. (1) 8-07-001:037 (Phase II). The housing project is comprised of 12 single family homes with four bedrooms each, and 6 duplexes with two-bedrooms per unit. Figure 2 includes a Site Plan and area of potential effect for this housing project. The State's land use designation for the property is the "Urban District," and the City's zoning for the parcel is R-5 Residential.

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/13

HPHA No. 1108 - Mā'ili II (AMP 44)

Figure 1 - Project Location Map

Wai'anae, O'ahu

1,000 FT

HHF PLANNERS
places for people

Source: State of Hawai'i GIS Data and Google Earth Pro - 1/12/2013

HPHA No. 1108 - Mā'ili II (AMP 44)

Figure 2 - Project Site & APE Map

Wai'anae, O'ahu

40 FEET

HHF PLANNERS
places for people

PHONE (808) 594-1888

FAX (808) 594-1938

STATE OF HAWAI'I
OFFICE OF HAWAIIAN AFFAIRS
560 N. NIMITZ HWY., SUITE 200
HONOLULU, HAWAI'I 96817

HRD15-5154C

October 8, 2015

Ronald A. Sato, AICP
Senior Associate
HHF Planners
Pacific Guardian Center
733 Bishop Street, Suite 2590
Honolulu, HI 96813

Re: National Historic Preservation Act Section 106 Consultation
Hawai'i Public Housing Authority Repair and Rehabilitation Projects
Statewide

Aloha e Ronald A. Sato:

The Office of Hawaiian Affairs (OHA) is in receipt of your September 8, 2015 letter, initiating consultation pursuant to Section 106 of the National Historic Preservation Act for a proposed undertaking by the State of Hawai'i Public Housing Authority (HPHA) via federal funds through a U.S. Department of Housing and Urban Development, Economic Development Initiative Special Project Grant.

It is our understanding this proposed undertaking involves repair, improvement, reconstruction, or rehabilitation of 43 existing public housing project sites located throughout the state over a period of five years, 2015-2020. HPHA has determined that no historic properties will be affected by the various repair and rehabilitation improvements.

Thank you for initiating consultation at this early stage and for providing an opportunity to comment on this proposed undertaking. Given the nature of the proposed work, OHA does not have any comments as to Section 106 consultation and we do not object to a determination of no adverse effect to historic properties. We do look forward to seeing the proposed repair and rehabilitation projects completed, as they will certainly benefit our various communities. Should

you have any questions regarding this letter, please contact Kathryn Keala at (808) 594-0272 or kathyk@oha.org.

'O wau iho nō me ka 'oia 'i'o,

Kamana'opono M. Crabbe, Ph.D.
Ka Pouhana, Chief Executive Officer

KC:kk

**Please address replies and similar, future correspondence to our agency:*

Dr. Kamana'opono Crabbe
Attn: OHA Compliance Enforcement
560 N. Nimitz Hwy, Ste. 200
Honolulu, HI 96817

HHF PLANNERS
places for people

35TH Anniversary 1980-2015

September 8, 2015

Dr. Kamanaʻopono Crabbe, Chief Executive Officer
Attn: OHA Compliance Enforcement
Office of Hawaiian Affairs
State of Hawaiʻi
560 North Nimitz Highway, Suite 200
Honolulu, Hawaiʻi 96817

Dear Dr. Crabbe:

Subject: Environmental Reviews for Federally-Subsidized Public Housing Projects Statewide Section 106 Consultation – No Effect Determination

The State of Hawaiʻi, Hawaiʻi Public Housing Authority (HPHA) is proposing to conduct repair and rehabilitation improvement projects to 43 existing public housing projects located throughout the State over the next five (5) years (2015-2020). The State HPHA is subsequently conducting environmental reviews for these existing public housing projects in conformance with U.S. Department of Housing and Urban Development (HUD) requirements specified under 24 CFR Part 58 because Federal funds would be used.

One of the environmental review requirements is conducting Section 106 consultation with the State Historic Preservation Officer under the National Historic Preservation Act, as amended (NHPA) (16 U.S.C. 470(f)). Repair and rehabilitation improvements using Federal funds is considered an "undertaking" under these regulations, and the State HPHA is serving as the Agency Official initiating this Section 106 consultation process for this project. A "no historic properties affected" determination is proposed for repair and rehabilitation improvements that would be implemented at the 43 existing public housing project sites. Further information justifying this determination is provided with this letter.

Project Description

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a "major construction activity" and would involve one or a combination of the following actions identified below.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent.

2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons.
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland.
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation.
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls).
7. Interior and exterior renovations and rehabilitation.
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site.
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Area of Potential Effect and Identification of Historic Properties

A listing of the 43 housing projects included under this Section 106 consultation is provided in Exhibit A along with information on existing land use. The "area of potential effect" (APE) on historic properties was established based upon the improvements that would occur which consist of repair and renovation work to existing buildings, units, and common area facilities. Utility repair or rehabilitation work would occur within the project site. The APE was therefore determined to consist of the property boundary associated with each housing project.

There are no known historic properties present within the properties of housing projects listed in Exhibit A. This is based upon; 1) similar HUD required environmental reviews conducted by HPHA in 2010 and prior which included site visits; 2) information on the State's listing of historic sites included on the State and National Registers of Historic Places; and 3) HPHA's experience with prior repair and renovation work occurring at these housing project sites. All of these properties have been extensively altered as part of prior construction of housing projects. Exhibit A also includes the year the housing projects were completed and initially occupied, and none of these projects have buildings 50 years old or older.

Determination of Effect

Based upon these efforts and review of each existing housing project, no historic properties were identified. Therefore, HPHA has determined that no historic properties would be affected by the various repair and rehabilitation improvements that may be implemented for these housing projects.

We are soliciting your comments on this no historic properties affected proposed determination. We would greatly appreciate your written response within 30 days of receipt of this letter, or sooner if possible.

Please contact me at 457-3172 or via email at rsato@hhf.com if you have any questions.

Sincerely,

Ronald A. Sato, AICP
Senior Associate

Enclosures

cc: Lisa Izumi, Project Engineer, HPHA

Enclosures – Exhibit A

EXHIBIT A
LISTING OF HOUSING PROJECTS

HPHA Project No.	Housing Project Name	Street Address	City/Town	Island	Zip Code	Tax Map Key	Year Completed & Occupied
Kaua'i County (6 Projects)							
1019	Hale Hoolulu (Eld)	4264 Ala Muku Place	Kilauea	Kauai	96754	5-2-08:56	1974
	APE Acreage: 1.00	Land Use: Used as residential housing project			Historic Properties Present: No		
1055	Hale Hoonanea (Eld)	4401 Waialo Road	Eleele	Kauai	96705	2-1-03:17	1976
	APE Acreage: 2.51	Land Use: Used as residential housing project			Historic Properties Present: No		
1054	Hale Nani Kai O'Kea (Eld)	4850 Kawaihau Rd.	Kapaa	Kauai	96746	4-6-14:105	1977
	APE Acreage: 3.47	Land Use: Used as residential housing project			Historic Properties Present: No		
1023	Home Nani (Eld)	Moana & Laau Rd.	Waimea	Kauai	96796	1-6-07:31	1970
	APE Acreage: 0.45	Land Use: Used as residential housing project			Historic Properties Present: No		
1086	Kawailehua (Federal)	5230 Paanau Rd.	Koloa	Kauai	96756	2-6-04:58	1993
	APE Acreage: 2.10	Land Use: Used as residential housing project			Historic Properties Present: No		
1064	Kekaha Ha'aheo	8238 Iwipolena St.	Kekaha	Kauai	96752	1-3-08:20 & 26	1982
	APE Acreage: 9.25	Land Use: Used as residential housing project			Historic Properties Present: No		
Maui County (4 Projects)							
1092	Makani Kai Hale I	35 Koapaka Ln.	Waiehu	Maui	96793	3-3-01:10	1995
	APE Acreage: 3.45 (Combined with Phase II)	Land Use: Used as residential housing project			Historic Properties Present: No		
1097	Makani Kai Hale II	35 Koapaka Ln.	Waiehu	Maui	96793	4-6-10:31	1998
	APE Acreage: 3.45 (Combined with Phase I)	Land Use: Used as residential housing project			Historic Properties Present: No		
1044	Piilani Homes	1028 Wainee St.	Lahaina	Maui	96761	4-5-07:05	1970
	APE Acreage: 2.62	Land Use: Used as residential housing project			Historic Properties Present: No		
1088	Kahale Mua (Federal)	P.O. Box 30	Maunaloa	Molokai	96770	5-1-02:39	1993
	APE Acreage: 1.88	Land Use: Used as residential housing project			Historic Properties Present: No		
Hawai'i County (13 Projects)							
1051	Hale Aloha O'Puna (Eld)	16-189 Pili Mua St.	Keaau	Hawaii	96749	1-6-143:35	1977
	APE Acreage: 1.90	Land Use: Used as residential housing project			Historic Properties Present: No		
1031	Hale Hauoli	45-540 Kaniaka Pl.	Honokaa	Hawaii	96727	4-5-10:78	1970
	APE Acreage: 2.43	Land Use: Used as residential housing project			Historic Properties Present: No		
1053	Hale Hookipa (Eld)	81-1038 Nani Kupuna Place	Kealakekua	Hawaii	96750	8-1-02:49	1976
	APE Acreage: 6.11	Land Use: Used as residential housing project			Historic Properties Present: No		
1052	Hale Olaloa	144 Kamana St.	Hilo	Hawaii	96720	2-4-56:21	1976
	APE Acreage: 6.51	Land Use: Used as residential housing project			Historic Properties Present: No		

EXHIBIT A
LISTING OF HOUSING PROJECTS (Continued)

HPHA Project No.	Housing Project Name	Street Address	City/Town	Island	Zip Code	Tax Map Key	Year Completed & Occupied
Hawai'i County (Continued)							
1061	Ka Hale Kahaluu	78-6725 Makolea St.	Kona	Hawaii	96740	7-8-10:04	1981
	APE Acreage: 3.37	Land Use: Used as residential housing project			Historic Properties Present: No		
1032	Kaimalino	74-5060 Kealakaa St.	Kona	Hawaii	96740	7-4-17:29	1971
	APE Acreage: 5.53	Land Use: Used as residential housing project			Historic Properties Present: No		
1097	Kauhale O'Hanakahi	19 Pamala St.	Hilo	Hawaii	96720	2-4-51:01	1997
	APE Acreage: 3.20	Land Use: Used as residential housing project			Historic Properties Present: No		
1097	Ke Kumu 'Ekolu	68-3385 Ke Kumu Pl.	Waikoloa	Hawaii	96738	6-8-02:43	1997
	APE Acreage: 6.47	Land Use: Used as residential housing project			Historic Properties Present: No		
1070	Kealakehe	74-991 Manawale'a St.	Kailua-Kona	Hawaii	96740	7-4-17:58	1985
	APE Acreage: 3.29	Land Use: Used as residential housing project			Historic Properties Present: No		
1063	Nani Olu	81-1011 Nani Kupuna Pl.	Kona	Hawaii	96740	8-1-02:47 & 48	1981
	APE Acreage: 0.99	Land Use: Used as residential housing project			Historic Properties Present: No		
1071	Noelani I	65-1191 Opelo Road	Kamuela	Hawaii	96743	6-5-09:29	1983
	APE Acreage: 0.69	Land Use: Used as residential housing project			Historic Properties Present: No		
1078	Noelani II	65-1191 Opelo Rd.	Kamuela	Hawaii	96743	6-5-09:25	1983
	APE Acreage: 0.70	Land Use: Used as residential housing project			Historic Properties Present: No		
1045	Pahala (Eld)	96-1169 Holei St.	Pahala	Hawaii	96720	9-6-17:37	1972
	APE Acreage: 1.44	Land Use: Used as residential housing project			Historic Properties Present: No		
City and County of Honolulu (20 Projects)							
1027	Hale Laulima	1184 Waimano Home Road	Pearl City	Oahu	96782	9-7-94:25	1981
	APE Acreage: 3.96	Land Use: Used as residential housing project			Historic Properties Present: No		
1072	Hookipa Kahaluu	47-330 Ahuimanu Rd.	Kaneohe	Oahu	96744	4-7-37:16	1983
	APE Acreage: 3.60	Land Use: Used as residential housing project			Historic Properties Present: No		
1062	Kalakaua Homes	1545 Kalakaua Ave.	Honolulu	Oahu	96826	2-3-19:04	1983
	APE Acreage: 4.80	Land Use: Used as residential housing project			Historic Properties Present: No		
1099	Kamehameha Homes	1541 Haka Dr.	Honolulu	Oahu	96817	1-5-01:01	1996
	APE Acreage: 16.00	Land Use: Used as residential housing project			Historic Properties Present: No		
1069	Kaneohe Apartments	45-507 & 45-513 Pahia Rd.	Kaneohe	Oahu	96744	4-5-19:26	1984
	APE Acreage: 0.43	Land Use: Used as residential housing project			Historic Properties Present: No		
1056	Kauhale Nani	310 N. Cane St.	Wahiawa	Oahu	96786	7-4-7:14	1980
	APE Acreage: 3.46	Land Use: Used as residential housing project			Historic Properties Present: No		
1090	Kauhale Ohana	41-1260 Kalanianaole Hwy.	Waimanalo	Oahu	96795	4-1-9:286	1995
	APE Acreage: 2.52	Land Use: Used as residential housing project			Historic Properties Present: No		

EXHIBIT A
LISTING OF HOUSING PROJECTS (Continued)

HPHA Project No.	Housing Project Name	Street Address	County	Island	Zip Code	Tax Map Key	Year Completed & Occupied
City and County of Honolulu (Continued)							
1091	Kau'iokalani	85-658 Farrington Hwy.	Waianae	Oahu	96792	8-5-28:044	1995
	APE Acreage: 4.04	Land Use: Used as residential housing project			Historic Properties Present: No		
1050	Kupuna Home O'Waialua (Eld)	67-088 Goodale Ave.	Waialua	Oahu	96791	6-7-16:28	1977
	APE Acreage: 3.27	Land Use: Used as residential housing project			Historic Properties Present: No		
1046	Makamae (Eld)	21 South Kuakini St.	Honolulu	Oahu	96813	2-2-01: 20	1971
	APE Acreage: 1.08	Land Use: Used as residential housing project			Historic Properties Present: No		
1036	Paoakalani (Eld)	1583 Kalakaua Ave.	Honolulu	Oahu	96826	2-3-19:4	1970
	APE Acreage: 1.80	Land Use: Used as residential housing project			Historic Properties Present: No		
1047	Pumehana (Eld)	1212 Kinau St.	Honolulu	Oahu	96814	2-4-11:39	1972
	APE Acreage: 0.46	Land Use: Used as residential housing project			Historic Properties Present: No		
1066	Salt Lake Apts.	2907 Ala Ilima St.	Honolulu	Oahu	96818	1-1-62:07	1982
	APE Acreage: 0.47	Land Use: Used as residential housing project			Historic Properties Present: No		
1073	Spencer House	1035 Spencer St.	Honolulu	Oahu	96822	2-4-16:08	1968
	APE Acreage: 0.32	Land Use: Used as residential housing project			Historic Properties Present: No		
1057	Waimaha-Sunflower	85-186 McArthur St.	Waianae	Oahu	96792	8-5-10:029, 063, 067	1980
	APE Acreage: 3.77	Land Use: Used as residential housing project			Historic Properties Present: No		
1025	Waimanalo Homes I	Humuniki St. & Humuna Pl.	Waimanalo	Oahu	96795	4-1-22:100; 4-1-23:050-064, 068; 4-1-28:005-022 and 107-122	1998
	APE Acreage: 8.34 (Combined with Phase II)	Land Use: Used as residential housing project			Historic Properties Present: No		
1107	Waimanalo Homes II	Humuniki St. & Humuna Pl.	Waimanalo	Oahu	96795	4-1-22:100; 4-1-23:050-064; 4-1-28:05-22 and 107-122	1998
	APE Acreage: 8.34 (Combined with Phase I)	Land Use: Used as residential housing project			Historic Properties Present: No		
1038	Waipahu I	94-111 Pupuole Pl.	Waipahu	Oahu	96797	9-4-39:19	1970
	APE Acreage: 0.26	Land Use: Used as residential housing project			Historic Properties Present: No		
1039	Waipahu II	94-132 Pupupuhi St.	Waipahu	Oahu	96797	9-4-39:76	1970
	APE Acreage: 0.26	Land Use: Used as residential housing project			Historic Properties Present: No		
1108	Maili II	87-171 Keliikipi St.	Waianae	Oahu	96792	8-7-01:01	1999
	APE Acreage: 1.73	Land Use: Used as residential housing project			Historic Properties Present: No		

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35TH Anniversary 1980-2015

September 8, 2015

Mr. Gene Leslie, President
Association of Hawaiian Civic Clubs
Hawai‘i Council

Via Email: aloha@aohcc.org

Dear Mr. Leslie:

Subject: Environmental Reviews for Federally-Subsidized Public Housing Projects (County of Hawai‘i)
Section 106 Consultation – No Effect Determination

The State of Hawai‘i, Hawai‘i Public Housing Authority (HPHA) is proposing to conduct repair and rehabilitation improvement projects to 13 existing public housing projects located throughout the County of Hawai‘i over the next five (5) years (2015-2020). The State HPHA is subsequently conducting environmental reviews for these existing public housing projects in conformance with U.S. Department of Housing and Urban Development (HUD) requirements specified under 24 CFR Part 58 because Federal funds would be used.

One of the environmental review requirements is conducting Section 106 consultation with the State Historic Preservation Officer under the National Historic Preservation Act, as amended (NHPA) (16 U.S.C. 470(f)). Repair and rehabilitation improvements using Federal funds is considered an “undertaking” under these regulations, and the State HPHA is serving as the Agency Official initiating this Section 106 consultation process for this project. A “no historic properties affected” determination is proposed for repair and rehabilitation improvements that would be implemented at the 13 existing public housing project sites. Further information justifying this determination is provided with this letter.

Project Description

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a “major construction activity” and would involve one or a combination of the following actions identified below.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent.

2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons.
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland.
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation.
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls).
7. Interior and exterior renovations and rehabilitation.
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site.
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Area of Potential Effect and Identification of Historic Properties

A listing of the 13 housing projects included under this Section 106 consultation is provided in Exhibit A along with information on existing land use. The “area of potential effect” (APE) on historic properties was established based upon the improvements that would occur which consist of repair and renovation work to existing buildings, units, and common area facilities. Utility repair or rehabilitation work would occur within the project site. The APE was therefore determined to consist of the property boundary associated with each housing project.

There are no known historic properties present within the properties of housing projects listed in Exhibit A. This is based upon; 1) similar HUD required environmental reviews conducted by HPHA in 2010 and prior which included site visits; 2) information on the State’s listing of historic sites included on the State and National Registers of Historic Places; and 3) HPHA’s experience with prior repair and renovation work occurring at these housing project sites. All of these properties have been extensively altered as part of prior construction of housing projects. Exhibit A also includes the year the housing projects were completed and initially occupied, and none of these projects have buildings 50 years old or older.

Determination of Effect

Based upon these efforts and review of each existing housing project, no historic properties were identified. Therefore, HPHA has determined that no historic properties would be affected by the various repair and rehabilitation improvements that may be implemented for these housing projects.

We are soliciting your comments on this no historic properties affected proposed determination. We would greatly appreciate your written response within 30 days of receipt of this letter, or sooner if possible.

Please contact me at 457-3172 or via email at rsato@hhf.com if you have any questions.

Sincerely,

Ronald A. Sato, AICP
Senior Associate

Enclosures

cc: Lisa Izumi, Project Engineer, HPHA

Enclosures – Exhibit A

EXHIBIT A
LISTING OF HOUSING PROJECTS

HPHA Project No.	Housing Project Name	Street Address	City/Town	Island	Zip Code	Tax Map Key	Year Completed & Occupied
Hawai‘i County (13 Projects)							
1051	Hale Aloha O'Puna (Eld)	16-189 Pili Mua St.	Keaau	Hawaii	96749	1-6-143:35	1977
	APE Acreage: 1.90	Land Use: Used as residential housing project			Historic Properties Present: No		
1031	Hale Hauoli	45-540 Kaniaka Pl.	Honokaa	Hawaii	96727	4-5-10:78	1970
	APE Acreage: 2.43	Land Use: Used as residential housing project			Historic Properties Present: No		
1053	Hale Hookipa (Eld)	81-1038 Nani Kupuna Place	Kealakekua	Hawaii	96750	8-1-02:49	1976
	APE Acreage: 6.11	Land Use: Used as residential housing project			Historic Properties Present: No		
1052	Hale Olaloa	144 Kamana St.	Hilo	Hawaii	96720	2-4-56:21	1976
	APE Acreage: 6.51	Land Use: Used as residential housing project			Historic Properties Present: No		
1061	Ka Hale Kahaluu	78-6725 Makolea St.	Kona	Hawaii	96740	7-8-10:04	1981
	APE Acreage: 3.37	Land Use: Used as residential housing project			Historic Properties Present: No		
1032	Kaimalino	74-5060 Kealakaa St.	Kona	Hawaii	96740	7-4-17:29	1971
	APE Acreage: 5.53	Land Use: Used as residential housing project			Historic Properties Present: No		
1097	Kauhale O'Hanakahi	19 Pamala St.	Hilo	Hawaii	96720	2-4-51:01	1997
	APE Acreage: 3.20	Land Use: Used as residential housing project			Historic Properties Present: No		
1097	Ke Kumu 'Ekolu	68-3385 Ke Kumu Pl.	Waikoloa	Hawaii	96738	6-8-02:43	1997
	APE Acreage: 6.47	Land Use: Used as residential housing project			Historic Properties Present: No		
1070	Kealakehe	74-991 Manawale'a St.	Kailua-Kona	Hawaii	96740	7-4-17:58	1985
	APE Acreage: 3.29	Land Use: Used as residential housing project			Historic Properties Present: No		
1063	Nani Olu	81-1011 Nani Kupuna Pl.	Kona	Hawaii	96740	8-1-02:47 & 48	1981
	APE Acreage: 0.99	Land Use: Used as residential housing project			Historic Properties Present: No		
1071	Noelani I	65-1191 Opelo Road	Kamuela	Hawaii	96743	6-5-09:29	1983
	APE Acreage: 0.69	Land Use: Used as residential housing project			Historic Properties Present: No		
1078	Noelani II	65-1191 Opelo Rd.	Kamuela	Hawaii	96743	6-5-09:25	1983
	APE Acreage: 0.70	Land Use: Used as residential housing project			Historic Properties Present: No		
1045	Pahala (Eld)	96-1169 Holei St.	Pahala	Hawaii	96720	9-6-17:37	1972
	APE Acreage: 1.44	Land Use: Used as residential housing project			Historic Properties Present: No		

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September 8, 2015

Ms. Sarah Peters, President
Association of Hawaiian Civic Clubs
Kaua‘i Council

Via Email: aloha@aohcc.org

Dear Ms. Peters:

Subject: Environmental Reviews for Federally-Subsidized Public Housing Projects (County of Kaua‘i)
Section 106 Consultation – No Effect Determination

The State of Hawai‘i, Hawai‘i Public Housing Authority (HPHA) is proposing to conduct repair and rehabilitation improvement projects to six existing public housing projects located throughout the County of Kaua‘i over the next five (5) years (2015-2020). The State HPHA is subsequently conducting environmental reviews for these existing public housing projects in conformance with U.S. Department of Housing and Urban Development (HUD) requirements specified under 24 CFR Part 58 because Federal funds would be used.

One of the environmental review requirements is conducting Section 106 consultation with the State Historic Preservation Officer under the National Historic Preservation Act, as amended (NHPA) (16 U.S.C. 470(f)). Repair and rehabilitation improvements using Federal funds is considered an “undertaking” under these regulations, and the State HPHA is serving as the Agency Official initiating this Section 106 consultation process for this project. A “no historic properties affected” determination is proposed for repair and rehabilitation improvements that would be implemented at the six existing public housing project sites. Further information justifying this determination is provided with this letter.

Project Description

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a “major construction activity” and would involve one or a combination of the following actions identified below.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent.

2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons.
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland.
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation.
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls).
7. Interior and exterior renovations and rehabilitation.
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site.
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Area of Potential Effect and Identification of Historic Properties

A listing of the six housing projects included under this Section 106 consultation is provided in Exhibit A along with information on existing land use. The “area of potential effect” (APE) on historic properties was established based upon the improvements that would occur which consist of repair and renovation work to existing buildings, units, and common area facilities. Utility repair or rehabilitation work would occur within the project site. The APE was therefore determined to consist of the property boundary associated with each housing project.

There are no known historic properties present within the properties of housing projects listed in Exhibit A. This is based upon; 1) similar HUD required environmental reviews conducted by HPHA in 2010 and prior which included site visits; 2) information on the State's listing of historic sites included on the State and National Registers of Historic Places; and 3) HPHA's experience with prior repair and renovation work occurring at these housing project sites. All of these properties have been extensively altered as part of prior construction of housing projects. Exhibit A also includes the year the housing projects were completed and initially occupied, and none of these projects have buildings 50 years old or older.

Determination of Effect

Based upon these efforts and review of each existing housing project, no historic properties were identified. Therefore, HPHA has determined that no historic properties would be affected by the various repair and rehabilitation improvements that may be implemented for these housing projects.

We are soliciting your comments on this no historic properties affected proposed determination. We would greatly appreciate your written response within 30 days of receipt of this letter, or sooner if possible.

Please contact me at 457-3172 or via email at rsato@hhf.com if you have any questions.

Sincerely,

Ronald A. Sato, AICP
Senior Associate

Enclosures

cc: Lisa Izumi, Project Engineer, HPHA

Enclosures – Exhibit A

EXHIBIT A
LISTING OF HOUSING PROJECTS

HPHA Project No.	Housing Project Name	Street Address	City/Town	Island	Zip Code	Tax Map Key	Year Completed & Occupied
Kaua‘i County (6 Projects)							
1019	Hale Hoolulu (Eld)	4264 Ala Muku Place	Kilauea	Kauai	96754	5-2-08:56	1974
	APE Acreage: 1.00	Land Use: Used as residential housing project			Historic Properties Present: No		
1055	Hale Hoonanea (Eld)	4401 Waialo Road	Eleele	Kauai	96705	2-1-03:17	1976
	APE Acreage: 2.51	Land Use: Used as residential housing project			Historic Properties Present: No		
1054	Hale Nani Kai O'Kea (Eld)	4850 Kawaihau Rd.	Kapaa	Kauai	96746	4-6-14:105	1977
	APE Acreage: 3.47	Land Use: Used as residential housing project			Historic Properties Present: No		
1023	Home Nani (Eld)	Moana & Laau Rd.	Waimea	Kauai	96796	1-6-07:31	1970
	APE Acreage: 0.45	Land Use: Used as residential housing project			Historic Properties Present: No		
1086	Kawailehua (Federal)	5230 Paanau Rd.	Koloa	Kauai	96756	2-6-04:58	1993
	APE Acreage: 2.10	Land Use: Used as residential housing project			Historic Properties Present: No		
1064	Kekaha Ha'aheo	8238 Iwipolena St.	Kekaha	Kauai	96752	1-3-08:20 & 26	1982
	APE Acreage: 9.25	Land Use: Used as residential housing project			Historic Properties Present: No		

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35TH Anniversary 1980-2015

September 8, 2015

Ms. K. Holoaumoku Ralar, President
Association of Hawaiian Civic Clubs
Maui Council

Via Email: aloha@aohcc.org

Dear Ms. Ralar:

Subject: Environmental Reviews for Federally-Subsidized Public Housing Projects (County of Maui)
Section 106 Consultation – No Effect Determination

The State of Hawai‘i, Hawai‘i Public Housing Authority (HPHA) is proposing to conduct repair and rehabilitation improvement projects to four existing public housing projects located throughout the County of Maui over the next five (5) years (2015-2020). The State HPHA is subsequently conducting environmental reviews for these existing public housing projects in conformance with U.S. Department of Housing and Urban Development (HUD) requirements specified under 24 CFR Part 58 because Federal funds would be used.

One of the environmental review requirements is conducting Section 106 consultation with the State Historic Preservation Officer under the National Historic Preservation Act, as amended (NHPA) (16 U.S.C. 470(f)). Repair and rehabilitation improvements using Federal funds is considered an “undertaking” under these regulations, and the State HPHA is serving as the Agency Official initiating this Section 106 consultation process for this project. A “no historic properties affected” determination is proposed for repair and rehabilitation improvements that would be implemented at the four existing public housing project sites. Further information justifying this determination is provided with this letter.

Project Description

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a “major construction activity” and would involve one or a combination of the following actions identified below.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent.

2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons.
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland.
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation.
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls).
7. Interior and exterior renovations and rehabilitation.
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site.
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These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Area of Potential Effect and Identification of Historic Properties

A listing of the four housing projects included under this Section 106 consultation is provided in Exhibit A along with information on existing land use. The “area of potential effect” (APE) on historic properties was established based upon the improvements that would occur which consist of repair and renovation work to existing buildings, units, and common area facilities. Utility repair or rehabilitation work would occur within the project site. The APE was therefore determined to consist of the property boundary associated with each housing project.

There are no known historic properties present within the properties of housing projects listed in Exhibit A. This is based upon; 1) similar HUD required environmental reviews conducted by HPHA in 2010 and prior which included site visits; 2) information on the State's listing of historic sites included on the State and National Registers of Historic Places; and 3) HPHA's experience with prior repair and renovation work occurring at these housing project sites. All of these properties have been extensively altered as part of prior construction of housing projects. Exhibit A also includes the year the housing projects were completed and initially occupied, and none of these projects have buildings 50 years old or older.

Determination of Effect

Based upon these efforts and review of each existing housing project, no historic properties were identified. Therefore, HPHA has determined that no historic properties would be affected by the various repair and rehabilitation improvements that may be implemented for these housing projects.

We are soliciting your comments on this no historic properties affected proposed determination. We would greatly appreciate your written response within 30 days of receipt of this letter, or sooner if possible.

Please contact me at 457-3172 or via email at rsato@hhf.com if you have any questions.

Sincerely,

Ronald A. Sato, AICP
Senior Associate

Enclosures

cc: Lisa Izumi, Project Engineer, HPHA

Enclosures – Exhibit A

EXHIBIT A
LISTING OF HOUSING PROJECTS

HPHA Project No.	Housing Project Name	Street Address	City/Town	Island	Zip Code	Tax Map Key	Year Completed & Occupied
Maui County (4 Projects)							
1092	Makani Kai Hale I	35 Koapaka Ln.	Waiehu	Maui	96793	3-3-01:10	1995
	APE Acreage: 3.45 (Combined with Phase II)	Land Use: Used as residential housing project			Historic Properties Present: No		
1097	Makani Kai Hale II	35 Koapaka Ln.	Waiehu	Maui	96793	4-6-10:31	1998
	APE Acreage: 3.45 (Combined with Phase I)	Land Use: Used as residential housing project			Historic Properties Present: No		
1044	Piilani Homes	1028 Wainee St.	Lahaina	Maui	96761	4-5-07:05	1970
	APE Acreage: 2.62	Land Use: Used as residential housing project			Historic Properties Present: No		
1088	Kahale Mua (Federal)	P.O. Box 30	Maunaloa	Molokai	96770	5-1-02:39	1993
	APE Acreage: 1.88	Land Use: Used as residential housing project			Historic Properties Present: No		

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September 8, 2015

Mr. Daniel Nahoopii, President
Association of Hawaiian Civic Clubs
O‘ahu Council

Via Email: dkn@hawaii.rr.com

Dear Mr. Nahoopii:

Subject: Environmental Reviews for Federally-Subsidized Public Housing Projects (City and County of Honolulu)
Section 106 Consultation – No Effect Determination

The State of Hawai‘i, Hawai‘i Public Housing Authority (HPHA) is proposing to conduct repair and rehabilitation improvement projects to 20 existing public housing projects located throughout the City and County of Honolulu over the next five (5) years (2015-2020). The State HPHA is subsequently conducting environmental reviews for these existing public housing projects in conformance with U.S. Department of Housing and Urban Development (HUD) requirements specified under 24 CFR Part 58 because Federal funds would be used.

One of the environmental review requirements is conducting Section 106 consultation with the State Historic Preservation Officer under the National Historic Preservation Act, as amended (NHPA) (16 U.S.C. 470(f)). Repair and rehabilitation improvements using Federal funds is considered an “undertaking” under these regulations, and the State HPHA is serving as the Agency Official initiating this Section 106 consultation process for this project. A “no historic properties affected” determination is proposed for repair and rehabilitation improvements that would be implemented at the 20 existing public housing project sites. Further information justifying this determination is provided with this letter.

Project Description

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a “major construction activity” and would involve one or a combination of the following actions identified below.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent.

2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons.
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland.
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation.
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls).
7. Interior and exterior renovations and rehabilitation.
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site.
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Area of Potential Effect and Identification of Historic Properties

A listing of the 20 housing projects included under this Section 106 consultation is provided in Exhibit A along with information on existing land use. The “area of potential effect” (APE) on historic properties was established based upon the improvements that would occur which consist of repair and renovation work to existing buildings, units, and common area facilities. Utility repair or rehabilitation work would occur within the project site. The APE was therefore determined to consist of the property boundary associated with each housing project.

There are no known historic properties present within the properties of housing projects listed in Exhibit A. This is based upon; 1) similar HUD required environmental reviews conducted by HPHA in 2010 and prior which included site visits; 2) information on the State’s listing of historic sites included on the State and National Registers of Historic Places; and 3) HPHA’s experience with prior repair and renovation work occurring at these housing project sites. All of these properties have been extensively altered as part of prior construction of housing projects. Exhibit A also includes the year the housing projects were completed and initially occupied, and none of these projects have buildings 50 years old or older.

Determination of Effect

Based upon these efforts and review of each existing housing project, no historic properties were identified. Therefore, HPHA has determined that no historic properties would be affected by the various repair and rehabilitation improvements that may be implemented for these housing projects.

We are soliciting your comments on this no historic properties affected proposed determination. We would greatly appreciate your written response within 30 days of receipt of this letter, or sooner if possible.

Please contact me at 457-3172 or via email at rsato@hhf.com if you have any questions.

Sincerely,

Ronald A. Sato, AICP
Senior Associate

Enclosures

cc: Lisa Izumi, Project Engineer, HPHA

Enclosures – Exhibit A

EXHIBIT A
LISTING OF HOUSING PROJECTS

HPHA Project No.	Housing Project Name	Street Address	City/Town	Island	Zip Code	Tax Map Key	Year Completed & Occupied
City and County of Honolulu (20 Projects)							
1027	Hale Laulima	1184 Waimano Home Road	Pearl City	Oahu	96782	9-7-94:25	1981
	APE Acreage: 3.96	Land Use: Used as residential housing project			Historic Properties Present: No		
1072	Hookipa Kahaluu	47-330 Ahuimanu Rd.	Kaneohe	Oahu	96744	4-7-37:16	1983
	APE Acreage: 3.60	Land Use: Used as residential housing project			Historic Properties Present: No		
1062	Kalakaua Homes	1545 Kalakaua Ave.	Honolulu	Oahu	96826	2-3-19:04	1983
	APE Acreage: 4.80	Land Use: Used as residential housing project			Historic Properties Present: No		
1099	Kamehameha Homes	1541 Haka Dr.	Honolulu	Oahu	96817	1-5-01:01	1996
	APE Acreage: 16.00	Land Use: Used as residential housing project			Historic Properties Present: No		
1069	Kaneohe Apartments	45-507 & 45-513 Pahia Rd.	Kaneohe	Oahu	96744	4-5-19:26	1984
	APE Acreage: 0.43	Land Use: Used as residential housing project			Historic Properties Present: No		
1056	Kauhale Nani	310 N. Cane St.	Wahiawa	Oahu	96786	7-4-7:14	1980
	APE Acreage: 3.46	Land Use: Used as residential housing project			Historic Properties Present: No		
1090	Kauhale Ohana	41-1260 Kalanianaole Hwy.	Waimanalo	Oahu	96795	4-1-9:286	1995
	APE Acreage: 2.52	Land Use: Used as residential housing project			Historic Properties Present: No		
1091	Kau'iokalani	85-658 Farrington Hwy.	Waianae	Oahu	96792	8-5-28:044	1995
	APE Acreage: 4.04	Land Use: Used as residential housing project			Historic Properties Present: No		
1050	Kupuna Home O'Waialua (Eld)	67-088 Goodale Ave.	Waialua	Oahu	96791	6-7-16:28	1977
	APE Acreage: 3.27	Land Use: Used as residential housing project			Historic Properties Present: No		
1046	Makamae (Eld)	21 South Kuakini St.	Honolulu	Oahu	96813	2-2-01: 20	1971
	APE Acreage: 1.08	Land Use: Used as residential housing project			Historic Properties Present: No		
1036	Paoakalani (Eld)	1583 Kalakaua Ave.	Honolulu	Oahu	96826	2-3-19:4	1970
	APE Acreage: 1.80	Land Use: Used as residential housing project			Historic Properties Present: No		
1047	Pumehana (Eld)	1212 Kinau St.	Honolulu	Oahu	96814	2-4-11:39	1972
	APE Acreage: 0.46	Land Use: Used as residential housing project			Historic Properties Present: No		
1066	Salt Lake Apts.	2907 Ala Ilima St.	Honolulu	Oahu	96818	1-1-62:07	1982
	APE Acreage: 0.47	Land Use: Used as residential housing project			Historic Properties Present: No		
1073	Spencer House	1035 Spencer St.	Honolulu	Oahu	96822	2-4-16:08	1968
	APE Acreage: 0.32	Land Use: Used as residential housing project			Historic Properties Present: No		
1057	Waimaha-Sunflower	85-186 McArthur St.	Waianae	Oahu	96792	8-5-10:029, 063, 067	1980
	APE Acreage: 3.77	Land Use: Used as residential housing project			Historic Properties Present: No		

EXHIBIT A
LISTING OF HOUSING PROJECTS (Continued)

HPHA Project No.	Housing Project Name	Street Address	County	Island	Zip Code	Tax Map Key	Year Completed & Occupied
City and County of Honolulu (Continued)							
1025	Waimanalo Homes I	Humuniki St. & Humuna Pl.	Waimanalo	Oahu	96795	4-1-22:100; 4-1-23:050-064, 068; 4-1-28:005-022 and 107-122	1998
	APE Acreage: 8.34 (Combined with Phase II)	Land Use: Used as residential housing project			Historic Properties Present: No		
1107	Waimanalo Homes II	Humuniki St. & Humuna Pl.	Waimanalo	Oahu	96795	4-1-22:100; 4-1-23:050-064; 4-1-28:05-22 and 107-122	1998
	APE Acreage: 8.34 (Combined with Phase I)	Land Use: Used as residential housing project			Historic Properties Present: No		
1038	Waipahu I	94-111 Pupuole Pl.	Waipahu	Oahu	96797	9-4-39:19	1970
	APE Acreage: 0.26	Land Use: Used as residential housing project			Historic Properties Present: No		
1039	Waipahu II	94-132 Pupupuhi St.	Waipahu	Oahu	96797	9-4-39:76	1970
	APE Acreage: 0.26	Land Use: Used as residential housing project			Historic Properties Present: No		
1108	Maili II	87-171 Keliikipi St.	Waianae	Oahu	96792	8-7-01:01	1999
	APE Acreage: 1.73	Land Use: Used as residential housing project			Historic Properties Present: No		

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35TH Anniversary 1980-2015

September 8, 2015

Ms. Annelle Amaral, President
Association of Hawaiian Civic Clubs
P.O. Box 1135
Honolulu, Hawai‘i 96807

Dear Ms. Amaral:

Subject: Environmental Reviews for Federally-Subsidized Public Housing Projects Statewide
Section 106 Consultation – No Effect Determination

The State of Hawai‘i, Hawai‘i Public Housing Authority (HPHA) is proposing to conduct repair and rehabilitation improvement projects to 43 existing public housing projects located throughout the State over the next five (5) years (2015-2020). The State HPHA is subsequently conducting environmental reviews for these existing public housing projects in conformance with U.S. Department of Housing and Urban Development (HUD) requirements specified under 24 CFR Part 58 because Federal funds would be used.

One of the environmental review requirements is conducting Section 106 consultation with the State Historic Preservation Officer under the National Historic Preservation Act, as amended (NHPA) (16 U.S.C. 470(f)). Repair and rehabilitation improvements using Federal funds is considered an “undertaking” under these regulations, and the State HPHA is serving as the Agency Official initiating this Section 106 consultation process for this project. A “no historic properties affected” determination is proposed for repair and rehabilitation improvements that would be implemented at the 43 existing public housing project sites. Further information justifying this determination is provided with this letter.

Project Description

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a “major construction activity” and would involve one or a combination of the following actions identified below.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent.
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons.

3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland.
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation.
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8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site.
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Area of Potential Effect and Identification of Historic Properties

A listing of the 43 housing projects included under this Section 106 consultation is provided in Exhibit A along with information on existing land use. The “area of potential effect” (APE) on historic properties was established based upon the improvements that would occur which consist of repair and renovation work to existing buildings, units, and common area facilities. Utility repair or rehabilitation work would occur within the project site. The APE was therefore determined to consist of the property boundary associated with each housing project.

There are no known historic properties present within the properties of housing projects listed in Exhibit A. This is based upon; 1) similar HUD required environmental reviews conducted by HPHA in 2010 and prior which included site visits; 2) information on the State’s listing of historic sites included on the State and National Registers of Historic Places; and 3) HPHA’s experience with prior repair and renovation work occurring at these housing project sites. All of these properties have been extensively altered as part of prior construction of housing projects. Exhibit A also includes the year the housing projects were completed and initially occupied, and none of these projects have buildings 50 years old or older.

Determination of Effect

Based upon these efforts and review of each existing housing project, no historic properties were identified. Therefore, HPHA has determined that no historic properties would be affected by the various repair and rehabilitation improvements that may be implemented for these housing projects.

We are soliciting your comments on this no historic properties affected proposed determination. We would greatly appreciate your written response within 30 days of receipt of this letter, or sooner if possible.

Please contact me at 457-3172 or via email at rsato@hhf.com if you have any questions.

Sincerely,

Ronald A. Sato, AICP
Senior Associate

Enclosures

cc: Lisa Izumi, Project Engineer, HPHA

Enclosures – Exhibit A

EXHIBIT A
LISTING OF HOUSING PROJECTS

HPHA Project No.	Housing Project Name	Street Address	City/Town	Island	Zip Code	Tax Map Key	Year Completed & Occupied
Kaua'i County (6 Projects)							
1019	Hale Hoolulu (Eld)	4264 Ala Muku Place	Kilauea	Kauai	96754	5-2-08:56	1974
	APE Acreage: 1.00	Land Use: Used as residential housing project			Historic Properties Present: No		
1055	Hale Hoonanea (Eld)	4401 Waialo Road	Eleele	Kauai	96705	2-1-03:17	1976
	APE Acreage: 2.51	Land Use: Used as residential housing project			Historic Properties Present: No		
1054	Hale Nani Kai O'Kea (Eld)	4850 Kawaihau Rd.	Kapaa	Kauai	96746	4-6-14:105	1977
	APE Acreage: 3.47	Land Use: Used as residential housing project			Historic Properties Present: No		
1023	Home Nani (Eld)	Moana & Laau Rd.	Waimea	Kauai	96796	1-6-07:31	1970
	APE Acreage: 0.45	Land Use: Used as residential housing project			Historic Properties Present: No		
1086	Kawailehua (Federal)	5230 Paanau Rd.	Koloa	Kauai	96756	2-6-04:58	1993
	APE Acreage: 2.10	Land Use: Used as residential housing project			Historic Properties Present: No		
1064	Kekaha Ha'aheo	8238 Iwipolena St.	Kekaha	Kauai	96752	1-3-08:20 & 26	1982
	APE Acreage: 9.25	Land Use: Used as residential housing project			Historic Properties Present: No		
Maui County (4 Projects)							
1092	Makani Kai Hale I	35 Koapaka Ln.	Waiehu	Maui	96793	3-3-01:10	1995
	APE Acreage: 3.45 (Combined with Phase II)	Land Use: Used as residential housing project			Historic Properties Present: No		
1097	Makani Kai Hale II	35 Koapaka Ln.	Waiehu	Maui	96793	4-6-10:31	1998
	APE Acreage: 3.45 (Combined with Phase I)	Land Use: Used as residential housing project			Historic Properties Present: No		
1044	Piilani Homes	1028 Wainee St.	Lahaina	Maui	96761	4-5-07:05	1970
	APE Acreage: 2.62	Land Use: Used as residential housing project			Historic Properties Present: No		
1088	Kahale Mua (Federal)	P.O. Box 30	Maunaloa	Molokai	96770	5-1-02:39	1993
	APE Acreage: 1.88	Land Use: Used as residential housing project			Historic Properties Present: No		
Hawai'i County (13 Projects)							
1051	Hale Aloha O'Puna (Eld)	16-189 Pili Mua St.	Keaau	Hawaii	96749	1-6-143:35	1977
	APE Acreage: 1.90	Land Use: Used as residential housing project			Historic Properties Present: No		
1031	Hale Hauoli	45-540 Kaniaka Pl.	Honokaa	Hawaii	96727	4-5-10:78	1970
	APE Acreage: 2.43	Land Use: Used as residential housing project			Historic Properties Present: No		
1053	Hale Hookipa (Eld)	81-1038 Nani Kupuna Place	Kealakekua	Hawaii	96750	8-1-02:49	1976
	APE Acreage: 6.11	Land Use: Used as residential housing project			Historic Properties Present: No		
1052	Hale Olaloa	144 Kamana St.	Hilo	Hawaii	96720	2-4-56:21	1976
	APE Acreage: 6.51	Land Use: Used as residential housing project			Historic Properties Present: No		

EXHIBIT A
LISTING OF HOUSING PROJECTS (Continued)

HPHA Project No.	Housing Project Name	Street Address	City/Town	Island	Zip Code	Tax Map Key	Year Completed & Occupied
Hawai'i County (Continued)							
1061	Ka Hale Kahaluu	78-6725 Makolea St.	Kona	Hawaii	96740	7-8-10:04	1981
	APE Acreage: 3.37	Land Use: Used as residential housing project			Historic Properties Present: No		
1032	Kaimalino	74-5060 Kealakaa St.	Kona	Hawaii	96740	7-4-17:29	1971
	APE Acreage: 5.53	Land Use: Used as residential housing project			Historic Properties Present: No		
1097	Kauhale O'Hanakahi	19 Pamala St.	Hilo	Hawaii	96720	2-4-51:01	1997
	APE Acreage: 3.20	Land Use: Used as residential housing project			Historic Properties Present: No		
1097	Ke Kumu 'Ekolu	68-3385 Ke Kumu Pl.	Waikoloa	Hawaii	96738	6-8-02:43	1997
	APE Acreage: 6.47	Land Use: Used as residential housing project			Historic Properties Present: No		
1070	Kealakehe	74-991 Manawale'a St.	Kailua-Kona	Hawaii	96740	7-4-17:58	1985
	APE Acreage: 3.29	Land Use: Used as residential housing project			Historic Properties Present: No		
1063	Nani Olu	81-1011 Nani Kupuna Pl.	Kona	Hawaii	96740	8-1-02:47 & 48	1981
	APE Acreage: 0.99	Land Use: Used as residential housing project			Historic Properties Present: No		
1071	Noelani I	65-1191 Opelo Road	Kamuela	Hawaii	96743	6-5-09:29	1983
	APE Acreage: 0.69	Land Use: Used as residential housing project			Historic Properties Present: No		
1078	Noelani II	65-1191 Opelo Rd.	Kamuela	Hawaii	96743	6-5-09:25	1983
	APE Acreage: 0.70	Land Use: Used as residential housing project			Historic Properties Present: No		
1045	Pahala (Eld)	96-1169 Holei St.	Pahala	Hawaii	96720	9-6-17:37	1972
	APE Acreage: 1.44	Land Use: Used as residential housing project			Historic Properties Present: No		
City and County of Honolulu (20 Projects)							
1027	Hale Laulima	1184 Waimano Home Road	Pearl City	Oahu	96782	9-7-94:25	1981
	APE Acreage: 3.96	Land Use: Used as residential housing project			Historic Properties Present: No		
1072	Hookipa Kahaluu	47-330 Ahuimanu Rd.	Kaneohe	Oahu	96744	4-7-37:16	1983
	APE Acreage: 3.60	Land Use: Used as residential housing project			Historic Properties Present: No		
1062	Kalakaua Homes	1545 Kalakaua Ave.	Honolulu	Oahu	96826	2-3-19:04	1983
	APE Acreage: 4.80	Land Use: Used as residential housing project			Historic Properties Present: No		
1099	Kamehameha Homes	1541 Haka Dr.	Honolulu	Oahu	96817	1-5-01:01	1996
	APE Acreage: 16.00	Land Use: Used as residential housing project			Historic Properties Present: No		
1069	Kaneohe Apartments	45-507 & 45-513 Pahia Rd.	Kaneohe	Oahu	96744	4-5-19:26	1984
	APE Acreage: 0.43	Land Use: Used as residential housing project			Historic Properties Present: No		
1056	Kauhale Nani	310 N. Cane St.	Wahiawa	Oahu	96786	7-4-7:14	1980
	APE Acreage: 3.46	Land Use: Used as residential housing project			Historic Properties Present: No		
1090	Kauhale Ohana	41-1260 Kalanianaole Hwy.	Waimanalo	Oahu	96795	4-1-9:286	1995
	APE Acreage: 2.52	Land Use: Used as residential housing project			Historic Properties Present: No		

EXHIBIT A
LISTING OF HOUSING PROJECTS (Continued)

HPHA Project No.	Housing Project Name	Street Address	County	Island	Zip Code	Tax Map Key	Year Completed & Occupied
City and County of Honolulu (Continued)							
1091	Kau'iokalani	85-658 Farrington Hwy.	Waianae	Oahu	96792	8-5-28:044	1995
	APE Acreage: 4.04	Land Use: Used as residential housing project			Historic Properties Present: No		
1050	Kupuna Home O'Waialua (Eld)	67-088 Goodale Ave.	Waialua	Oahu	96791	6-7-16:28	1977
	APE Acreage: 3.27	Land Use: Used as residential housing project			Historic Properties Present: No		
1046	Makamae (Eld)	21 South Kuakini St.	Honolulu	Oahu	96813	2-2-01: 20	1971
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	APE Acreage: 1.80	Land Use: Used as residential housing project			Historic Properties Present: No		
1047	Pumehana (Eld)	1212 Kinau St.	Honolulu	Oahu	96814	2-4-11:39	1972
	APE Acreage: 0.46	Land Use: Used as residential housing project			Historic Properties Present: No		
1066	Salt Lake Apts.	2907 Ala Ilima St.	Honolulu	Oahu	96818	1-1-62:07	1982
	APE Acreage: 0.47	Land Use: Used as residential housing project			Historic Properties Present: No		
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	APE Acreage: 3.77	Land Use: Used as residential housing project			Historic Properties Present: No		
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	APE Acreage: 8.34 (Combined with Phase II)	Land Use: Used as residential housing project			Historic Properties Present: No		
1107	Waimanalo Homes II	Humuniki St. & Humuna Pl.	Waimanalo	Oahu	96795	4-1-22:100; 4-1-23:050-064; 4-1-28:05-22 and 107-122	1998
	APE Acreage: 8.34 (Combined with Phase I)	Land Use: Used as residential housing project			Historic Properties Present: No		
1038	Waipahu I	94-111 Pupuole Pl.	Waipahu	Oahu	96797	9-4-39:19	1970
	APE Acreage: 0.26	Land Use: Used as residential housing project			Historic Properties Present: No		
1039	Waipahu II	94-132 Pupupuhi St.	Waipahu	Oahu	96797	9-4-39:76	1970
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1108	Maili II	87-171 Keliikipi St.	Waianae	Oahu	96792	8-7-01:01	1999
	APE Acreage: 1.73	Land Use: Used as residential housing project			Historic Properties Present: No		

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September 8, 2015

Mr. George I. Atta, FAICP, Director
Department of Planning and Permitting
City and County of Honolulu
650 South King Street, 7th Floor
Honolulu, Hawai‘i 96813

Dear Mr. Atta, FAICP:

Subject: Environmental Reviews for Federally-Subsidized Public Housing Projects (City and County of Honolulu)
Section 106 Consultation – No Effect Determination

The State of Hawai‘i, Hawai‘i Public Housing Authority (HPHA) is proposing to conduct repair and rehabilitation improvement projects to 20 existing public housing projects located throughout the City and County of Honolulu over the next five (5) years (2015-2020). The State HPHA is subsequently conducting environmental reviews for these existing public housing projects in conformance with U.S. Department of Housing and Urban Development (HUD) requirements specified under 24 CFR Part 58 because Federal funds would be used.

One of the environmental review requirements is conducting Section 106 consultation with the State Historic Preservation Officer under the National Historic Preservation Act, as amended (NHPA) (16 U.S.C. 470(f)). Repair and rehabilitation improvements using Federal funds is considered an “undertaking” under these regulations, and the State HPHA is serving as the Agency Official initiating this Section 106 consultation process for this project. A “no historic properties affected” determination is proposed for repair and rehabilitation improvements that would be implemented at the 20 existing public housing project sites. Further information justifying this determination is provided with this letter.

Project Description

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1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent.

2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons.
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland.
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation.
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8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site.
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Area of Potential Effect and Identification of Historic Properties

A listing of the 20 housing projects included under this Section 106 consultation is provided in Exhibit A along with information on existing land use. The "area of potential effect" (APE) on historic properties was established based upon the improvements that would occur which consist of repair and renovation work to existing buildings, units, and common area facilities. Utility repair or rehabilitation work would occur within the project site. The APE was therefore determined to consist of the property boundary associated with each housing project.

There are no known historic properties present within the properties of housing projects listed in Exhibit A. This is based upon; 1) similar HUD required environmental reviews conducted by HPHA in 2010 and prior which included site visits; 2) information on the State's listing of historic sites included on the State and National Registers of Historic Places; and 3) HPHA's experience with prior repair and renovation work occurring at these housing project sites. All of these properties have been extensively altered as part of prior construction of housing projects. Exhibit A also includes the year the housing projects were completed and initially occupied, and none of these projects have buildings 50 years old or older.

Determination of Effect

Based upon these efforts and review of each existing housing project, no historic properties were identified. Therefore, HPHA has determined that no historic properties would be affected by the various repair and rehabilitation improvements that may be implemented for these housing projects.

We are soliciting your comments on this no historic properties affected proposed determination. We would greatly appreciate your written response within 30 days of receipt of this letter, or sooner if possible.

Please contact me at 457-3172 or via email at rsato@hhf.com if you have any questions.

Sincerely,

Ronald A. Sato, AICP
Senior Associate

Enclosures

cc: Lisa Izumi, Project Engineer, HPHA

Enclosures – Exhibit A

EXHIBIT A
LISTING OF HOUSING PROJECTS

HPHA Project No.	Housing Project Name	Street Address	City/Town	Island	Zip Code	Tax Map Key	Year Completed & Occupied
City and County of Honolulu (20 Projects)							
1027	Hale Laulima	1184 Waimano Home Road	Pearl City	Oahu	96782	9-7-94:25	1981
	APE Acreage: 3.96	Land Use: Used as residential housing project			Historic Properties Present: No		
1072	Hookipa Kahaluu	47-330 Ahuimanu Rd.	Kaneohe	Oahu	96744	4-7-37:16	1983
	APE Acreage: 3.60	Land Use: Used as residential housing project			Historic Properties Present: No		
1062	Kalakaua Homes	1545 Kalakaua Ave.	Honolulu	Oahu	96826	2-3-19:04	1983
	APE Acreage: 4.80	Land Use: Used as residential housing project			Historic Properties Present: No		
1099	Kamehameha Homes	1541 Haka Dr.	Honolulu	Oahu	96817	1-5-01:01	1996
	APE Acreage: 16.00	Land Use: Used as residential housing project			Historic Properties Present: No		
1069	Kaneohe Apartments	45-507 & 45-513 Pahia Rd.	Kaneohe	Oahu	96744	4-5-19:26	1984
	APE Acreage: 0.43	Land Use: Used as residential housing project			Historic Properties Present: No		
1056	Kauhale Nani	310 N. Cane St.	Wahiawa	Oahu	96786	7-4-7:14	1980
	APE Acreage: 3.46	Land Use: Used as residential housing project			Historic Properties Present: No		
1090	Kauhale Ohana	41-1260 Kalanianaole Hwy.	Waimanalo	Oahu	96795	4-1-9:286	1995
	APE Acreage: 2.52	Land Use: Used as residential housing project			Historic Properties Present: No		
1091	Kau'iokalani	85-658 Farrington Hwy.	Waianae	Oahu	96792	8-5-28:044	1995
	APE Acreage: 4.04	Land Use: Used as residential housing project			Historic Properties Present: No		
1050	Kupuna Home O'Waialua (Eld)	67-088 Goodale Ave.	Waialua	Oahu	96791	6-7-16:28	1977
	APE Acreage: 3.27	Land Use: Used as residential housing project			Historic Properties Present: No		
1046	Makamae (Eld)	21 South Kuakini St.	Honolulu	Oahu	96813	2-2-01: 20	1971
	APE Acreage: 1.08	Land Use: Used as residential housing project			Historic Properties Present: No		
1036	Paoakalani (Eld)	1583 Kalakaua Ave.	Honolulu	Oahu	96826	2-3-19:4	1970
	APE Acreage: 1.80	Land Use: Used as residential housing project			Historic Properties Present: No		
1047	Pumehana (Eld)	1212 Kinau St.	Honolulu	Oahu	96814	2-4-11:39	1972
	APE Acreage: 0.46	Land Use: Used as residential housing project			Historic Properties Present: No		
1066	Salt Lake Apts.	2907 Ala Ilima St.	Honolulu	Oahu	96818	1-1-62:07	1982
	APE Acreage: 0.47	Land Use: Used as residential housing project			Historic Properties Present: No		
1073	Spencer House	1035 Spencer St.	Honolulu	Oahu	96822	2-4-16:08	1968
	APE Acreage: 0.32	Land Use: Used as residential housing project			Historic Properties Present: No		
1057	Waimaha-Sunflower	85-186 McArthur St.	Waianae	Oahu	96792	8-5-10:029, 063, 067	1980
	APE Acreage: 3.77	Land Use: Used as residential housing project			Historic Properties Present: No		

EXHIBIT A
LISTING OF HOUSING PROJECTS (Continued)

HPHA Project No.	Housing Project Name	Street Address	County	Island	Zip Code	Tax Map Key	Year Completed & Occupied
City and County of Honolulu (Continued)							
1025	Waimanalo Homes I	Humuniki St. & Humuna Pl.	Waimanalo	Oahu	96795	4-1-22:100; 4-1-23:050-064, 068; 4-1-28:005-022 and 107-122	1998
	APE Acreage: 8.34 (Combined with Phase II)	Land Use: Used as residential housing project			Historic Properties Present: No		
1107	Waimanalo Homes II	Humuniki St. & Humuna Pl.	Waimanalo	Oahu	96795	4-1-22:100; 4-1-23:050-064; 4-1-28:05-22 and 107-122	1998
	APE Acreage: 8.34 (Combined with Phase I)	Land Use: Used as residential housing project			Historic Properties Present: No		
1038	Waipahu I	94-111 Pupuole Pl.	Waipahu	Oahu	96797	9-4-39:19	1970
	APE Acreage: 0.26	Land Use: Used as residential housing project			Historic Properties Present: No		
1039	Waipahu II	94-132 Pupupuhi St.	Waipahu	Oahu	96797	9-4-39:76	1970
	APE Acreage: 0.26	Land Use: Used as residential housing project			Historic Properties Present: No		
1108	Maili II	87-171 Keliikipi St.	Waianae	Oahu	96792	8-7-01:01	1999
	APE Acreage: 1.73	Land Use: Used as residential housing project			Historic Properties Present: No		

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September 8, 2015

Mr. Duane Kanuha, Director
Planning Department
County of Hawai‘i
Aupuni Center
101 Pauahi Street, Suite 3
Hilo, Hawai‘i 96720

Dear Mr. Kanuha:

Subject: Environmental Reviews for Federally-Subsidized Public Housing Projects (County of Hawai‘i)
Section 106 Consultation – No Effect Determination

The State of Hawai‘i, Hawai‘i Public Housing Authority (HPHA) is proposing to conduct repair and rehabilitation improvement projects to 13 existing public housing projects located within the County of Hawai‘i over the next five (5) years (2015-2020). The State HPHA is subsequently conducting environmental reviews for these existing public housing projects in conformance with U.S. Department of Housing and Urban Development (HUD) requirements specified under 24 CFR Part 58 because Federal funds would be used.

One of the environmental review requirements is conducting Section 106 consultation with the State Historic Preservation Officer under the National Historic Preservation Act, as amended (NHPA) (16 U.S.C. 470(f)). Repair and rehabilitation improvements using Federal funds is considered an “undertaking” under these regulations, and the State HPHA is serving as the Agency Official initiating this Section 106 consultation process for this project. A “no historic properties affected” determination is proposed for repair and rehabilitation improvements that would be implemented at the 43 existing public housing project sites. Further information justifying this determination is provided with this letter.

Project Description

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a “major construction activity” and would involve one or a combination of the following actions identified below.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent.

2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons.
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland.
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation.
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls).
7. Interior and exterior renovations and rehabilitation.
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site.
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Area of Potential Effect and Identification of Historic Properties

A listing of the 13 housing projects included under this Section 106 consultation is provided in Exhibit A along with information on existing land use. The “area of potential effect” (APE) on historic properties was established based upon the improvements that would occur which consist of repair and renovation work to existing buildings, units, and common area facilities. Utility repair or rehabilitation work would occur within the project site. The APE was therefore determined to consist of the property boundary associated with each housing project. Exhibit B includes a summary of each housing project, a location map, and an APE boundary map.

There are no known historic properties present within the properties of housing projects listed in Exhibit A. This is based upon; 1) similar HUD required environmental reviews conducted by HPHA in 2010 and prior which included site visits; 2) information on the State's listing of historic sites included on the State and National Registers of Historic Places; and 3) HPHA's experience with prior repair and renovation work occurring at these housing project sites. All of these properties have been extensively altered as part of prior construction of housing projects. Exhibit A also includes the year the housing projects were completed and initially occupied, and none of these projects have buildings 50 years old or older.

Determination of Effect

Based upon these efforts and review of each existing housing project, no historic properties were identified. Therefore, HPHA has determined that no historic properties would be affected by the various repair and rehabilitation improvements that may be implemented for these housing projects.

We are soliciting your comments on this no historic properties affected proposed determination. We would greatly appreciate your written response within 30 days of receipt of this letter, or sooner if possible.

Please contact me at 457-3172 or via email at rsato@hhf.com if you have any questions.

Sincerely,

Ronald A. Sato, AICP
Senior Associate

Enclosures

cc: Lisa Izumi, Project Engineer, HPHA

Enclosures – Exhibits A and B

EXHIBIT A
LISTING OF HOUSING PROJECTS

HPHA Project No.	Housing Project Name	Street Address	City/Town	Island	Zip Code	Tax Map Key	Year Completed & Occupied
Hawai'i County (13 Projects)							
1051	Hale Aloha O'Puna (Eld)	16-189 Pili Mua St.	Keaau	Hawaii	96749	1-6-143:35	1977
	APE Acreage: 1.90	Land Use: Used as residential housing project			Historic Properties Present: No		
1031	Hale Hauoli	45-540 Kaniaka Pl.	Honokaa	Hawaii	96727	4-5-10:78	1970
	APE Acreage: 2.43	Land Use: Used as residential housing project			Historic Properties Present: No		
1053	Hale Hookipa (Eld)	81-1038 Nani Kupuna Place	Kealakekua	Hawaii	96750	8-1-02:49	1976
	APE Acreage: 6.11	Land Use: Used as residential housing project			Historic Properties Present: No		
1052	Hale Olaloa	144 Kamana St.	Hilo	Hawaii	96720	2-4-56:21	1976
	APE Acreage: 6.51	Land Use: Used as residential housing project			Historic Properties Present: No		
1061	Ka Hale Kahaluu	78-6725 Makolea St.	Kona	Hawaii	96740	7-8-10:04	1981
	APE Acreage: 3.37	Land Use: Used as residential housing project			Historic Properties Present: No		
1032	Kaimalino	74-5060 Kealakaa St.	Kona	Hawaii	96740	7-4-17:29	1971
	APE Acreage: 5.53	Land Use: Used as residential housing project			Historic Properties Present: No		
1097	Kauhale O'Hanakahi	19 Pamala St.	Hilo	Hawaii	96720	2-4-51:01	1997
	APE Acreage: 3.20	Land Use: Used as residential housing project			Historic Properties Present: No		
1097	Ke Kumu 'Ekolu	68-3385 Ke Kumu Pl.	Waikoloa	Hawaii	96738	6-8-02:43	1997
	APE Acreage: 6.47	Land Use: Used as residential housing project			Historic Properties Present: No		
1070	Kealakehe	74-991 Manawale'a St.	Kailua-Kona	Hawaii	96740	7-4-17:58	1985
	APE Acreage: 3.29	Land Use: Used as residential housing project			Historic Properties Present: No		
1063	Nani Olu	81-1011 Nani Kupuna Pl.	Kona	Hawaii	96740	8-1-02:47 & 48	1981
	APE Acreage: 0.99	Land Use: Used as residential housing project			Historic Properties Present: No		
1071	Noelani I	65-1191 Opelo Road	Kamuela	Hawaii	96743	6-5-09:29	1983
	APE Acreage: 0.69	Land Use: Used as residential housing project			Historic Properties Present: No		
1078	Noelani II	65-1191 Opelo Rd.	Kamuela	Hawaii	96743	6-5-09:25	1983
	APE Acreage: 0.70	Land Use: Used as residential housing project			Historic Properties Present: No		
1045	Pahala (Eld)	96-1169 Holei St.	Pahala	Hawaii	96720	9-6-17:37	1972
	APE Acreage: 1.44	Land Use: Used as residential housing project			Historic Properties Present: No		

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September 8, 2015

Ms. Kiersten Faulkner, Executive Director
Historic Hawai'i Foundation
Dole Office Building Tower
680 Iwilei Road, Suite #690
Honolulu, Hawai‘i 96817

Dear Ms. Faulkner:

Subject: Environmental Reviews for Federally-Subsidized Public Housing Projects Statewide
Section 106 Consultation – No Effect Determination

The State of Hawai‘i, Hawai‘i Public Housing Authority (HPHA) is proposing to conduct repair and rehabilitation improvement projects to 43 existing public housing projects located throughout the State over the next five (5) years (2015-2020). The State HPHA is subsequently conducting environmental reviews for these existing public housing projects in conformance with U.S. Department of Housing and Urban Development (HUD) requirements specified under 24 CFR Part 58 because Federal funds would be used.

One of the environmental review requirements is conducting Section 106 consultation with the State Historic Preservation Officer under the National Historic Preservation Act, as amended (NHPA) (16 U.S.C. 470(f)). Repair and rehabilitation improvements using Federal funds is considered an “undertaking” under these regulations, and the State HPHA is serving as the Agency Official initiating this Section 106 consultation process for this project. A “no historic properties affected” determination is proposed for repair and rehabilitation improvements that would be implemented at the 43 existing public housing project sites. Further information justifying this determination is provided with this letter.

Project Description

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a “major construction activity” and would involve one or a combination of the following actions identified below.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent.
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons.

3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland.
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation.
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls).
7. Interior and exterior renovations and rehabilitation.
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site.
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Area of Potential Effect and Identification of Historic Properties

A listing of the 43 housing projects included under this Section 106 consultation is provided in Exhibit A along with information on existing land use. The “area of potential effect” (APE) on historic properties was established based upon the improvements that would occur which consist of repair and renovation work to existing buildings, units, and common area facilities. Utility repair or rehabilitation work would occur within the project site. The APE was therefore determined to consist of the property boundary associated with each housing project.

There are no known historic properties present within the properties of housing projects listed in Exhibit A. This is based upon; 1) similar HUD required environmental reviews conducted by HPHA in 2010 and prior which included site visits; 2) information on the State’s listing of historic sites included on the State and National Registers of Historic Places; and 3) HPHA’s experience with prior repair and renovation work occurring at these housing project sites. All of these properties have been extensively altered as part of prior construction of housing projects. Exhibit A also includes the year the housing projects were completed and initially occupied, and none of these projects have buildings 50 years old or older.

Determination of Effect

Based upon these efforts and review of each existing housing project, no historic properties were identified. Therefore, HPHA has determined that no historic properties would be affected by the various repair and rehabilitation improvements that may be implemented for these housing projects.

We are soliciting your comments on this no historic properties affected proposed determination. We would greatly appreciate your written response within 30 days of receipt of this letter, or sooner if possible.

Please contact me at 457-3172 or via email at rsato@hhf.com if you have any questions.

Sincerely,

Ronald A. Sato, AICP
Senior Associate

Enclosures

cc: Lisa Izumi, Project Engineer, HPHA

Enclosures – Exhibit A

EXHIBIT A
LISTING OF HOUSING PROJECTS

HPHA Project No.	Housing Project Name	Street Address	City/Town	Island	Zip Code	Tax Map Key	Year Completed & Occupied
Kaua‘i County (6 Projects)							
1019	Hale Hoolulu (Eld)	4264 Ala Muku Place	Kilauea	Kauai	96754	5-2-08:56	1974
	APE Acreage: 1.00	Land Use: Used as residential housing project			Historic Properties Present: No		
1055	Hale Hoonanea (Eld)	4401 Waialo Road	Eleele	Kauai	96705	2-1-03:17	1976
	APE Acreage: 2.51	Land Use: Used as residential housing project			Historic Properties Present: No		
1054	Hale Nani Kai O'Kea (Eld)	4850 Kawaihau Rd.	Kapaa	Kauai	96746	4-6-14:105	1977
	APE Acreage: 3.47	Land Use: Used as residential housing project			Historic Properties Present: No		
1023	Home Nani (Eld)	Moana & Laau Rd.	Waimea	Kauai	96796	1-6-07:31	1970
	APE Acreage: 0.45	Land Use: Used as residential housing project			Historic Properties Present: No		
1086	Kawailehua (Federal)	5230 Paanau Rd.	Koloa	Kauai	96756	2-6-04:58	1993
	APE Acreage: 2.10	Land Use: Used as residential housing project			Historic Properties Present: No		
1064	Kekaha Ha'aheo	8238 Iwipolena St.	Kekaha	Kauai	96752	1-3-08:20 & 26	1982
	APE Acreage: 9.25	Land Use: Used as residential housing project			Historic Properties Present: No		
Maui County (4 Projects)							
1092	Makani Kai Hale I	35 Koapaka Ln.	Waiehu	Maui	96793	3-3-01:10	1995
	APE Acreage: 3.45 (Combined with Phase II)	Land Use: Used as residential housing project			Historic Properties Present: No		
1097	Makani Kai Hale II	35 Koapaka Ln.	Waiehu	Maui	96793	4-6-10:31	1998
	APE Acreage: 3.45 (Combined with Phase I)	Land Use: Used as residential housing project			Historic Properties Present: No		
1044	Piilani Homes	1028 Wainee St.	Lahaina	Maui	96761	4-5-07:05	1970
	APE Acreage: 2.62	Land Use: Used as residential housing project			Historic Properties Present: No		
1088	Kahale Mua (Federal)	P.O. Box 30	Maunaloa	Molokai	96770	5-1-02:39	1993
	APE Acreage: 1.88	Land Use: Used as residential housing project			Historic Properties Present: No		
Hawai‘i County (13 Projects)							
1051	Hale Aloha O'Puna (Eld)	16-189 Pili Mua St.	Keaau	Hawaii	96749	1-6-143:35	1977
	APE Acreage: 1.90	Land Use: Used as residential housing project			Historic Properties Present: No		
1031	Hale Hauoli	45-540 Kaniaka Pl.	Honokaa	Hawaii	96727	4-5-10:78	1970
	APE Acreage: 2.43	Land Use: Used as residential housing project			Historic Properties Present: No		
1053	Hale Hookipa (Eld)	81-1038 Nani Kupuna Place	Kealakekua	Hawaii	96750	8-1-02:49	1976
	APE Acreage: 6.11	Land Use: Used as residential housing project			Historic Properties Present: No		
1052	Hale Olaloa	144 Kamana St.	Hilo	Hawaii	96720	2-4-56:21	1976
	APE Acreage: 6.51	Land Use: Used as residential housing project			Historic Properties Present: No		

EXHIBIT A
LISTING OF HOUSING PROJECTS (Continued)

HPHA Project No.	Housing Project Name	Street Address	City/Town	Island	Zip Code	Tax Map Key	Year Completed & Occupied
Hawai‘i County (Continued)							
1061	Ka Hale Kahaluu	78-6725 Makolea St.	Kona	Hawaii	96740	7-8-10:04	1981
	APE Acreage: 3.37	Land Use: Used as residential housing project			Historic Properties Present: No		
1032	Kaimalino	74-5060 Kealakaa St.	Kona	Hawaii	96740	7-4-17:29	1971
	APE Acreage: 5.53	Land Use: Used as residential housing project			Historic Properties Present: No		
1097	Kauhale O'Hanakahi	19 Pamala St.	Hilo	Hawaii	96720	2-4-51:01	1997
	APE Acreage: 3.20	Land Use: Used as residential housing project			Historic Properties Present: No		
1097	Ke Kumu 'Ekolu	68-3385 Ke Kumu Pl.	Waikoloa	Hawaii	96738	6-8-02:43	1997
	APE Acreage: 6.47	Land Use: Used as residential housing project			Historic Properties Present: No		
1070	Kealakehe	74-991 Manawale'a St.	Kailua-Kona	Hawaii	96740	7-4-17:58	1985
	APE Acreage: 3.29	Land Use: Used as residential housing project			Historic Properties Present: No		
1063	Nani Olu	81-1011 Nani Kupuna Pl.	Kona	Hawaii	96740	8-1-02:47 & 48	1981
	APE Acreage: 0.99	Land Use: Used as residential housing project			Historic Properties Present: No		
1071	Noelani I	65-1191 Opelo Road	Kamuela	Hawaii	96743	6-5-09:29	1983
	APE Acreage: 0.69	Land Use: Used as residential housing project			Historic Properties Present: No		
1078	Noelani II	65-1191 Opelo Rd.	Kamuela	Hawaii	96743	6-5-09:25	1983
	APE Acreage: 0.70	Land Use: Used as residential housing project			Historic Properties Present: No		
1045	Pahala (Eld)	96-1169 Holei St.	Pahala	Hawaii	96720	9-6-17:37	1972
	APE Acreage: 1.44	Land Use: Used as residential housing project			Historic Properties Present: No		
City and County of Honolulu (20 Projects)							
1027	Hale Laulima	1184 Waimano Home Road	Pearl City	Oahu	96782	9-7-94:25	1981
	APE Acreage: 3.96	Land Use: Used as residential housing project			Historic Properties Present: No		
1072	Hookipa Kahaluu	47-330 Ahuimanu Rd.	Kaneohe	Oahu	96744	4-7-37:16	1983
	APE Acreage: 3.60	Land Use: Used as residential housing project			Historic Properties Present: No		
1062	Kalakaua Homes	1545 Kalakaua Ave.	Honolulu	Oahu	96826	2-3-19:04	1983
	APE Acreage: 4.80	Land Use: Used as residential housing project			Historic Properties Present: No		
1099	Kamehameha Homes	1541 Haka Dr.	Honolulu	Oahu	96817	1-5-01:01	1996
	APE Acreage: 16.00	Land Use: Used as residential housing project			Historic Properties Present: No		
1069	Kaneohe Apartments	45-507 & 45-513 Pahia Rd.	Kaneohe	Oahu	96744	4-5-19:26	1984
	APE Acreage: 0.43	Land Use: Used as residential housing project			Historic Properties Present: No		
1056	Kauhale Nani	310 N. Cane St.	Wahiawa	Oahu	96786	7-4-7:14	1980
	APE Acreage: 3.46	Land Use: Used as residential housing project			Historic Properties Present: No		
1090	Kauhale Ohana	41-1260 Kalanianaole Hwy.	Waimanalo	Oahu	96795	4-1-9:286	1995
	APE Acreage: 2.52	Land Use: Used as residential housing project			Historic Properties Present: No		

EXHIBIT A
LISTING OF HOUSING PROJECTS (Continued)

HPHA Project No.	Housing Project Name	Street Address	County	Island	Zip Code	Tax Map Key	Year Completed & Occupied
City and County of Honolulu (Continued)							
1091	Kau'iokalani	85-658 Farrington Hwy.	Waianae	Oahu	96792	8-5-28:044	1995
	APE Acreage: 4.04	Land Use: Used as residential housing project			Historic Properties Present: No		
1050	Kupuna Home O'Waialua (Eld)	67-088 Goodale Ave.	Waialua	Oahu	96791	6-7-16:28	1977
	APE Acreage: 3.27	Land Use: Used as residential housing project			Historic Properties Present: No		
1046	Makamae (Eld)	21 South Kuakini St.	Honolulu	Oahu	96813	2-2-01: 20	1971
	APE Acreage: 1.08	Land Use: Used as residential housing project			Historic Properties Present: No		
1036	Paoakalani (Eld)	1583 Kalakaua Ave.	Honolulu	Oahu	96826	2-3-19:4	1970
	APE Acreage: 1.80	Land Use: Used as residential housing project			Historic Properties Present: No		
1047	Pumehana (Eld)	1212 Kinau St.	Honolulu	Oahu	96814	2-4-11:39	1972
	APE Acreage: 0.46	Land Use: Used as residential housing project			Historic Properties Present: No		
1066	Salt Lake Apts.	2907 Ala Ilima St.	Honolulu	Oahu	96818	1-1-62:07	1982
	APE Acreage: 0.47	Land Use: Used as residential housing project			Historic Properties Present: No		
1073	Spencer House	1035 Spencer St.	Honolulu	Oahu	96822	2-4-16:08	1968
	APE Acreage: 0.32	Land Use: Used as residential housing project			Historic Properties Present: No		
1057	Waimaha-Sunflower	85-186 McArthur St.	Waianae	Oahu	96792	8-5-10:029, 063, 067	1980
	APE Acreage: 3.77	Land Use: Used as residential housing project			Historic Properties Present: No		
1025	Waimanalo Homes I	Humuniki St. & Humuna Pl.	Waimanalo	Oahu	96795	4-1-22:100; 4-1-23:050-064, 068; 4-1-28:005-022 and 107-122	1998
	APE Acreage: 8.34 (Combined with Phase II)	Land Use: Used as residential housing project			Historic Properties Present: No		
1107	Waimanalo Homes II	Humuniki St. & Humuna Pl.	Waimanalo	Oahu	96795	4-1-22:100; 4-1-23:050-064; 4-1-28:05-22 and 107-122	1998
	APE Acreage: 8.34 (Combined with Phase I)	Land Use: Used as residential housing project			Historic Properties Present: No		
1038	Waipahu I	94-111 Pupuole Pl.	Waipahu	Oahu	96797	9-4-39:19	1970
	APE Acreage: 0.26	Land Use: Used as residential housing project			Historic Properties Present: No		
1039	Waipahu II	94-132 Pupupuhi St.	Waipahu	Oahu	96797	9-4-39:76	1970
	APE Acreage: 0.26	Land Use: Used as residential housing project			Historic Properties Present: No		
1108	Maili II	87-171 Keliikipi St.	Waianae	Oahu	96792	8-7-01:01	1999
	APE Acreage: 1.73	Land Use: Used as residential housing project			Historic Properties Present: No		

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September 8, 2015

Mr. Edward Halealoha Ayau, Executive Director
Hui Malama I Na Kupuna o Hawai'i Nei

Via Email: halealoha@wave.hicv.net

Dear Mr. Ayau:

Subject: Environmental Reviews for Federally-Subsidized Public Housing Projects Statewide
Section 106 Consultation – No Effect Determination

The State of Hawai'i, Hawai'i Public Housing Authority (HPHA) is proposing to conduct repair and rehabilitation improvement projects to 43 existing public housing projects located throughout the State over the next five (5) years (2015-2020). The State HPHA is subsequently conducting environmental reviews for these existing public housing projects in conformance with U.S. Department of Housing and Urban Development (HUD) requirements specified under 24 CFR Part 58 because Federal funds would be used.

One of the environmental review requirements is conducting Section 106 consultation with the State Historic Preservation Officer under the National Historic Preservation Act, as amended (NHPA) (16 U.S.C. 470(f)). Repair and rehabilitation improvements using Federal funds is considered an "undertaking" under these regulations, and the State HPHA is serving as the Agency Official initiating this Section 106 consultation process for this project. A "no historic properties affected" determination is proposed for repair and rehabilitation improvements that would be implemented at the 43 existing public housing project sites. Further information justifying this determination is provided with this letter.

Project Description

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a "major construction activity" and would involve one or a combination of the following actions identified below.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent.
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons.

3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland.
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation.
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls).
7. Interior and exterior renovations and rehabilitation.
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site.
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Area of Potential Effect and Identification of Historic Properties

A listing of the 43 housing projects included under this Section 106 consultation is provided in Exhibit A along with information on existing land use. The “area of potential effect” (APE) on historic properties was established based upon the improvements that would occur which consist of repair and renovation work to existing buildings, units, and common area facilities. Utility repair or rehabilitation work would occur within the project site. The APE was therefore determined to consist of the property boundary associated with each housing project.

There are no known historic properties present within the properties of housing projects listed in Exhibit A. This is based upon; 1) similar HUD required environmental reviews conducted by HPHA in 2010 and prior which included site visits; 2) information on the State’s listing of historic sites included on the State and National Registers of Historic Places; and 3) HPHA’s experience with prior repair and renovation work occurring at these housing project sites. All of these properties have been extensively altered as part of prior construction of housing projects. Exhibit A also includes the year the housing projects were completed and initially occupied, and none of these projects have buildings 50 years old or older.

Determination of Effect

Based upon these efforts and review of each existing housing project, no historic properties were identified. Therefore, HPHA has determined that no historic properties would be affected by the various repair and rehabilitation improvements that may be implemented for these housing projects.

We are soliciting your comments on this no historic properties affected proposed determination. We would greatly appreciate your written response within 30 days of receipt of this letter, or sooner if possible.

Please contact me at 457-3172 or via email at rsato@hhf.com if you have any questions.

Sincerely,

Ronald A. Sato, AICP
Senior Associate

Enclosures

cc: Lisa Izumi, Project Engineer, HPHA

Enclosures – Exhibit A

EXHIBIT A
LISTING OF HOUSING PROJECTS

HPHA Project No.	Housing Project Name	Street Address	City/Town	Island	Zip Code	Tax Map Key	Year Completed & Occupied
Kaua'i County (6 Projects)							
1019	Hale Hoolulu (Eld)	4264 Ala Muku Place	Kilauea	Kauai	96754	5-2-08:56	1974
	APE Acreage: 1.00	Land Use: Used as residential housing project			Historic Properties Present: No		
1055	Hale Hoonanea (Eld)	4401 Waialo Road	Eleele	Kauai	96705	2-1-03:17	1976
	APE Acreage: 2.51	Land Use: Used as residential housing project			Historic Properties Present: No		
1054	Hale Nani Kai O'Kea (Eld)	4850 Kawaihau Rd.	Kapaa	Kauai	96746	4-6-14:105	1977
	APE Acreage: 3.47	Land Use: Used as residential housing project			Historic Properties Present: No		
1023	Home Nani (Eld)	Moana & Laau Rd.	Waimea	Kauai	96796	1-6-07:31	1970
	APE Acreage: 0.45	Land Use: Used as residential housing project			Historic Properties Present: No		
1086	Kawailehua (Federal)	5230 Paanau Rd.	Koloa	Kauai	96756	2-6-04:58	1993
	APE Acreage: 2.10	Land Use: Used as residential housing project			Historic Properties Present: No		
1064	Kekaha Ha'aheo	8238 Iwipolena St.	Kekaha	Kauai	96752	1-3-08:20 & 26	1982
	APE Acreage: 9.25	Land Use: Used as residential housing project			Historic Properties Present: No		
Maui County (4 Projects)							
1092	Makani Kai Hale I	35 Koapaka Ln.	Waiehu	Maui	96793	3-3-01:10	1995
	APE Acreage: 3.45 (Combined with Phase II)	Land Use: Used as residential housing project			Historic Properties Present: No		
1097	Makani Kai Hale II	35 Koapaka Ln.	Waiehu	Maui	96793	4-6-10:31	1998
	APE Acreage: 3.45 (Combined with Phase I)	Land Use: Used as residential housing project			Historic Properties Present: No		
1044	Piilani Homes	1028 Wainee St.	Lahaina	Maui	96761	4-5-07:05	1970
	APE Acreage: 2.62	Land Use: Used as residential housing project			Historic Properties Present: No		
1088	Kahale Mua (Federal)	P.O. Box 30	Maunaloa	Molokai	96770	5-1-02:39	1993
	APE Acreage: 1.88	Land Use: Used as residential housing project			Historic Properties Present: No		
Hawai'i County (13 Projects)							
1051	Hale Aloha O'Puna (Eld)	16-189 Pili Mua St.	Keaau	Hawaii	96749	1-6-143:35	1977
	APE Acreage: 1.90	Land Use: Used as residential housing project			Historic Properties Present: No		
1031	Hale Hauoli	45-540 Kaniaka Pl.	Honokaa	Hawaii	96727	4-5-10:78	1970
	APE Acreage: 2.43	Land Use: Used as residential housing project			Historic Properties Present: No		
1053	Hale Hookipa (Eld)	81-1038 Nani Kupuna Place	Kealakekua	Hawaii	96750	8-1-02:49	1976
	APE Acreage: 6.11	Land Use: Used as residential housing project			Historic Properties Present: No		
1052	Hale Olaloa	144 Kamana St.	Hilo	Hawaii	96720	2-4-56:21	1976
	APE Acreage: 6.51	Land Use: Used as residential housing project			Historic Properties Present: No		

EXHIBIT A
LISTING OF HOUSING PROJECTS (Continued)

HPHA Project No.	Housing Project Name	Street Address	City/Town	Island	Zip Code	Tax Map Key	Year Completed & Occupied
Hawai'i County (Continued)							
1061	Ka Hale Kahaluu	78-6725 Makolea St.	Kona	Hawaii	96740	7-8-10:04	1981
	APE Acreage: 3.37	Land Use: Used as residential housing project			Historic Properties Present: No		
1032	Kaimalino	74-5060 Kealakaa St.	Kona	Hawaii	96740	7-4-17:29	1971
	APE Acreage: 5.53	Land Use: Used as residential housing project			Historic Properties Present: No		
1097	Kauhale O'Hanakahi	19 Pamala St.	Hilo	Hawaii	96720	2-4-51:01	1997
	APE Acreage: 3.20	Land Use: Used as residential housing project			Historic Properties Present: No		
1097	Ke Kumu 'Ekolu	68-3385 Ke Kumu Pl.	Waikoloa	Hawaii	96738	6-8-02:43	1997
	APE Acreage: 6.47	Land Use: Used as residential housing project			Historic Properties Present: No		
1070	Kealakehe	74-991 Manawale'a St.	Kailua-Kona	Hawaii	96740	7-4-17:58	1985
	APE Acreage: 3.29	Land Use: Used as residential housing project			Historic Properties Present: No		
1063	Nani Olu	81-1011 Nani Kupuna Pl.	Kona	Hawaii	96740	8-1-02:47 & 48	1981
	APE Acreage: 0.99	Land Use: Used as residential housing project			Historic Properties Present: No		
1071	Noelani I	65-1191 Opelo Road	Kamuela	Hawaii	96743	6-5-09:29	1983
	APE Acreage: 0.69	Land Use: Used as residential housing project			Historic Properties Present: No		
1078	Noelani II	65-1191 Opelo Rd.	Kamuela	Hawaii	96743	6-5-09:25	1983
	APE Acreage: 0.70	Land Use: Used as residential housing project			Historic Properties Present: No		
1045	Pahala (Eld)	96-1169 Holei St.	Pahala	Hawaii	96720	9-6-17:37	1972
	APE Acreage: 1.44	Land Use: Used as residential housing project			Historic Properties Present: No		
City and County of Honolulu (20 Projects)							
1027	Hale Laulima	1184 Waimano Home Road	Pearl City	Oahu	96782	9-7-94:25	1981
	APE Acreage: 3.96	Land Use: Used as residential housing project			Historic Properties Present: No		
1072	Hookipa Kahaluu	47-330 Ahuimanu Rd.	Kaneohe	Oahu	96744	4-7-37:16	1983
	APE Acreage: 3.60	Land Use: Used as residential housing project			Historic Properties Present: No		
1062	Kalakaua Homes	1545 Kalakaua Ave.	Honolulu	Oahu	96826	2-3-19:04	1983
	APE Acreage: 4.80	Land Use: Used as residential housing project			Historic Properties Present: No		
1099	Kamehameha Homes	1541 Haka Dr.	Honolulu	Oahu	96817	1-5-01:01	1996
	APE Acreage: 16.00	Land Use: Used as residential housing project			Historic Properties Present: No		
1069	Kaneohe Apartments	45-507 & 45-513 Pahia Rd.	Kaneohe	Oahu	96744	4-5-19:26	1984
	APE Acreage: 0.43	Land Use: Used as residential housing project			Historic Properties Present: No		
1056	Kauhale Nani	310 N. Cane St.	Wahiawa	Oahu	96786	7-4-7:14	1980
	APE Acreage: 3.46	Land Use: Used as residential housing project			Historic Properties Present: No		
1090	Kauhale Ohana	41-1260 Kalanianaole Hwy.	Waimanalo	Oahu	96795	4-1-9:286	1995
	APE Acreage: 2.52	Land Use: Used as residential housing project			Historic Properties Present: No		

EXHIBIT A
LISTING OF HOUSING PROJECTS (Continued)

HPHA Project No.	Housing Project Name	Street Address	County	Island	Zip Code	Tax Map Key	Year Completed & Occupied
City and County of Honolulu (Continued)							
1091	Kau'iokalani	85-658 Farrington Hwy.	Waianae	Oahu	96792	8-5-28:044	1995
	APE Acreage: 4.04	Land Use: Used as residential housing project			Historic Properties Present: No		
1050	Kupuna Home O'Waialua (Eld)	67-088 Goodale Ave.	Waialua	Oahu	96791	6-7-16:28	1977
	APE Acreage: 3.27	Land Use: Used as residential housing project			Historic Properties Present: No		
1046	Makamae (Eld)	21 South Kuakini St.	Honolulu	Oahu	96813	2-2-01: 20	1971
	APE Acreage: 1.08	Land Use: Used as residential housing project			Historic Properties Present: No		
1036	Paoakalani (Eld)	1583 Kalakaua Ave.	Honolulu	Oahu	96826	2-3-19:4	1970
	APE Acreage: 1.80	Land Use: Used as residential housing project			Historic Properties Present: No		
1047	Pumehana (Eld)	1212 Kinau St.	Honolulu	Oahu	96814	2-4-11:39	1972
	APE Acreage: 0.46	Land Use: Used as residential housing project			Historic Properties Present: No		
1066	Salt Lake Apts.	2907 Ala Ilima St.	Honolulu	Oahu	96818	1-1-62:07	1982
	APE Acreage: 0.47	Land Use: Used as residential housing project			Historic Properties Present: No		
1073	Spencer House	1035 Spencer St.	Honolulu	Oahu	96822	2-4-16:08	1968
	APE Acreage: 0.32	Land Use: Used as residential housing project			Historic Properties Present: No		
1057	Waimaha-Sunflower	85-186 McArthur St.	Waianae	Oahu	96792	8-5-10:029, 063, 067	1980
	APE Acreage: 3.77	Land Use: Used as residential housing project			Historic Properties Present: No		
1025	Waimanalo Homes I	Humuniki St. & Humuna Pl.	Waimanalo	Oahu	96795	4-1-22:100; 4-1-23:050-064, 068; 4-1-28:005-022 and 107-122	1998
	APE Acreage: 8.34 (Combined with Phase II)	Land Use: Used as residential housing project			Historic Properties Present: No		
1107	Waimanalo Homes II	Humuniki St. & Humuna Pl.	Waimanalo	Oahu	96795	4-1-22:100; 4-1-23:050-064; 4-1-28:05-22 and 107-122	1998
	APE Acreage: 8.34 (Combined with Phase I)	Land Use: Used as residential housing project			Historic Properties Present: No		
1038	Waipahu I	94-111 Pupuole Pl.	Waipahu	Oahu	96797	9-4-39:19	1970
	APE Acreage: 0.26	Land Use: Used as residential housing project			Historic Properties Present: No		
1039	Waipahu II	94-132 Pupupuhi St.	Waipahu	Oahu	96797	9-4-39:76	1970
	APE Acreage: 0.26	Land Use: Used as residential housing project			Historic Properties Present: No		
1108	Maili II	87-171 Keliikipi St.	Waianae	Oahu	96792	8-7-01:01	1999
	APE Acreage: 1.73	Land Use: Used as residential housing project			Historic Properties Present: No		

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September 8, 2015

Mr. Michael Dahilig, Director
Department of Planning
County of Kaua‘i
4444 Rice Street, Suite 473
Lihue, Hawai‘i 96766

Dear Mr. Dahilig:

Subject: Environmental Reviews for Federally-Subsidized Public Housing Projects (County of Kaua‘i)
Section 106 Consultation – No Effect Determination

The State of Hawai‘i, Hawai‘i Public Housing Authority (HPHA) is proposing to conduct repair and rehabilitation improvement projects to six existing public housing projects located throughout the County of Kaua‘i over the next five (5) years (2015-2020). The State HPHA is subsequently conducting environmental reviews for these existing public housing projects in conformance with U.S. Department of Housing and Urban Development (HUD) requirements specified under 24 CFR Part 58 because Federal funds would be used.

One of the environmental review requirements is conducting Section 106 consultation with the State Historic Preservation Officer under the National Historic Preservation Act, as amended (NHPA) (16 U.S.C. 470(f)). Repair and rehabilitation improvements using Federal funds is considered an “undertaking” under these regulations, and the State HPHA is serving as the Agency Official initiating this Section 106 consultation process for this project. A “no historic properties affected” determination is proposed for repair and rehabilitation improvements that would be implemented at the six existing public housing project sites. Further information justifying this determination is provided with this letter.

Project Description

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a “major construction activity” and would involve one or a combination of the following actions identified below.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent.

2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons.
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland.
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation.
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls).
7. Interior and exterior renovations and rehabilitation.
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site.
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Area of Potential Effect and Identification of Historic Properties

A listing of the six housing projects included under this Section 106 consultation is provided in Exhibit A along with information on existing land use. The “area of potential effect” (APE) on historic properties was established based upon the improvements that would occur which consist of repair and renovation work to existing buildings, units, and common area facilities. Utility repair or rehabilitation work would occur within the project site. The APE was therefore determined to consist of the property boundary associated with each housing project.

There are no known historic properties present within the properties of housing projects listed in Exhibit A. This is based upon; 1) similar HUD required environmental reviews conducted by HPHA in 2010 and prior which included site visits; 2) information on the State’s listing of historic sites included on the State and National Registers of Historic Places; and 3) HPHA’s experience with prior repair and renovation work occurring at these housing project sites. All of these properties have been extensively altered as part of prior construction of housing projects. Exhibit A also includes the year the housing projects were completed and initially occupied, and none of these projects have buildings 50 years old or older.

Determination of Effect

Based upon these efforts and review of each existing housing project, no historic properties were identified. Therefore, HPHA has determined that no historic properties would be affected by the various repair and rehabilitation improvements that may be implemented for these housing projects.

We are soliciting your comments on this no historic properties affected proposed determination. We would greatly appreciate your written response within 30 days of receipt of this letter, or sooner if possible.

Please contact me at 457-3172 or via email at rsato@hhf.com if you have any questions.

Sincerely,

Ronald A. Sato, AICP
Senior Associate

Enclosures

cc: Lisa Izumi, Project Engineer, HPHA

Enclosures – Exhibit A

EXHIBIT A
LISTING OF HOUSING PROJECTS

HPHA Project No.	Housing Project Name	Street Address	City/Town	Island	Zip Code	Tax Map Key	Year Completed & Occupied
Kaua'i County (6 Projects)							
1019	Hale Hoolulu (Eld)	4264 Ala Muku Place	Kilauea	Kauai	96754	5-2-08:56	1974
	APE Acreage: 1.00	Land Use: Used as residential housing project			Historic Properties Present: No		
1055	Hale Hoonanea (Eld)	4401 Waialo Road	Eleele	Kauai	96705	2-1-03:17	1976
	APE Acreage: 2.51	Land Use: Used as residential housing project			Historic Properties Present: No		
1054	Hale Nani Kai O'Kea (Eld)	4850 Kawaihau Rd.	Kapaa	Kauai	96746	4-6-14:105	1977
	APE Acreage: 3.47	Land Use: Used as residential housing project			Historic Properties Present: No		
1023	Home Nani (Eld)	Moana & Laau Rd.	Waimea	Kauai	96796	1-6-07:31	1970
	APE Acreage: 0.45	Land Use: Used as residential housing project			Historic Properties Present: No		
1086	Kawailehua (Federal)	5230 Paanau Rd.	Koloa	Kauai	96756	2-6-04:58	1993
	APE Acreage: 2.10	Land Use: Used as residential housing project			Historic Properties Present: No		
1064	Kekaha Ha'aheo	8238 Iwipolena St.	Kekaha	Kauai	96752	1-3-08:20 & 26	1982
	APE Acreage: 9.25	Land Use: Used as residential housing project			Historic Properties Present: No		

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September 8, 2015

Mr. William Spence, Director
Planning Department
County of Maui
One Main Plaza Building, Suite 315
2200 Main Street
Wailuku, Hawai'i 96793

Dear Mr. Spence:

Subject: Environmental Reviews for Federally-Subsidized Public Housing Projects (County of Maui)
Section 106 Consultation – No Effect Determination

The State of Hawai'i, Hawai'i Public Housing Authority (HPHA) is proposing to conduct repair and rehabilitation improvement projects to four existing public housing projects located throughout the County of Maui over the next five (5) years (2015-2020). The State HPHA is subsequently conducting environmental reviews for these existing public housing projects in conformance with U.S. Department of Housing and Urban Development (HUD) requirements specified under 24 CFR Part 58 because Federal funds would be used.

One of the environmental review requirements is conducting Section 106 consultation with the State Historic Preservation Officer under the National Historic Preservation Act, as amended (NHPA) (16 U.S.C. 470(f)). Repair and rehabilitation improvements using Federal funds is considered an "undertaking" under these regulations, and the State HPHA is serving as the Agency Official initiating this Section 106 consultation process for this project. A "no historic properties affected" determination is proposed for repair and rehabilitation improvements that would be implemented at the four existing public housing project sites. Further information justifying this determination is provided with this letter.

Project Description

Funding for these housing projects are being expended through Federal funds from HUD under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a "major construction activity" and would involve one or a combination of the following actions identified below.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent.

2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons.
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland.
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation.
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls).
7. Interior and exterior renovations and rehabilitation.
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site.
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Area of Potential Effect and Identification of Historic Properties

A listing of the four housing projects included under this Section 106 consultation is provided in Exhibit A along with information on existing land use. The "area of potential effect" (APE) on historic properties was established based upon the improvements that would occur which consist of repair and renovation work to existing buildings, units, and common area facilities. Utility repair or rehabilitation work would occur within the project site. The APE was therefore determined to consist of the property boundary associated with each housing project.

There are no known historic properties present within the properties of housing projects listed in Exhibit A. This is based upon; 1) similar HUD required environmental reviews conducted by HPHA in 2010 and prior which included site visits; 2) information on the State's listing of historic sites included on the State and National Registers of Historic Places; and 3) HPHA's experience with prior repair and renovation work occurring at these housing project sites. All of these properties have been extensively altered as part of prior construction of housing projects. Exhibit A also includes the year the housing projects were completed and initially occupied, and none of these projects have buildings 50 years old or older.

Determination of Effect

Based upon these efforts and review of each existing housing project, no historic properties were identified. Therefore, HPHA has determined that no historic properties would be affected by the various repair and rehabilitation improvements that may be implemented for these housing projects.

We are soliciting your comments on this no historic properties affected proposed determination. We would greatly appreciate your written response within 30 days of receipt of this letter, or sooner if possible.

Please contact me at 457-3172 or via email at rsato@hhf.com if you have any questions.

Sincerely,

Ronald A. Sato, AICP
Senior Associate

Enclosures

cc: Lisa Izumi, Project Engineer, HPHA

Enclosures – Exhibit A

EXHIBIT A
LISTING OF HOUSING PROJECTS

HPHA Project No.	Housing Project Name	Street Address	City/Town	Island	Zip Code	Tax Map Key	Year Completed & Occupied
Maui County (4 Projects)							
1092	Makani Kai Hale I	35 Koapaka Ln.	Waiehu	Maui	96793	3-3-01:10	1995
	APE Acreage: 3.45 (Combined with Phase II)	Land Use: Used as residential housing project			Historic Properties Present: No		
1097	Makani Kai Hale II	35 Koapaka Ln.	Waiehu	Maui	96793	4-6-10:31	1998
	APE Acreage: 3.45 (Combined with Phase I)	Land Use: Used as residential housing project			Historic Properties Present: No		
1044	Piilani Homes	1028 Wainee St.	Lahaina	Maui	96761	4-5-07:05	1970
	APE Acreage: 2.62	Land Use: Used as residential housing project			Historic Properties Present: No		
1088	Kahale Mua (Federal)	P.O. Box 30	Maunaloa	Molokai	96770	5-1-02:39	1993
	APE Acreage: 1.88	Land Use: Used as residential housing project			Historic Properties Present: No		

APPENDIX A-2

No Adverse Effect Determination

DAVID Y. IGE
GOVERNOR

HAKIM OUANSAFI
EXECUTIVE DIRECTOR

BARBARA E. ARASHIRO
EXECUTIVE ASSISTANT

STATE OF HAWAII
DEPARTMENT OF HUMAN SERVICES
HAWAII PUBLIC HOUSING AUTHORITY
1002 NORTH SCHOOL STREET
POST OFFICE BOX 17907
Honolulu, Hawaii 96817

IN REPLY PLEASE REFER TO:

15:CMS/173

February 4, 2016

Dr. Alan Downer, Deputy State Historic Preservation Officer
State Historic Preservation Division
Department of Land and Natural Resources
State of Hawai'i
Kakuhihewa Building
601 Kamokila Boulevard, Suite 555
Kapolei, Hawaii 96707

Dear Dr. Downer:

Subject: Environmental Reviews for Federally-Subsidized Public Housing Projects Statewide
Section 106 Consultation – No Adverse Effect Determination Concurrence

Thank you for the 28 individual letters with your department's proposed determinations as part of Section 106 consultation for repair and rehabilitation improvements planned for State of Hawai'i (State), Hawai'i Public Housing Authority's (HPHA's) housing projects statewide. The letters received were dated between November 30th through December 11, 2015, and the table provided includes a list of these letters identified by the State Historic Preservation Division's (SHPD) Log No. and Document No for reference.

As requested in your letters, this letter is being sent to notify you of HPHA's concurrence with the determinations and conditions for these 28 housing projects. HPHA's concurrence is based upon our proposed determination letters submitted to the State Historic Preservation Officer dated July 23, 2015 and August 20, 2015. This also includes a follow-up letter to SHPD from HHF Planners, dated November 6, 2015, resulting from consultation with your staff to provide additional information to support your department's review.

We appreciate your department's assistance on this consultation. Please contact Ms. Becky Choi, Construction Management Branch Administrator at 832-6020 or via email at Becky.L.Choi@hawaii.gov if you have any questions.

Sincerely,

Hakim Ouansafi
Executive Director

Attachment

15CMS173SHPD Concurrence Ltr. to Dr. Alan Downer.doc

Mailed 2/4/16

	Housing Project	SHPD LOG No.	Document No.
1.	Kalihi Valley Homes	2015.02939	1509JLP40
2.	Palolo Valley Homes	2015.02939; 2015.03557	1511JLP28
3.	Wahiawa Terrace	2015.02939; 2015.03563	1511JLP36
4.	Makua Ali'i	2015.02939; 2015.03565	1511JLP41
5.	Kalanihuia (Elderly)	2015.02939; 2015.03568	1511JLP42
6.	Nanakuli Homes	2015.02939; 2015.03571	1511JLP35
7.	Pu`uwai Momi	2015.02939; 2015.03572	1511JLP38
8.	Kuhio Park Terrace Towers	2015.02939; 2015.03574	1511JLP37
9.	Kuhio Homes	2015.02939; 2015.03575	1511JLP42
10.	Punchbowl Homes	2015.02939; 2015.03576	1511JLP43
11.	Mayor Wright Homes	2015.02939; 2015.03579	1511JLP39
12.	Ka`ahumanu Homes	2015.02939; 2015.03581	1509JLP40
13.	Kuhio Park Terrace Low-Rise	2015.02939; 2015.03583	1509JLP45
14.	Ko`olau Village	2015.02939; 2015.03569	1509JLP40
15.	Ma`ili I	2015.02939; 2015.03570	1509JLP41
16.	Lanakila I	2015.02939; 2015.03578	1511JLP30
17.	Lanakila II	2015.02939; 2015.03573	1511JLP31
18.	Lanakila III (formerly V)	2015.02939; 2015.03577	1511JLP32
19.	Lanakila IIIA	2015.02939; 2015.03580	1511JLP33
20.	Lanakila IV	2015.02939; 2015.03582	1511JLP34
21.	Pomaika`i	2015.02939; 2015.03566	1511JLP27
22.	Punahele	2015.02939; 2015.03567	1509JLP38
23.	Kahekili Terrace (A & B)	2015.02939; 2015.03561	1511JLP29
24.	David Malo Circle	2015.02939; 2015.03558	1509JLP29
25.	`Ele`ele Homes	2015.02939; 2015.03559	1509JLP30
26.	Kalaheo	2015.02939; 2015.03564	1509JLP35
27.	Hui O Hanamaulu	2015.02939; 2015.03560	1509JLP31
28.	Kapa'a Homes	2015.02939; 2015.03562	1509JLP33

DAVID Y. IGE
GOVERNOR OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555
KAPOLEI, HAWAII 96707

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KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

November 30, 2015

IN REPLY REFER TO:
LOG: 2015.02939
DOC: 1509JLP40
Architecture, Archaeology,
History and Culture

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
P.O. Box 17907
Honolulu, HI 96817

Dear Mr. Ouansafi,

SUBJECT: **Chapter 6E-8 and National Historic Preservation Act (NHPA) Section 106 Consultation - Department of Housing and Urban Development (HUD)**
Department of Human Services, Hawaii Public Housing Authority
Kalihi Valley Homes Rehabilitation Project – 2250 Kalena Drive
Kalihi Ahupuaʻa, Kona District, Island of Oʻahu
TMK: (1) 1-3-022:001

Thank you for your submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services (DHS), Hawaii Public Housing Authority (HPHA) consultation with SHPD in accordance with 36 CFR 800.3, and pursuant to Hawaii Revised Statutes (HRS), Chapter 6E. SHPD received another submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience.

The submittal indicates that the HPHA is requesting the State Historic Preservation Officer's (SHPO) concurrence with a determination of "no effect" for the proposed HUD repair and rehabilitation improvement projects involving 43 existing public housing developments located throughout the State over the next fivd5 (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 consultation on their behalf.

This letter addresses the Kalihi Valley Homes Project at 2250 Kalena Drive. The HPHA has identified the area of potential effects (APE) as the 24.53 acre area parcel owned by the State (HPHA) which is identified as TMK: (1) 1-3-022:001. DHS/HPHA have indicated at this stage of the planning process, they are unclear whether the subject 24.53-acres project area will require any ground disturbances.

Our records indicate that no archaeological inventory survey has been conducted within the subject parcel and that no historic properties have been identified. However, based on nearby studies potential exists to encounter subsurface traditional Hawaiian and/or historic properties within the subject parcel.

The SHPD has reviewed the undertaking at 2250 Kalena Drive, and the SHPO's determination is **no adverse effect** pursuant to NHPA Section 106 and **no historic properties affected** pursuant to HRS §6E-8 within the APE **provided the following conditions are met:**

- If ground disturbing activity is anticipated, DHS must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation;
- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;

- Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;
- Submit a TMK map showing the full extent of the project area within the affected parcel/s;
- Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Summary of land use history, such as previous intensive cultivation, grubbing or grading;
- Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions regarding archaeological resources or concerns please contact Susan Lebo at (808) 692-8019 or at Susan.A.Lebo@hawaii.gov. For any history and cultural concerns please contact Kaʻāhiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov. Please contact Jessica Puff at Jessica.L.Puff@hawaii.gov or at (808) 692-8023 for any questions regarding architectural concerns or this letter.

Sincerely,

Alan A. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

DAVID Y. IGE
GOVERNOR OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
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December 11, 2015

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
P.O. Box 17907
Honolulu, HI 96817

LOG: 2015.02939, 2015.03575
DOC: 1511JLP42
Architecture, Archaeology
History and Culture

SUBJECT: **Chapter 6E-8 and National Historic Preservation Act Section (NHPA) Section 106 Consultation – Department of Housing and Urban Development (HUD) Repair and Rehabilitation Project Department of Human Services, Hawai‘i Public Housing Authority (HPHA) Kuhio Homes Rehabilitation Project – 1430 and 1449 Ahonui Street Honolulu Ahupua‘a, Kona District, Island of O‘ahu TMK: (1) 1-3-039:003 and 006**

Thank you for your initial submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services (DHS), Hawaii Public Housing Authority (HPHA) consultation with SHPD in accordance with 36 CFR 800.3 and Hawaii Revised Statutes (HRS), Chapter 6E. We received your another submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience.

The submittal indicates that the HPHA is requesting the State Historic Preservation Officer's (SHPO) concurrence with a determination of "no effect" for the proposed HUD repair and rehabilitation improvement projects involving 43 existing public housing developments located throughout the State over the next five (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 consultation on their behalf.

This letter addresses Kuhio Homes Rehabilitation Project, 1430 Ahonui Street and 1449 Ahonui Street. The HPHA has identified the area of potential effects (APE) as the 2.94 acre area parcel owned by the State (HPHA) which is identified as TMK: (1) 1-3-039:003 and 006. DHS/HPHA have indicated at this stage of the planning process, they are unclear whether the subject 2.94-acre project area will require any ground disturbances.

Our records indicate that no archaeological inventory survey has been conducted within the subject parcel and that no historic properties have been identified. However, based on nearby studies potential exists to encounter subsurface traditional Hawaiian and/or historic properties within the subject parcel.

The SHPD has reviewed the undertaking at 1430 Ahonui Street and 1449 Ahonui Street, and the SHPO's determination is **no adverse effect** pursuant to NHPA Section 106 and **no historic properties affected** pursuant to HRS §6E-8 within the APE **provided the following conditions are met:**

- If ground disturbing activity is anticipated, DHS must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation;
- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;
- Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;

- Submit a TMK map showing the full extent of the project area within the affected parcel/s;
- Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Summary of land use history, such as previous intensive cultivation, grubbing or grading;
- Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions regarding archaeological resources or concerns please contact Susan Lebo at (808) 692-8019 or at Susan.A.Lebo@hawaii.gov. For any history and cultural concerns please contact Kaʻāhiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov. Please contact Jessica Puff at Jessica.L.Puff@hawaii.gov or (808) 692-8023 for any questions regarding architectural concerns or this letter.

Sincerely,

Susan A. Lebo

Signed for

Alan A. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

DAVID Y. IGE
GOVERNOR OF HAWAII

SUZANNE D. CASE
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STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555

December 11, 2015

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
P.O. Box 17907
Honolulu, HI 96817

LOG: 2015.02939, 2015.03574
DOC: 1511JLP37
Architecture, Archaeology
History and Culture

SUBJECT: **Chapter 6E-8 and National Historic Preservation Act Section (NHPA) Section 106 Consultation – Department of Housing and Urban Development (HUD) Repair and Rehabilitation Project Department of Human Services, Hawai‘i Public Housing Authority (HPHA) Kuhio Park Terrace High Rise Rehabilitation Project – 1485, 1531 and 1545 Linapuni Street Honolulu Ahupua‘a, Kona District, Island of O‘ahu TMK: (1) 1-3-039:007, 009 and 010**

Thank you for your initial submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services (DHS), Hawaii Public Housing Authority (HPHA) consultation with SHPD in accordance with 36 CFR 800.3 and Hawaii Revised Statutes (HRS), Chapter 6E. We received your another submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience.

The submittal indicates that the HPHA is requesting the State Historic Preservation Officer's (SHPO) concurrence with a determination of "no effect" for the proposed HUD repair and rehabilitation improvement projects involving 43 existing public housing developments located throughout the State over the next five (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 consultation on their behalf.

This letter addresses Kuhio Park Terrace High Rises Rehabilitation Project, 1485 Linapuni Street, 1531 Linapuni Street and 1545 Linapuni Street. The HPHA has identified the area of potential effects (APE) as the 18.36 acre area parcel owned by the State (HPHA) which is identified as TMK: (1) 1-3-039:007, 009 and 010. DHS/HPHA have indicated at this stage of the planning process, they are unclear whether the subject 18.36-acre project area will require any ground disturbances.

Our records indicate that no archaeological inventory survey has been conducted within the subject parcel and that no historic properties have been identified. However, based on nearby studies potential exists to encounter subsurface traditional Hawaiian and/or historic properties within the subject parcel.

The SHPD has reviewed the undertaking at 1485 Linapuni Street, 1531 Linapuni Street and 1545 Linapuni Street, and the SHPO's determination is **no adverse effect** pursuant to NHPA Section 106 and **no historic properties affected** pursuant to HRS §6E-8 within the APE **provided the following conditions are met:**

- If ground disturbing activity is anticipated, DHS must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation;
- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;
- Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;

- Submit a TMK map showing the full extent of the project area within the affected parcel/s;
- Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Summary of land use history, such as previous intensive cultivation, grubbing or grading;
- Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

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Sincerely,

Susan A. Lebo

Signed for

Alan A. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

DAVID Y. IGE
GOVERNOR OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
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KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

November 30, 2015

IN REPLY REFER TO:
LOG: 2015.02939, 2015.03583
DOC: 1509JLP45
Architecture, Archaeology,
History and Culture

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
P.O. Box 17907
Honolulu, HI 96817

Dear Mr. Ouansafi,

SUBJECT: **Chapter 6E-8 and National Historic Preservation Act (NHPA) Section 106 Consultation - Department of Housing and Urban Development (HUD)**
Department of Human Services, Hawaii Public Housing Authority
Kuhio Park Terrace Low-Rise – 1474 Linapuni Street
Kalihi Ahupuaʻa, Kona District, Island of Oʻahu
TMK: (1) 1-3-039:008

Thank you for your submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services (DHS), Hawaii Public Housing Authority (HPHA) consultation with SHPD in accordance with 36 CFR 800.3, and pursuant to Hawaii Revised Statutes (HRS), Chapter 6E. SHPD received another submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience.

The submittal indicates that the HPHA is requesting the State Historic Preservation Officer's (SHPO) concurrence with a determination of "no effect" for the proposed HUD repair and rehabilitation improvement projects involving 43 existing public housing developments located throughout the State over the next five (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 consultation on their behalf.

This letter addresses the Kuhio Park terrace Low-Rises at 1474 Linapuni Street. The HPHA has identified the area of potential effects (APE) as the 3.36-acre area parcel owned by the State (HPHA) which is identified as TMK: (1) 1-3-039:008. DHS/HPHA have indicated at this stage of the planning process, they are unclear whether the subject 3.36-acre project area will require any ground disturbances.

Our records indicate that no archaeological inventory survey has been conducted within the subject parcel and that no historic properties have been identified. However, based on nearby studies potential exists to encounter subsurface traditional Hawaiian and/or historic properties within the subject parcel.

The SHPD has reviewed the undertaking at 1474 Linapuni Street, and the SHPO's determination is **no adverse effect** pursuant to NHPA Section 106 and **no historic properties affected** pursuant to HRS §6E-8 within the APE **provided the following conditions are met:**

- If ground disturbing activity is anticipated, DHS must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation;
- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;

- Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;
- Submit a TMK map showing the full extent of the project area within the affected parcel/s;
- Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Summary of land use history, such as previous intensive cultivation, grubbing or grading; and
- Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions regarding archaeological resources or concerns please contact Susan Lebo at (808) 692-8019 or at Susan.A.Lebo@hawaii.gov. For any history and cultural concerns please contact Kaʻāhiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov. Please contact Jessica Puff at Jessica.L.Puff@hawaii.gov or at (808) 692-8023 for any questions regarding architectural concerns or this letter.

Sincerely,

Alan A. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

DAVID Y. IGE
GOVERNOR OF HAWAII

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

KEKOA KALUHIWA
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JEFFREY T. PEARSON
DEPUTY DIRECTOR - WATER

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STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555

November 30, 2015

IN REPLY REFER TO:
LOG: 2015.02939, 2015.03581
DOC NO: 1509JLP40
Architecture, Archaeology
History and Culture

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
P.O. Box 17907
Honolulu, HI 96817

SUBJECT: **Chapter 6E-8 and National Historic Preservation Act Section (NHPA) Section 106 Consultation – Department of Housing and Urban Development (HUD) Repair and Rehabilitation Project Department of Human Services, Hawai‘i Public Housing Authority (HPHA) Ka‘ahumanu Homes Rehabilitation Project – 760 McNeill Street Kapālama Ahupua‘a, Kona District, Island of O‘ahu TMK: (1) 1-5-024:001**

Thank you for your initial submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services (DHS), Hawaii Public Housing Authority (HPHA) consultation with SHPD in accordance with 36 CFR 800.3 and Hawaii Revised Statutes (HRS), Chapter 6E. We received your supplemental submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience.

The submittals indicate that the HPHA is requesting the State Historic Preservation Officer’s (SHPO) concurrence with a determination of “no effect” for the proposed HUD repair and rehabilitation improvement projects involving 43 existing public housing developments located throughout the State over the next fivd5 (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 consultation on their behalf.

This letter addresses Ka‘ahumanu Homes Rehabilitation Project, 760 McNeill Street. The HPHA has identified the area of potential effects (APE) as the 7.35-acre area parcel owned by the State (HPHA) which is identified as TMK: (1) 1-5-024:001. DHS/HPHA have indicated at this stage of the planning process, they are unclear whether the subject 7.35-acre project area will require any ground disturbances.

Our records indicate that no archaeological inventory survey has been conducted within the subject parcel and that no historic properties have been identified. However, based on nearby studies potential exists to encounter subsurface traditional Hawaiian and/or historic properties within the subject parcel.

The SHPD has reviewed the undertaking at 760 McNeill Street, and the SHPO’s determination is **no adverse effect** pursuant to NHPA Section 106 and **no historic properties affected** pursuant to HRS §6E-8 within the APE **provided the following conditions are met:**

- If ground disturbing activity is anticipated, DHS must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation;
- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;
- Submit information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;

- Submit a TMK map showing the full extent of the project area within the affected parcel(s);
- Submit description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Submit summary of land use history, such as previous intensive cultivation, grubbing or grading; and
- Submit copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions regarding archaeological resources or concerns please contact Susan Lebo at (808) 692-8019 or at Susan.A.Lebo@hawaii.gov. For any history and cultural concerns please contact Kaʻāhiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov. Please contact Jessica Puff at Jessica.L.Puff@hawaii.gov or (808) 692-8023 for any questions regarding architectural concerns or this letter.

Sincerely,

Alan S. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

DAVID Y. IGE
GOVERNOR OF HAWAII

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
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JEFFREY T. PEARSON
DEPUTY DIRECTOR - WATER

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STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555

December 2, 2015

IN REPLY REFER TO:
LOG: 2015.02939, 2015.03568
DOC NO: 1511JLP42
Architecture, Archaeology
History and Culture

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
P.O. Box 17907
Honolulu, HI 96817

SUBJECT: **Chapter 6E-8 and National Historic Preservation Act Section (NHPA) Section 106 Consultation – Department of Housing and Urban Development (HUD) Repair and Rehabilitation Project Department of Human Services, Hawai‘i Public Housing Authority (HPHA) Kalanihuia Rehabilitation Project – 1220 Aala Street Honolulu Ahupua‘a, Kona District, Island of O‘ahu TMK: (1) 1-7-026:006**

Thank you for your initial submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services (DHS), Hawaii Public Housing Authority (HPHA) consultation with SHPD in accordance with 36 CFR 800.3 and Hawaii Revised Statutes (HRS), Chapter 6E. We received your supplemental submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience.

The submittals indicate that the HPHA is requesting the State Historic Preservation Officer’s (SHPO) concurrence with a determination of “no effect” for the proposed HUD repair and rehabilitation improvement projects involving 43 existing public housing developments located throughout the State over the next fivd5 (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 consultation on their behalf.

This letter addresses Kalanihuia Rehabilitation Project, 1220 Aala Street. The HPHA has identified the area of potential effects (APE) as the 1.88 acre area parcel owned by the State (HPHA) which is identified as TMK: (1) 1-7-026:006. DHS/HPHA have indicated at this stage of the planning process, they are unclear whether the subject 1.88-acre project area will require any ground disturbances.

Our records indicate that no archaeological inventory survey has been conducted within the subject parcel and that no historic properties have been identified. However, based on nearby studies potential exists to encounter subsurface traditional Hawaiian and/or historic properties within the subject parcel.

The SHPD has reviewed the undertaking at 1220 Aala, and the SHPO’s determination is **no adverse effect** pursuant to NHPA Section 106 and **no historic properties affected** pursuant to HRS §6E-8 within the APE **provided the following conditions are met:**

- If ground disturbing activity is anticipated, DHS must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation;
- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;
- Submit information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;

- Submit a TMK map showing the full extent of the project area within the affected parcel(s);
- Submit description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Submit summary of land use history, such as previous intensive cultivation, grubbing or grading; and
- Submit copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions regarding archaeological resources or concerns please contact Susan Lebo at (808) 692-8019 or at Susan.A.Lebo@hawaii.gov. For any history and cultural concerns please contact Kaʻāhiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov. Please contact Jessica Puff at Jessica.L.Puff@hawaii.gov or (808) 692-8023 for any questions regarding architectural concerns or this letter.

Sincerely,

Alan S. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

DAVID Y. IGE
GOVERNOR OF HAWAII

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
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JEFFREY T. PEARSON
DEPUTY DIRECTOR - WATER

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STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555

December 2, 2015

IN REPLY REFER TO:
LOG: 2015.02939, 2015.03579
DOC NO: 1511JLP39
Architecture, Archaeology
History and Culture

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
P.O. Box 17907
Honolulu, HI 96817

SUBJECT: **Chapter 6E-8 and National Historic Preservation Act Section (NHPA) Section 106 Consultation – Department of Housing and Urban Development (HUD) Repair and Rehabilitation Project Department of Human Services, Hawai‘i Public Housing Authority (HPHA) Mayor Wright Homes Rehabilitation Project – 521 North Kukui Street Honolulu Ahupua‘a, Kona District, Island of O‘ahu TMK: (1) 1-7-029:003**

Thank you for your initial submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services (DHS), Hawaii Public Housing Authority (HPHA) consultation with SHPD in accordance with 36 CFR 800.3 and Hawaii Revised Statutes (HRS), Chapter 6E. We received your supplemental submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience.

The submittals indicate that the HPHA is requesting the State Historic Preservation Officer's (SHPO) concurrence with a determination of "no effect" for the proposed HUD repair and rehabilitation improvement projects involving 43 existing public housing developments located throughout the State over the next fivd5 (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 consultation on their behalf.

This letter addresses Mayor Wright Homes Rehabilitation Project, 521 North Kukui Street. The HPHA has identified the area of potential effects (APE) as the 14.84 acre area parcel owned by the State (HPHA) which is identified as TMK: (1) 1-7-029:003. DHS/HPHA have indicated at this stage of the planning process, they are unclear whether the subject 14.84-acre project area will require any ground disturbances.

Our records indicate that no archaeological inventory survey has been conducted within the subject parcel and that no historic properties have been identified. However, based on nearby studies potential exists to encounter subsurface traditional Hawaiian and/or historic properties within the subject parcel.

The SHPD has reviewed the undertaking at 521 North Kukui Street, and the SHPO's determination is **no adverse effect** pursuant to NHPA Section 106 and **no historic properties affected** pursuant to HRS §6E-8 within the APE **provided the following conditions are met:**

- If ground disturbing activity is anticipated, DHS must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation;
- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;
- Submit information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;
- Submit a TMK map showing the full extent of the project area within the affected parcel(s);

- Submit description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Submit summary of land use history, such as previous intensive cultivation, grubbing or grading; and
- Submit copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions regarding archaeological resources or concerns please contact Susan Lebo at (808) 692-8019 or at Susan.A.Lebo@hawaii.gov. For any history and cultural concerns please contact Kaʻāhiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov. Please contact Jessica Puff at Jessica.L.Puff@hawaii.gov or (808) 692-8023 for any questions regarding architectural concerns or this letter.

Sincerely,

Alan S. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

DAVID Y. IGE
GOVERNOR OF HAWAII

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

KEKOA KALUHIWA
FIRST DEPUTY

JEFFREY T. PEARSON
DEPUTY DIRECTOR - WATER

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KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555

December 2, 2015

IN REPLY REFER TO:
LOG: 2015.02939, 2015.03576
DOC NO: 1511JLP43
Architecture, Archaeology
History and Culture

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
P.O. Box 17907
Honolulu, HI 96817

SUBJECT: **Chapter 6E-8 and National Historic Preservation Act Section (NHPA) Section 106 Consultation – Department of Housing and Urban Development (HUD) Repair and Rehabilitation Project Department of Human Services, Hawai‘i Public Housing Authority (HPHA) Punchbowl Homes Rehabilitation Project – 730 Captain Cook Avenue Honolulu Ahupua‘a, Kona District, Island of O‘ahu TMK: (1) 2-1-039:012**

Thank you for your initial submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services (DHS), Hawaii Public Housing Authority (HPHA) consultation with SHPD in accordance with 36 CFR 800.3 and Hawaii Revised Statutes (HRS), Chapter 6E. We received your supplemental submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience.

The submittals indicate that the HPHA is requesting the State Historic Preservation Officer’s (SHPO) concurrence with a determination of “no effect” for the proposed HUD repair and rehabilitation improvement projects involving 43 existing public housing developments located throughout the State over the next fivd5 (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 consultation on their behalf.

This letter addresses Punchbowl Homes Rehabilitation Project, 730 Captain Cook Avenue. The DHS/HPHA has identified the area of potential effects (APE) as the 2.94 acre area parcel owned by the State (HPHA) which is identified as TMK: (1) 2-1-039:012. DHS/HPHA have indicated at this stage of the planning process, they are unclear whether the subject 2.94-acre project area will require any ground disturbances.

Our records indicate that no archaeological inventory survey has been conducted within the subject parcel and that no historic properties have been identified. However, based on nearby studies potential exists to encounter subsurface traditional Hawaiian and/or historic properties within the subject parcel.

The SHPD has reviewed the undertaking at 730 Captain Cook Avenue, and the SHPO’s determination is **no adverse effect** pursuant to NHPA Section 106 and **no historic properties affected** pursuant to HRS §6E-8 within the APE **provided the following conditions are met:**

- If ground disturbing activity is anticipated, DHS must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation;
- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;
- Submit information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;

- Submit a TMK map showing the full extent of the project area within the affected parcel(s);
- Submit description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Submit summary of land use history, such as previous intensive cultivation, grubbing or grading; and
- Submit copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions regarding archaeological resources or concerns please contact Susan Lebo at (808) 692-8019 or at Susan.A.Lebo@hawaii.gov. For any history and cultural concerns please contact Kaʻāhiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov. Please contact Jessica Puff at Jessica.L.Puff@hawaii.gov or (808) 692-8023 for any questions regarding architectural concerns or this letter.

Sincerely,

Alan S. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

DAVID Y. IGE
GOVERNOR OF HAWAII

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

KEKOA KALUHIWA
FIRST DEPUTY

JEFFREY T. PEARSON
DEPUTY DIRECTOR - WATER

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COMMISSION ON WATER RESOURCE MANAGEMENT
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CONSERVATION AND RESOURCES ENFORCEMENT
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HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555

December 2, 2015

IN REPLY REFER TO:
LOG: 2015.02939, 2015.03565
DOC NO: 1511JLP41
Architecture, Archaeology
History and Culture

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
P.O. Box 17907
Honolulu, HI 96817

SUBJECT: **Chapter 6E-8 and National Historic Preservation Act Section (NHPA) Section 106 Consultation – Department of Housing and Urban Development (HUD) Repair and Rehabilitation Project Department of Human Services, Hawai‘i Public Housing Authority (HPHA) Makua Alii Rehabilitation Project – 1541 Kalakaua Avenue Honolulu Ahupua‘a, Kona District, Island of O‘ahu TMK: (1) 2-3-019:004**

Thank you for your initial submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services (DHS), Hawaii Public Housing Authority (HPHA) consultation with SHPD in accordance with 36 CFR 800.3 and Hawaii Revised Statutes (HRS), Chapter 6E. We received your supplemental submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience.

The submittals indicate that the HPHA is requesting the State Historic Preservation Officer's (SHPO) concurrence with a determination of "no effect" for the proposed HUD repair and rehabilitation improvement projects involving 43 existing public housing developments located throughout the State over the next five (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 consultation on their behalf.

This letter addresses Makua Alii Rehabilitation Project, 1541 Kalakaua Avenue. The HPHA has identified the area of potential effects (APE) as the 2.60 acre area parcel owned by the State (HPHA) which is identified as TMK: (1) 2-3-019:004. DHS/HPHA have indicated at this stage of the planning process, they are unclear whether the subject 2.60-acre project area will require any ground disturbances.

Our records indicate that no archaeological inventory survey has been conducted within the subject parcel and that no historic properties have been identified. However, based on nearby studies potential exists to encounter subsurface traditional Hawaiian and/or historic properties within the subject parcel.

The SHPD has reviewed the undertaking at 1541 Kalakaua Avenue, and the SHPO's determination is **no adverse effect** pursuant to NHPA Section 106 and **no historic properties affected** pursuant to HRS §6E-8 within the APE **provided the following conditions are met:**

- If ground disturbing activity is anticipated, DHS must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation;
- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;
- Submit information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;

- Submit a TMK map showing the full extent of the project area within the affected parcel(s);
- Submit description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Submit summary of land use history, such as previous intensive cultivation, grubbing or grading; and
- Submit copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions regarding archaeological resources or concerns please contact Susan Lebo at (808) 692-8019 or at Susan.A.Lebo@hawaii.gov. For any history and cultural concerns please contact Kaʻāhiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov. Please contact Jessica Puff at Jessica.L.Puff@hawaii.gov or (808) 692-8023 for any questions regarding architectural concerns or this letter.

Sincerely,

Alan S. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

DAVID Y. IGE
GOVERNOR OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
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KEKOA KALUHIWA
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JEFFREY T. PEARSON
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HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

December 11, 2015

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
P.O. Box 17907
Honolulu, HI 96817

LOG: 2015.02939, 2015.03557
DOC: 1511JLP28
Architecture, Archaeology
History and Culture

Dear Mr. Ouansafi:

SUBJECT: **Chapter 6E-8 and National Historic Preservation Act Section (NHPA) Section 106 Consultation – Department of Housing and Urban Development (HUD) Repair and Rehabilitation Project Department of Human Services, Hawai‘i Public Housing Authority (HPHA) Palolo Valley Homes Rehabilitation Project – 2107 Ahe Street Waikiki Ahupua‘a, Kona District, Island of O‘ahu TMK: (1) 3-4-007:016**

Thank you for your initial submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services (DHS), Hawaii Public Housing Authority (HPHA) consultation with SHPD in accordance with 36 CFR 800.3 and Hawaii Revised Statutes (HRS), Chapter 6E. We received your another submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience.

The submittal indicates that the HPHA is requesting the State Historic Preservation Officer's (SHPO) concurrence with a determination of "no effect" for the proposed HUD repair and rehabilitation improvement projects involving 43 existing public housing developments located throughout the State over the next five (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 consultation on their behalf.

This letter addresses Palolo Valley Homes Residential Rehabilitation Project, 2107 Ahe Street. The HPHA has identified the area of potential effects (APE) as the 9.11-acre area parcel owned by the State (HPHA) which is identified as TMK: (1) 3-4-007:016. DHS/HPHA have indicated at this stage of the planning process, they are unclear whether the subject 9.11-acre project area will require any ground disturbances.

Our records indicate that no archaeological inventory survey has been conducted within the subject parcel and that no historic properties have been identified. However, based on nearby studies potential exists to encounter subsurface traditional Hawaiian and/or historic properties within the subject parcel.

The SHPD has reviewed the undertaking 2107 Ahe Street, and the SHPO's determination is **no adverse effect** pursuant to NHPA Section 106 and **no historic properties affected** pursuant to HRS §6E-8 within the APE **provided the following conditions are met:**

- If ground disturbing activity is anticipated, DHS must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation;
- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;

- Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;
- Submit a TMK map showing the full extent of the project area within the affected parcel/s;
- Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Summary of land use history, such as previous intensive cultivation, grubbing or grading;
- Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions regarding archaeological resources or concerns please contact Susan Lebo at (808) 692-8019 or at Susan.A.Lebo@hawaii.gov. For any history and cultural concerns please contact Kaʻāhiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov. Please contact Jessica Puff at Jessica.L.Puff@hawaii.gov or (808) 692-8023 for any questions regarding architectural concerns or this letter.

Sincerely,

Susan A. Lebo

Signed for

Alan A. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

DAVID Y. IGE
GOVERNOR OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555
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SUZANNE D. CASE
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JEFFREY T. PEARSON
DEPUTY DIRECTOR - WATER

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HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
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STATE PARKS

November 16, 2015

IN REPLY REFER TO:
LOG: 2015.02939, 2015.03569
DOC: 1509JLP40
Architecture, Archaeology,
History and Culture

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
P.O. Box 17907
Honolulu, HI 96817

Dear Mr. Ouansafi,

SUBJECT: **Chapter 6E-8 and National Historic Preservation Act (NHPA) Section 106 Consultation – Department of Housing and Urban Development (HUD)**
Department of Human Services, Hawaii Public Housing Authority
Koʻolau Village Rehabilitation Project - 45-1027 Kamau Place
Kāneʻohe Ahupuaʻa, Koʻolaupoko District, Island of Oʻahu
TMK: (1) 4-5-023:008

Thank you for your submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services (DHS), Hawaii Public Housing Authority (HPHA) consultation with SHPD in accordance with 36 CFR 800.3, and pursuant to Hawaii Revised Statutes (HRS), Chapter 6E. SHPD received another submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience.

Your submittal indicates that DHS/HPHA is requesting the State Historic Preservation Officer's (SHPO) concurrence with a determination of "no effect" for the proposed HUD repair and rehabilitation improvement projects. HUD funding will be expended under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants and other grants. The repair and rehabilitation project will involve 43 existing public housing projects located throughout the State of Hawaii over the next five (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 on their behalf. This letter addresses the rehabilitation of Koʻolau Village at 45-1027 Kamau Place, Kāneʻohe, Oʻahu.

DHS/HPHA has identified one of the 43 project site and it's area of potential effect as the 14.02 acre parcel owned by the State of Hawaii, Hawaii Housing Authority identified as TMK: (1) 4-5-023:008. In addition DHS/HPHA has indicated at this stage of the planning process, they are unclear whether this project area identified as TMK: (1) 4-5-023:008, will require any ground disturbances.

Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA Section 106), and Hawaii Revised Statutes §6E-8 we have reviewed the undertaking at 45-1027 Kamau Place, Kaneohe, Oahu.

The SHPO's determination, for the purpose of NHPA Section 106, is that the proposed undertaking will have **no adverse effect** and that, for the purposes of HRS §6E-8, **no historic properties affected**, within the area of potential effects (APE) for the above cited undertaking **provided the following conditions are met:**

- There will be no ground disturbing activities within your final scope of work. If ground disturbing activity is anticipated, DHS must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation;
- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;
- Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;
- Submit a TMK map showing the full extent of the project area within the affected parcel(s);
- Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Summary of land use history, such as previous intensive cultivation, grubbing or grading;
- Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions regarding archaeological resources or concerns please contact Susan Lebo at (808) 692-8019 or at Susan.A.Lebo@hawaii.gov. For any history and cultural concerns please contact Ka‘āhiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov. Please contact Jessica Puff at Jessica.L.Puff@hawaii.gov or at (808) 692-8023 for any questions regarding architectural concerns or this letter.

Sincerely,

Alan A. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

DAVID Y. IGE
GOVERNOR OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
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JEFFREY T. PEARSON
DEPUTY DIRECTOR - WATER

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KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

December 11, 2015

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
P.O. Box 17907
Honolulu, HI 96817

LOG: 2015.02939, 2015.03563
DOC: 1511JLP36
Architecture, Archaeology
History and Culture

Dear Mr. Ouansafi:

SUBJECT: **Chapter 6E-8 and National Historic Preservation Act Section (NHPA) Section 106 Consultation – Department of Housing and Urban Development (HUD) Repair and Rehabilitation Project Department of Human Services, Hawai‘i Public Housing Authority (HPHA) Wahiawa Terrace Homes Rehabilitation Project – 337 Palm Street Kamananui Ahupua‘a, Waialua District, Island of O‘ahu TMK: (1) 7-1-001:034**

Thank you for your initial submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services (DHS), Hawaii Public Housing Authority (HPHA) consultation with SHPD in accordance with 36 CFR 800.3 and Hawaii Revised Statutes (HRS), Chapter 6E. We received your another submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience.

The submittal indicates that the HPHA is requesting the State Historic Preservation Officer’s (SHPO) concurrence with a determination of “no effect” for the proposed HUD repair and rehabilitation improvement projects involving 43 existing public housing developments located throughout the State over the next fivd5 (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 consultation on their behalf.

This letter addresses Wahiawa Terrace Homes Rehabilitation Project, 337 Palm Street. The HPHA has identified the area of potential effects (APE) as the 2.75 acre area parcel owned by the State (HPHA) which is identified as TMK: (1) 7-1-001:034. DHS/HPHA have indicated at this stage of the planning process, they are unclear whether the subject 2.75-acre project area will require any ground disturbances.

Our records indicate that no archaeological inventory survey has been conducted within the subject parcel and that no historic properties have been identified. However, based on nearby studies potential exists to encounter subsurface traditional Hawaiian and/or historic properties within the subject parcel.

The SHPD has reviewed the undertaking at 337 Palm Street, and the SHPO’s determination is **no adverse effect** pursuant to NHPA Section 106 and **no historic properties affected** pursuant to HRS §6E-8 within the APE **provided the following conditions are met:**

- If ground disturbing activity is anticipated, DHS must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation;
- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;

- Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;
- Submit a TMK map showing the full extent of the project area within the affected parcel/s;
- Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Summary of land use history, such as previous intensive cultivation, grubbing or grading;
- Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions regarding archaeological resources or concerns please contact Susan Lebo at (808) 692-8019 or at Susan.A.Lebo@hawaii.gov. For any history and cultural concerns please contact Kaʻāhiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov. Please contact Jessica Puff at Jessica.L.Puff@hawaii.gov or (808) 692-8023 for any questions regarding architectural concerns or this letter.

Sincerely,

Susan A. Lebo

Signed for

Alan A. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

DAVID Y. IGE
GOVERNOR OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
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KAHOOLAWE ISLAND RESERVE COMMISSION
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STATE PARKS

November 16, 2015

IN REPLY REFER TO:
LOG: 2015. 02939, 2015.03570
DOC: 1509JLP41
Architecture, Archaeology,
History and Culture

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
P.O. Box 17907
Honolulu, HI 96817

Dear Mr. Ouansafi,

SUBJECT: **Chapter 6E-8 and National Historic Preservation Act (NHPA) Section 106 Consultation – Department of Housing and Urban Development (HUD)**
Department of Human Services, Hawaii Public Housing Authority
Maili I Rehabilitation Project – 87-172 Maliona Street
Waianae Ahupua‘a, Waianae District, Island of O‘ahu
TMK: (1) 8-7-002:011

Thank you for your submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services (DHS), Hawaii Public Housing Authority (HPHA) consultation with SHPD in accordance with 36 CFR 800.3, and pursuant to Hawaii Revised Statutes (HRS), Chapter 6E. SHPD received another submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience.

Your submittal indicates that DHS/HPHA is requesting the State Historic Preservation Officer’s (SHPO) concurrence with a determination of “no effect” for the proposed HUD repair and rehabilitation improvement projects. HUD funding will be expended under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants and other grants. The repair and rehabilitation project will involve 43 existing public housing projects located throughout the State of Hawaii over the next five (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 on their behalf. This letter addresses the rehabilitation of Maili I Public Housing located at 87-172 Maliona Street, Waianae.

DHS/HPHA has identified Maili I as one of the 43 project site and it’s area of potential effect as the 2.29 acre parcel owned by the State of Hawaii, Hawaii Housing Authority identified as TMK: (1) 8-7-002:011 In addition DHS/HPHA has indicated at this stage of the planning process, they are unclear whether this project area identified as TMK: (1) 4-5-023:008, will require any ground disturbances.

Our records indicate numerous archaeological studies have been conducted within the Waianae Ahupuaa and a large number of surface and subsurface traditional and historic properties have been identified. The traditional sites include several Heiau(s), enclosures, rock walls, and large agricultural complexes consisting of wet land and dry land farming, and human burials. A human burial (SIHP 50-80-07-4244) is documented at approximately 1/4 mile from the proposed project site. Other historic properties include remnant ranching and sugar plantation remnants. In addition, SHPD has previously commented on a revised scope of work for the Maili I Homes Project on June 3, 1999 (Log No: 23539; Doc No 9905SC24). SHPD’s determination was indicative to no ground disturbances or demolitions of existing structures.

Pursuant to NHPA, Section 106 and HRS §6E-8 we have reviewed the undertaking at 87-172 Maliona Street, Waianae. The SHPO has determined, for the purpose of NHPA Section 106 that the proposed undertaking will have **no adverse effect** and that, for the purposes of HRS §6E-8, **no historic properties affected**, within the area of potential effects (APE) for the above cited undertaking **provided the following conditions are met:**

- There will be no ground disturbing activities within your final scope of work. If ground disturbing activity is anticipated, DHS must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation;
- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;
- Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;
- Submit a TMK map showing the full extent of the project area within the affected parcel(s);
- Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Summary of land use history, such as previous intensive cultivation, grubbing or grading;
- Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions regarding archaeological resources or concerns please contact Susan Lebo at (808) 692-8019 or at Susan.A.Lebo@hawaii.gov. For any history and cultural concerns please contact Ka‘āhiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov. Please contact Jessica Puff at Jessica.L.Puff@hawaii.gov or at (808) 692-8023 for any questions regarding architectural concerns or this letter.

Sincerely,

Alan A. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

DAVID Y. IGE
GOVERNOR OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555

SUZANNE D. CASE
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DEPUTY DIRECTOR - WATER

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December 11, 2015

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
P.O. Box 17907
Honolulu, HI 96817

LOG: 2015.02939, 2015.03571
DOC: 1511JLP35
Architecture, Archaeology
History and Culture

Dear Mr. Ouansafi:

SUBJECT: **Chapter 6E-8 and National Historic Preservation Act Section (NHPA) Section 106 Consultation – Department of Housing and Urban Development (HUD) Repair and Rehabilitation Project Department of Human Services, Hawai‘i Public Housing Authority (HPHA) Nanakuli Homes Rehabilitation Project – 87-1608 Farrington Highway Nānākuli Ahupua‘a, Waianae District, Island of O‘ahu TMK: (1) 8-7-034:004**

Thank you for your initial submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services (DHS), Hawaii Public Housing Authority (HPHA) consultation with SHPD in accordance with 36 CFR 800.3 and Hawaii Revised Statutes (HRS), Chapter 6E. We received your another submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience.

The submittal indicates that the HPHA is requesting the State Historic Preservation Officer’s (SHPO) concurrence with a determination of “no effect” for the proposed HUD repair and rehabilitation improvement projects involving 43 existing public housing developments located throughout the State over the next fivd5 (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 consultation on their behalf.

This letter addresses Nānākuli Homes Rehabilitation Project, 87-1608 Farrington Highway. The HPHA has identified the area of potential effects (APE) as the 4.24 acre area parcel owned by the State (HPHA) which is identified as TMK: (1) 8-7-034:004. DHS/HPHA have indicated at this stage of the planning process, they are unclear whether the subject 4.24-acre project area will require any ground disturbances.

Our records indicate that no archaeological inventory survey has been conducted within the subject parcel and that no historic properties have been identified. However, based on nearby studies potential exists to encounter subsurface traditional Hawaiian and/or historic properties within the subject parcel.

The SHPD has reviewed the undertaking at 87-1068 Farrington Highway, and the SHPO’s determination is **no adverse effect** pursuant to NHPA Section 106 and **no historic properties affected** pursuant to HRS §6E-8 within the APE **provided the following conditions are met:**

- If ground disturbing activity is anticipated, DHS must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation;
- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;

- Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;
- Submit a TMK map showing the full extent of the project area within the affected parcel/s;
- Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Summary of land use history, such as previous intensive cultivation, grubbing or grading;
- Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions regarding archaeological resources or concerns please contact Susan Lebo at (808) 692-8019 or at Susan.A.Lebo@hawaii.gov. For any history and cultural concerns please contact Kaʻāhiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov. Please contact Jessica Puff at Jessica.L.Puff@hawaii.gov or (808) 692-8023 for any questions regarding architectural concerns or this letter.

Sincerely,

Susan A. Lebo

Signed for

Alan A. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

DAVID Y. IGE
GOVERNOR OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
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KEKOA KALUHIWA
FIRST DEPUTY

JEFFREY T. PEARSON
DEPUTY DIRECTOR - WATER

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FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

December 7, 2015

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
P.O. Box 17907
Honolulu, HI 96817

LOG: 2015.02939, 2015.03572
DOC: 1511JLP38
Architecture, Archaeology
History and Culture

Dear Mr. Ouansafi:

SUBJECT: **Chapter 6E-8 and National Historic Preservation Act Section (NHPA) Section 106 Consultation – Department of Housing and Urban Development (HUD) Repair and Rehabilitation Project Department of Human Services, Hawai‘i Public Housing Authority (HPHA) Puuwai Momi Homes Rehabilitation Project – 99-132 Kohomua Street Halawa Ahupua‘a, ‘Ewa District, Island of O‘ahu TMK: (1) 9-9-003:056 and 064**

Thank you for your initial submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services (DHS), Hawaii Public Housing Authority (HPHA) consultation with SHPD in accordance with 36 CFR 800.3 and Hawaii Revised Statutes (HRS), Chapter 6E. We received your another submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience.

The submittal indicates that the HPHA is requesting the State Historic Preservation Officer’s (SHPO) concurrence with a determination of “no effect” for the proposed HUD repair and rehabilitation improvement projects involving 43 existing public housing developments located throughout the State over the next five (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 consultation on their behalf.

This letter addresses Puuwai MOmi Rehabilitation Project, 99-132 Kohomua Street. The HPHA has identified the area of potential effects (APE) as the 11.54 acre area parcel owned by the State (HPHA) which is identified as TMK: (1) 9-9-003:056 and 064 DHS/HPHA have indicated at this stage of the planning process, they are unclear whether the subject 11.54-acre project area will require any ground disturbances.

Our records indicate that no archaeological inventory survey has been conducted within the subject parcel and that no historic properties have been identified. However, based on nearby studies potential exists to encounter subsurface traditional Hawaiian and/or historic properties within the subject parcel.

The SHPD has reviewed the undertaking at 99-132 Kohomua Street, and the SHPO’s determination is **no adverse effect** pursuant to NHPA Section 106 and **no historic properties affected** pursuant to HRS §6E-8 within the APE **provided the following conditions are met:**

- If ground disturbing activity is anticipated, DHS must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation;
- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;

- Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;
- Submit a TMK map showing the full extent of the project area within the affected parcel/s;
- Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Summary of land use history, such as previous intensive cultivation, grubbing or grading;
- Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions regarding archaeological resources or concerns please contact Susan Lebo at (808) 692-8019 or at Susan.A.Lebo@hawaii.gov. For any history and cultural concerns please contact Kaʻāhiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov. Please contact Jessica Puff at Jessica.L.Puff@hawaii.gov or (808) 692-8023 for any questions regarding architectural concerns or this letter.

Sincerely,

Susan A. Lebo

Signed For

Alan A. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

DAVID Y. IGE
GOVERNOR OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555

SUZANNE D. CASE
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KEKOA KALUHIWA
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KAHOOLAWE ISLAND RESERVE COMMISSION
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STATE PARKS

December 11, 2015

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
P.O. Box 17907
Honolulu, HI 96817

LOG: 2015.02939, 2015.03561
DOC: 1511JLP29
Architecture, Archaeology
History and Culture

Dear Mr. Ouansafi:

SUBJECT: **Chapter 6E-8 and National Historic Preservation Act Section (NHPA) Section 106 Consultation – Department of Housing and Urban Development (HUD) Repair and Rehabilitation Project Department of Human Services, Hawai‘i Public Housing Authority (HPHA) Kahekili Terrace (A & B) Homes Rehabilitation Project – 2015 Holowai Place Pu‘ali Komohana Ahupua‘a, Wailuku District, Island of Maui TMK: (2) 3-4-033:023**

Thank you for your initial submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services (DHS), Hawaii Public Housing Authority (HPHA) consultation with SHPD in accordance with 36 CFR 800.3 and Hawaii Revised Statutes (HRS), Chapter 6E. We received your another submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience.

The submittal indicates that the HPHA is requesting the State Historic Preservation Officer’s (SHPO) concurrence with a determination of “no effect” for the proposed HUD repair and rehabilitation improvement projects involving 43 existing public housing developments located throughout the State over the next fivd5 (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 consultation on their behalf.

This letter addresses Kahekili Terrace (A & B) Homes Rehabilitation Project, 2015 Holowai Place. The HPHA has identified the area of potential effects (APE) as the 5.45 acre area parcel owned by the State (HPHA) which is identified as TMK: (2) 3-4-033:023. DHS/HPHA have indicated at this stage of the planning process, they are unclear whether the subject 5.45-acre project area will require any ground disturbances.

Our records indicate that no archaeological inventory survey has been conducted within the subject parcel and that no historic properties have been identified. However, based on nearby studies potential exists to encounter subsurface traditional Hawaiian and/or historic properties within the subject parcel.

The SHPD has reviewed the undertaking at 2015 Holowai Place, and the SHPO’s determination is **no adverse effect** pursuant to NHPA Section 106 and **no historic properties affected** pursuant to HRS §6E-8 within the APE **provided the following conditions are met:**

- If ground disturbing activity is anticipated, DHS must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation;
- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;

- Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;
- Submit a TMK map showing the full extent of the project area within the affected parcel/s;
- Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Summary of land use history, such as previous intensive cultivation, grubbing or grading;
- Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions regarding archaeological resources or concerns please contact Morgan Davis at (808) 243-4641 or at Morgan.E.Davis@hawaii.gov. For any history and cultural concerns please contact Kaʻāhiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov. Please contact Jessica Puff at Jessica.L.Puff@hawaii.gov or (808) 692-8023 for any questions regarding architectural concerns or this letter.

Sincerely,

Susan A. Lebo

Signed for

Alan A. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

DAVID Y. IGE
GOVERNOR OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555

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HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

November 30, 2015

IN REPLY REFER TO:
LOG NO: 2015.02939, 2015.03558
DOC NO: 1509JLP29

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
PO Box 17907
Honolulu, HI 96817

Dear Mr. Ouansafi:

SUBJECT: **Chapter 6E-8 and National Historic Preservation Act (NHPA) Section 106 Consultation**
Department of Housing and Urban Development (HUD) – Repair and Rehabilitation Project
Department of Human Services, Hawai‘i Public Housing Authority (HPHA)
David Malo Circle Residential Housing Project – 723 Mill Street
Paunau Ahupua‘a, Lahaina District, Island of Maui
TMK: (2) 4-6-010:028

Thank you for your initial submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services, Hawaii Public Housing Authority (HPHA) consultation with the SHPD in accordance with 36 CFR 800.3, pursuant to Hawaii Revised Statutes (HRS), Chapter 6E. SHPD received your another submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience.

Your submittal indicates that DHS/HPHA is requesting the State Historic Preservation Officer’s (SHPO) concurrence with a determination of “no effect” for the proposed HUD repair and rehabilitation improvement projects. HUD funding will be expended under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants and other grants. The repair and rehabilitation project will involve 43 existing public housing developments located throughout the State of Hawaii over the next five (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 on their behalf. This letter addresses the rehabilitation of David Malo Residential Housing Project, 723 Mill Street, Lahaina, Maui.

DHS/HPHA has identified one of the 43 project site and it’s area of potential effects (APE) as the 1.60 acre area parcel owned by the State of Hawaii, Hawaii Housing Authority identified as TMK: (2) 4-6-010:028. In addition, DHS/HPHA have indicated at this stage of the planning process, they are unclear whether the subject 1.60-acre project area will require any ground disturbances.

Our records indicate that no archaeological inventory survey has been conducted within subject parcel and that no historic properties have been identified. Furthermore, the identified parcel [TMK: (2) 4-6-010:028] is within the boundaries of the Historic Lahaina District, State Inventory of Historic Places (SIHP) 50-50-03-3001 and the National Register of Historic Places (NRHP No: 66000302). In addition, numerous Land Commission Awards (LCA) were issued in Paunau Ahupua‘a during the Māhele of the mid-1800s. Specifically, LCA 3420-B and LCA 5383:1 were issued within the subject parcel, indicating potential for pre- and/or early post-Contact historic properties. In addition, nearby historic sites include the Aus Site (SIHP 1797), the Hauloa Stone (SIHP 1202), and the Moku‘ula Complex.

Given this information, we believe historic sites or site remnants may be present in the subsurface deposits of the subject property. SHPD previously recommended archaeological monitoring during proposed construction, and an archaeological monitoring plan has been accepted for this project (Log No. 2015.02836, Doc No. 1509MD25).

Pursuant to NHPA, Section 106 and HRS §6E-8 we have reviewed the undertaking at 87-172 Maliona Street, Waianae. The SHPO has determined, for the purpose of NHPA Section 106 that the proposed undertaking will have **no adverse effect** and that, for the purposes of HRS §6E-8, **no historic properties affected**, within the area of potential effects for the above cited undertaking **provided the following conditions are met:**

- Implementation of the SHPD-accepted archaeological monitoring plan for all ground disturbance;
- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;
- Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;
- Submit a TMK map showing the full extent of the project area within the affected parcel/s;
- Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions regarding archaeological resources or concerns please contact Susan Lebo at (808) 692-8019 or at Susan.A.Lebo@hawaii.gov. For any history and cultural concerns please contact Ka‘āhiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov. Please contact Jessica Puff at Jessica.L.Puff@hawaii.gov or at (808) 692-8023 for any questions regarding architectural concerns or this letter.

Sincerely,

Alan A. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

cc:	County of Maui Department of Planning (Planning@co.maui.hi.us)	County of Maui Department of Public Works – DSA (Renee.Segundo@co.maui.hi.us)	County of Maui Cultural Resources Commission (Annalise.Kehler@co.maui.hi.us)

DAVID Y. IGE
GOVERNOR OF HAWAII

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
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STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555

December 8, 2015

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
P.O. Box 17907
Honolulu, HI 96817

LOG: 2015.02939, 2015.03566
DOC: 1511JLP27
Architecture, Archaeology
History and Culture

Dear Mr. Ouansafi:

SUBJECT: **Chapter 6E-8 and National Historic Preservation Act Section (NHPA) Section 106 Consultation – Department of Housing and Urban Development (HUD) Repair and Rehabilitation Project Department of Human Services, Hawai‘i Public Housing Authority (HPHA) Pomaikai Residential Housing Rehabilitation Project – 929 Ululani Street Waiakea Ahupua‘a, South Hilo District, Island of Hawai‘i TMK: (3) 2-4-025:092**

Thank you for your initial submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services (DHS), Hawaii Public Housing Authority (HPHA) consultation with SHPD in accordance with 36 CFR 800.3 and Hawaii Revised Statutes (HRS), Chapter 6E. We received your another submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience.

The submittal indicates that the HPHA is requesting the State Historic Preservation Officer’s (SHPO) concurrence with a determination of “no effect” for the proposed HUD repair and rehabilitation improvement projects involving 43 existing public housing developments located throughout the State over the next five (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 consultation on their behalf.

This letter addresses Pomaikai Residential Housing Rehabilitation Project, 929 Ululani Street. The HPHA has identified the area of potential effects (APE) as the 0.96 acre area parcel owned by the State (HPHA) which is identified as TMK: (3) 2-4-005:092. DHS/HPHA have indicated at this stage of the planning process, they are unclear whether the subject 0.96-acre project area will require any ground disturbances.

Our records indicate that no archaeological inventory survey has been conducted within the subject parcel and that no historic properties have been identified. However, based on nearby studies potential exists to encounter subsurface traditional Hawaiian and/or historic properties within the subject parcel.

The SHPD has reviewed the undertaking at 929 Ululani Street, and the SHPO’s determination is **no adverse effect** pursuant to NHPA Section 106 and **no historic properties affected** pursuant to HRS §6E-8 within the APE **provided the following conditions are met:**

- If ground disturbing activity is anticipated, DHS must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation;
- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;

- Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;
- Submit a TMK map showing the full extent of the project area within the affected parcel/s;
- Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Summary of land use history, such as previous intensive cultivation, grubbing or grading;
- Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions regarding archaeological resources or concerns please contact Sean Naleimaile at (808) 933-7651 or at Sean.P.Naleimaile@hawaii.gov. For any history and cultural concerns please contact Kaʻāhiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov. Please contact Jessica Puff at Jessica.L.Puff@hawaii.gov or (808) 692-8023 for any questions regarding architectural concerns or this letter.

Sincerely,

Alan A. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

DAVID Y. IGE
GOVERNOR OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

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STATE PARKS

December 8, 2015

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
P.O. Box 17907
Honolulu, HI 96817

LOG: 2015.02939, 2015.03573
DOC: 1511JLP31
Architecture, Archaeology
History and Culture

Dear Mr. Ouansafi:

SUBJECT: **Chapter 6E-8 and National Historic Preservation Act Section (NHPA) Section 106 Consultation – Department of Housing and Urban Development (HUD) Repair and Rehabilitation Project Department of Human Services, Hawai‘i Public Housing Authority (HPHA) Lanakila II Housing Rehabilitation Project – 600 Wailoa Street Waiakea Ahupua‘a, South Hilo District, Island of Hawai‘i TMK: (3) 2-4-028:007**

Thank you for your initial submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services (DHS), Hawaii Public Housing Authority (HPHA) consultation with SHPD in accordance with 36 CFR 800.3 and Hawaii Revised Statutes (HRS), Chapter 6E. We received your another submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience.

The submittal indicates that the HPHA is requesting the State Historic Preservation Officer’s (SHPO) concurrence with a determination of “no effect” for the proposed HUD repair and rehabilitation improvement projects involving 43 existing public housing developments located throughout the State over the next five (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 consultation on their behalf.

This letter addresses Lanakila II Housing Rehabilitation Project, 600 Wailoa Street. The HPHA has identified the area of potential effects (APE) as the 7.82 acre area parcel owned by the State (HPHA) which is identified as TMK: (3) 2-4-028:007. DHS/HPHA have indicated at this stage of the planning process, they are unclear whether the subject 7.82-acre project area will require any ground disturbances.

Our records indicate that no archaeological inventory survey has been conducted within the subject parcel and that no historic properties have been identified. However, based on nearby studies potential exists to encounter subsurface traditional Hawaiian and/or historic properties within the subject parcel.

The SHPD has reviewed the undertaking at 600 Wailoa Street, and the SHPO’s determination is **no adverse effect** pursuant to NHPA Section 106 and **no historic properties affected** pursuant to HRS §6E-8 within the APE **provided the following conditions are met:**

- If ground disturbing activity is anticipated, DHS must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation;
- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;

- Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;
- Submit a TMK map showing the full extent of the project area within the affected parcel/s;
- Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Summary of land use history, such as previous intensive cultivation, grubbing or grading;
- Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions regarding archaeological resources or concerns please contact Sean Naleimaile at (808) 933-7651 or at Sean.P.Naleimaile@hawaii.gov. For any history and cultural concerns please contact Kaʻāhiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov. Please contact Jessica Puff at Jessica.L.Puff@hawaii.gov or (808) 692-8023 for any questions regarding architectural concerns or this letter.

Sincerely,

Susan A. Lebo

Signed For

Alan A. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

DAVID Y. IGE
GOVERNOR OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
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DEPUTY DIRECTOR - WATER

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KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

December 9, 2015

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
P.O. Box 17907
Honolulu, HI 96817

LOG: 2015.02939, 2015.03577
DOC: 1511JLP32
Architecture, Archaeology
History and Culture

Dear Mr. Ouansafi:

SUBJECT: **Chapter 6E-8 and National Historic Preservation Act Section (NHPA) Section 106 Consultation – Department of Housing and Urban Development (HUD) Repair and Rehabilitation Project Department of Human Services, Hawai‘i Public Housing Authority (HPHA) Lanakila III Housing Rehabilitation Project – 600 Wailoa Street Waiakea Ahupua‘a, South Hilo District, Island of Hawai‘i TMK: (3) 2-4-028:007**

Thank you for your initial submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services (DHS), Hawaii Public Housing Authority (HPHA) consultation with SHPD in accordance with 36 CFR 800.3 and Hawaii Revised Statutes (HRS), Chapter 6E. We received your another submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience.

The submittal indicates that the HPHA is requesting the State Historic Preservation Officer’s (SHPO) concurrence with a determination of “no effect” for the proposed HUD repair and rehabilitation improvement projects involving 43 existing public housing developments located throughout the State over the next five (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 consultation on their behalf.

This letter addresses Lanakila III Housing Rehabilitation Project, 600 Wailoa Street. The HPHA has identified the area of potential effects (APE) as the 3.84 acre area parcel owned by the State (HPHA) which is identified as TMK: (3) 2-4-028:007. DHS/HPHA have indicated at this stage of the planning process, they are unclear whether the subject 3.84-acre project area will require any ground disturbances.

Our records indicate that no archaeological inventory survey has been conducted within the subject parcel and that no historic properties have been identified. However, based on nearby studies potential exists to encounter subsurface traditional Hawaiian and/or historic properties within the subject parcel.

The SHPD has reviewed the undertaking at 600 Wailoa Street, and the SHPO’s determination is **no adverse effect** pursuant to NHPA Section 106 and **no historic properties affected** pursuant to HRS §6E-8 within the APE **provided the following conditions are met:**

- If ground disturbing activity is anticipated, DHS must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation;
- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;

- Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;
- Submit a TMK map showing the full extent of the project area within the affected parcel/s;
- Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Summary of land use history, such as previous intensive cultivation, grubbing or grading;
- Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions regarding archaeological resources or concerns please contact Sean Naleimaile at (808) 933-7651 or at Sean.P.Naleimaile@hawaii.gov. For any history and cultural concerns please contact Kaʻāhiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov. Please contact Jessica Puff at Jessica.L.Puff@hawaii.gov or (808) 692-8023 for any questions regarding architectural concerns or this letter.

Sincerely,

Alan A. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

DAVID Y. IGE
GOVERNOR OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555

SUZANNE D. CASE
CHAIRPERSON
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KEKOA KALUHIWA
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JEFFREY T. PEARSON
DEPUTY DIRECTOR - WATER

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KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

December 9, 2015

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
P.O. Box 17907
Honolulu, HI 96817

LOG: 2015.02939, 2015.03578
DOC: 1511JLP30
Architecture, Archaeology
History and Culture

Dear Mr. Ouansafi:

SUBJECT: **Chapter 6E-8 and National Historic Preservation Act Section (NHPA) Section 106 Consultation – Department of Housing and Urban Development (HUD) Repair and Rehabilitation Project Department of Human Services, Hawai‘i Public Housing Authority (HPHA) Lanakila I Housing Rehabilitation Project – 600 Wailoa Street Waiakea Ahupua‘a, South Hilo District, Island of Hawai‘i TMK: (3) 2-4-028:007**

Thank you for your initial submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services (DHS), Hawaii Public Housing Authority (HPHA) consultation with SHPD in accordance with 36 CFR 800.3 and Hawaii Revised Statutes (HRS), Chapter 6E. We received your another submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience.

The submittal indicates that the HPHA is requesting the State Historic Preservation Officer’s (SHPO) concurrence with a determination of “no effect” for the proposed HUD repair and rehabilitation improvement projects involving 43 existing public housing developments located throughout the State over the next five (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 consultation on their behalf.

This letter addresses Lanakila I Housing Rehabilitation Project, 600 Wailoa Street. The HPHA has identified the area of potential effects (APE) as the 5.92 acre area parcel owned by the State (HPHA) which is identified as TMK: (3) 2-4-028:007. DHS/HPHA have indicated at this stage of the planning process, they are unclear whether the subject 5.92-acre project area will require any ground disturbances.

Our records indicate that no archaeological inventory survey has been conducted within the subject parcel and that no historic properties have been identified. However, based on nearby studies potential exists to encounter subsurface traditional Hawaiian and/or historic properties within the subject parcel.

The SHPD has reviewed the undertaking at 600 Wailoa Street, and the SHPO’s determination is **no adverse effect** pursuant to NHPA Section 106 and **no historic properties affected** pursuant to HRS §6E-8 within the APE **provided the following conditions are met:**

- If ground disturbing activity is anticipated, DHS must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation;
- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;

- Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;
- Submit a TMK map showing the full extent of the project area within the affected parcel/s;
- Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Summary of land use history, such as previous intensive cultivation, grubbing or grading;
- Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions regarding archaeological resources or concerns please contact Sean Naleimaile at (808) 933-7651 or at Sean.P.Naleimaile@hawaii.gov. For any history and cultural concerns please contact Kaʻāhiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov. Please contact Jessica Puff at Jessica.L.Puff@hawaii.gov or (808) 692-8023 for any questions regarding architectural concerns or this letter.

Sincerely,

Alan A. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

DAVID Y. IGE
GOVERNOR OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

KEKOA KALUHIWA
FIRST DEPUTY

JEFFREY T. PEARSON
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
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COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
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LAND
STATE PARKS

December 9, 2015

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
P.O. Box 17907
Honolulu, HI 96817

LOG: 2015.02939, 2015.03580
DOC: 1511JLP33
Architecture, Archaeology
History and Culture

Dear Mr. Ouansafi:

SUBJECT: **Chapter 6E-8 and National Historic Preservation Act Section (NHPA) Section 106 Consultation – Department of Housing and Urban Development (HUD) Repair and Rehabilitation Project Department of Human Services, Hawai‘i Public Housing Authority (HPHA) Lanakila III-A Housing Rehabilitation Project – 600 Wailoa Street Waiakea Ahupua‘a, South Hilo District, Island of Hawai‘i TMK: (3) 2-4-028:007**

Thank you for your initial submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services (DHS), Hawaii Public Housing Authority (HPHA) consultation with SHPD in accordance with 36 CFR 800.3 and Hawaii Revised Statutes (HRS), Chapter 6E. We received your another submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience.

The submittal indicates that the HPHA is requesting the State Historic Preservation Officer’s (SHPO) concurrence with a determination of “no effect” for the proposed HUD repair and rehabilitation improvement projects involving 43 existing public housing developments located throughout the State over the next five (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 consultation on their behalf.

This letter addresses Lanakila III-A Housing Rehabilitation Project, 600 Wailoa Street. The HPHA has identified the area of potential effects (APE) as the 2.36 acre area parcel owned by the State (HPHA) which is identified as TMK: (3) 2-4-028:007. DHS/HPHA have indicated at this stage of the planning process, they are unclear whether the subject 2.36-acre project area will require any ground disturbances.

Our records indicate that no archaeological inventory survey has been conducted within the subject parcel and that no historic properties have been identified. However, based on nearby studies potential exists to encounter subsurface traditional Hawaiian and/or historic properties within the subject parcel.

The SHPD has reviewed the undertaking at 600 Wailoa Street, and the SHPO’s determination is **no adverse effect** pursuant to NHPA Section 106 and **no historic properties affected** pursuant to HRS §6E-8 within the APE **provided the following conditions are met:**

- If ground disturbing activity is anticipated, DHS must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation;
- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;

- Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;
- Submit a TMK map showing the full extent of the project area within the affected parcel/s;
- Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Summary of land use history, such as previous intensive cultivation, grubbing or grading;
- Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions regarding archaeological resources or concerns please contact Sean Naleimaile at (808) 933-7651 or at Sean.P.Naleimaile@hawaii.gov. For any history and cultural concerns please contact Kaʻāhiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov. Please contact Jessica Puff at Jessica.L.Puff@hawaii.gov or (808) 692-8023 for any questions regarding architectural concerns or this letter.

Sincerely,

Alan A. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

DAVID Y. IGE
GOVERNOR OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555

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JEFFREY T. PEARSON
DEPUTY DIRECTOR - WATER

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HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

December 8, 2015

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
P.O. Box 17907
Honolulu, HI 96817

LOG: 2015.02939, 2015.03582
DOC: 1511JLP34
Architecture, Archaeology
History and Culture

Dear Mr. Ouansafi:

SUBJECT: **Chapter 6E-8 and National Historic Preservation Act Section (NHPA) Section 106 Consultation – Department of Housing and Urban Development (HUD) Repair and Rehabilitation Project Department of Human Services, Hawai‘i Public Housing Authority (HPHA) Lanakila IV Housing Rehabilitation Project – 600 Wailoa Street Waiakea Ahupua‘a, South Hilo District, Island of Hawai‘i TMK: (3) 2-4-028:007**

Thank you for your initial submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services (DHS), Hawaii Public Housing Authority (HPHA) consultation with SHPD in accordance with 36 CFR 800.3 and Hawaii Revised Statutes (HRS), Chapter 6E. We received your another submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience.

The submittal indicates that the HPHA is requesting the State Historic Preservation Officer’s (SHPO) concurrence with a determination of “no effect” for the proposed HUD repair and rehabilitation improvement projects involving 43 existing public housing developments located throughout the State over the next five (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 consultation on their behalf.

This letter addresses Lanakila IV Housing Rehabilitation Project, 600 Wailoa Street. The HPHA has identified the area of potential effects (APE) as the 5.07 acre area parcel owned by the State (HPHA) which is identified as TMK: (3) 2-4-028:007. DHS/HPHA have indicated at this stage of the planning process, they are unclear whether the subject 5.07-acre project area will require any ground disturbances.

Our records indicate that no archaeological inventory survey has been conducted within the subject parcel and that no historic properties have been identified. However, based on nearby studies potential exists to encounter subsurface traditional Hawaiian and/or historic properties within the subject parcel.

The SHPD has reviewed the undertaking at 600 Wailoa Street, and the SHPO’s determination is **no adverse effect** pursuant to NHPA Section 106 and **no historic properties affected** pursuant to HRS §6E-8 within the APE **provided the following conditions are met:**

- If ground disturbing activity is anticipated, DHS must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation;
- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;

- Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;
- Submit a TMK map showing the full extent of the project area within the affected parcel/s;
- Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Summary of land use history, such as previous intensive cultivation, grubbing or grading;
- Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions regarding archaeological resources or concerns please contact Sean Naleimaile at (808) 933-7651 or at Sean.P.Naleimaile@hawaii.gov. For any history and cultural concerns please contact Kaʻāhiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov. Please contact Jessica Puff at Jessica.L.Puff@hawaii.gov or (808) 692-8023 for any questions regarding architectural concerns or this letter.

Sincerely,

Alan A. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

DAVID Y. IGE
GOVERNOR OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555

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STATE PARKS

December 9, 2015

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
P.O. Box 17907
Honolulu, HI 96817

LOG: 2015.02939, 2015.03567
DOC: 1509JLP38
Architecture, Archaeology
History and Culture

Dear Mr. Ouansafi:

SUBJECT: **Chapter 6E-8 and National Historic Preservation Act Section (NHPA) Section 106 Consultation – Department of Housing and Urban Development (HUD) Repair and Rehabilitation Project Department of Human Services, Hawai‘i Public Housing Authority (HPHA) Punahele Residential Housing Rehabilitation Project – 5 Lokahi Place Waiakea Ahupua‘a, Hilo District, Island of Hawai‘i TMK: (3) 2-4-052:022**

Thank you for your initial submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services (DHS), Hawaii Public Housing Authority (HPHA) consultation with SHPD in accordance with 36 CFR 800.3 and Hawaii Revised Statutes (HRS), Chapter 6E. We received your another submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience.

The submittal indicates that the HPHA is requesting the State Historic Preservation Officer’s (SHPO) concurrence with a determination of “no effect” for the proposed HUD repair and rehabilitation improvement projects involving 43 existing public housing developments located throughout the State over the next five (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 consultation on their behalf.

This letter addresses Punahele Housing Rehabilitation Project, 5 Lokahi Place. The HPHA has identified the area of potential effects (APE) as the 3.97 acre area parcel owned by the State (HPHA) which is identified as TMK: (3) 2-4-052:022. DHS/HPHA have indicated at this stage of the planning process, they are unclear whether the subject 3.97-acre project area will require any ground disturbances.

Our records indicate that no archaeological inventory survey has been conducted within the subject parcel and that no historic properties have been identified. However, based on nearby studies potential exists to encounter subsurface traditional Hawaiian and/or historic properties within the subject parcel.

The SHPD has reviewed the undertaking at 5 Lokahi Place, and the SHPO’s determination is **no adverse effect** pursuant to NHPA Section 106 and **no historic properties affected** pursuant to HRS §6E-8 within the APE **provided the following conditions are met:**

- If ground disturbing activity is anticipated, DHS must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation;
- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;

- Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;
- Submit a TMK map showing the full extent of the project area within the affected parcel/s;
- Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Summary of land use history, such as previous intensive cultivation, grubbing or grading;
- Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions regarding archaeological resources or concerns please contact Sean Naleimaile at (808) 933-7651 or at Sean.P.Naleimaile@hawaii.gov. For any history and cultural concerns please contact Kaʻāhiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov. Please contact Jessica Puff at Jessica.L.Puff@hawaii.gov or (808) 692-8023 for any questions regarding architectural concerns or this letter.

Sincerely,

Alan A. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

DAVID Y. IGE
GOVERNOR OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555

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HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

November 20, 2015

IN REPLY REFER TO:
Log Nos. 2015.02939, 2015.03559
Doc. No. 1509JLP30
Architecture, Archaeology
History and Culture

Hakim Ouansafi, Executive Director
Department of Human Services
Hawaii Public Housing Authority
P.O. Box 17907
Honolulu, HI 96817

Dear Mr. Ouansafi:

SUBJECT: **Chapter 6E- and National Historic Preservation Act Section (NHPA) Section 106 Consultation – Department of Housing and Urban Development (HUD) – Repair and Rehabilitation Project Department of Human Services, Hawai‘i Public Housing Authority (HPHA) Eleele Homes, 340 Ahe Street Ele‘ele Ahupua‘a, Kona District, Island of Kaua‘i TMK: (4) 2-1-001:013 and 042**

Thank you for your initial submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services, Hawaii Public Housing Authority (HPHA) consultation with the SHPD in accordance with 36 CFR 800.3 and Hawaii Revised Statutes (HRS), Chapter 6E. We received your supplemental submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience. HUD funding will be expended under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants and other grants.

The submittal indicates that the HPHA is requesting the State Historic Preservation Officer’s (SHPO) concurrence with a determination of “no effect” for the proposed HUD repair and rehabilitation improvement projects involving 43 existing public housing developments located throughout the State over the next five (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 on their behalf.

This letter addresses the HUD housing complex at 340 Ahe Street. The HPHA has identified the area of potential effects (APE) as State (HPHA) property comprising 2.11 acres and identified as TMK: (4) 2-1-001:013 and 042. In addition, DHS/HPHA has indicated at this stage of the planning process, they are unclear whether this project will require any ground disturbance.

Our records indicate that no archaeological inventory survey has been conducted within the subject parcel and that no historic properties have been identified. They also reveal that several archaeological studies (Thrum 1906; Bennett 1931; Kikuchi 1963; Hammatt 1992; Glidden et al. 1993; Creed et al. 1994; Creed and Hammatt 1994 and Kikiloi et al. 2000) have been conducted within the Ahupua‘a of Hanapepe and Ele‘ele and that a number of surface and subsurface traditional and historic properties have been identified. The traditional sites include habitation sites, agricultural terraces and complexes, heiau, and human burials. Historic sites include subsurface midden and historic plantation-period artifacts. Based on these studies, potential exists to encounter subsurface traditional Hawaiian and/or historic properties within the subject APE.

The SHPD has reviewed the undertaking at 340 Ahe Street, and the SHPO’s determination is **no adverse effect** pursuant to NHPA Section 106 and **no historic properties affected** pursuant to HRS §6E-8 within the APE **provided the following conditions are met:**

- There will be no ground disturbing activities within your final scope of work. If ground disturbing activity is anticipated, DHS must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation;
- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;
- Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;
- Submit a TMK map showing the full extent of the project area within the affected parcel/s;
- Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Summary of land use history, such as previous intensive cultivation, grubbing or grading;
- Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions regarding archaeological resources or concerns please contact MaryJane Naone at (808) 271-4940 or at MaryJane.Naone@hawaii.gov. For any history and cultural concerns please contact Kaahiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov. Please contact Jessica Puff at Jessica.L.Puff@hawaii.gov or (808) 692-8023 for any questions regarding architectural concerns or this letter.

Sincerely,

Alan S. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

cc: Myles Hironaka, County of Kauai, mhironaka@kauai.gov
Susan A. Lebo, SHPD Archaeological Branch Chief, Susan.A.Lebo@hawaii.gov

DAVID Y. IGE
GOVERNOR OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555

SUZANNE D. CASE
CHAIRPERSON
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DEPUTY DIRECTOR - WATER

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HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

November 20, 2015

IN REPLY REFER TO:
Log Nos. 2015.02939, 2015.03564
Doc. No. 1509JLP35
Architecture, Archaeology
History and Culture

Hakim Ouansafi, Executive Director
Department of Human Services
Hawaii Public Housing Authority
P.O. Box 17907
Honolulu, HI 96817

Dear Mr. Ouansafi:

SUBJECT: **Chapter 6E- and National Historic Preservation Act Section (NHPA) Section 106 Consultation – Department of Housing and Urban Development (HUD) – Repair and Rehabilitation Project Department of Human Services, Hawai‘i Public Housing Authority (HPHA)**
2625 Pu‘u Road, Kalaheo
Kalaheo Ahupua‘a, Kona District, Island of Kaua‘i
TMK: (4) 2-3-012:030

Thank you for your initial submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services, Hawaii Public Housing Authority (HPHA) consultation with the SHPD in accordance with 36 CFR 800.3 and Hawaii Revised Statutes (HRS), Chapter 6E. We received your supplemental submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience. HUD funding will be expended under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants and other grants.

The submittal indicates that the HPHA is requesting the State Historic Preservation Officer’s (SHPO) concurrence with a determination of “no effect” for the proposed HUD repair and rehabilitation improvement projects involving 43 existing public housing developments located throughout the State over the next five (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 on their behalf.

This letter addresses the Kalaheo Housing Project located at 2625 Pu‘u Road. The HPHA has identified the area of potential effects (APE) as the 1.09 acre area parcel owned by the State (HPHA) which is identified as TMK: (4) 2-3-012:030. In addition, DHS/HPHA have indicated at this stage of the planning process, they are unclear whether the subject 1.09-acre project area will require any ground disturbances.

Our records indicate that no archaeological inventory survey has been conducted within the subject parcel and that no historic properties have been identified. They also indicate that several archaeological studies (Bennett 1931; Kikuchi 1963; McMahon 1988; Pantaleo and Williams 1991; McMahon 1991; Perzinski 2001; Tulchin et al. 2005 and Tulchin et al. 2006) have been conducted within Kalaheo Ahupua‘a and a number of plantation period historic sites have been identified. Based on these studies, potential exists to encounter subsurface traditional Hawaiian and/or historic properties within the subject parcel.

The SHPD has reviewed the undertaking at 2625 Pu‘u Road, and the SHPO’s determination is **no adverse effect** pursuant to NHPA Section 106 and **no historic properties affected** pursuant to HRS §6E-8 within the APE **provided the following conditions are met:**

- There will be no ground disturbing activities within your final scope of work. If ground disturbing activity is anticipated, DHS must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation;

- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;
- Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;
- Submit a TMK map showing the full extent of the project area within the affected parcel(s);
- Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Summary of land use history, such as previous intensive cultivation, grubbing or grading; and
- Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to the SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions regarding archaeological resources or concerns please contact MaryJane Naone at (808) 271-4940 or at MaryJane.Naone@hawaii.gov. For any history and cultural concerns please contact Ka‘āhiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov. Please contact Jessica Puff at Jessica.L.Puff@hawaii.gov or (808) 692-8023 for any questions regarding architectural concerns or this letter.

Sincerely,

Alan A. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

cc: Myles Hironaka, County of Kauai, mhironaka@kauai.gov
Susan A. Lebo, SHPD-Archaeological Branch Chief, Susan.A.Lebo@hawaii.gov
MaryJane Naone, SHPD Kauai Archaeologist, MaryJane.Naone@hawaii.gov
Kaahiki Solis, SHPD Cultural Historian, Sheleigh.Solis@hawaii.gov

DAVID Y. IGE
GOVERNOR OF HAWAII

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
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KEKOA KALUHIWA
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STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555

November 30, 2015

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
P.O. Box 17907
Honolulu, HI 96817

LOG: 2015.02939, 2015.03560
DOC NO: 1509JLP31
Architecture, Archaeology
History and Culture

SUBJECT: **Chapter 6E-8 and National Historic Preservation Act Section (NHPA) Section 106 Consultation – Department of Housing and Urban Development (HUD) – Repair and Rehabilitation Project Department of Human Services, Hawai‘i Public Housing Authority (HPHA) Hui O Hanamaulu Rehabilitation Project – 4841 Laukona Street Hanamaulu Ahupua‘a, Puna District, Island of Kaua‘i TMK: (4) 3-8-012:030**

Thank you for your initial submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services, Hawaii Public Housing Authority (HPHA) consultation with SHPD in accordance with 36 CFR 800.3 and Hawaii Revised Statutes (HRS), Chapter 6E. We received your another submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience.

The submittal indicates that DHS/HPHA is requesting State Historic Preservation Officer’s (SHPO) concurrence with a determination of “no effect” for the proposed HUD repair and rehabilitation improvement projects. HUD funding will be expended under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants and other grants. The repair and rehabilitation project will involve 43 existing public housing projects located throughout the State of Hawaii over the next five (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 on their behalf. This letter addresses the rehabilitation of Hui O Hanamaulu Housing located at 4841 Laukona Street, Hanamaulu, Kaua‘i.

DHS/HPHA has identified one of the 43 project sites and its’ area of potential effect (APE) as the 3.92 acre area parcel owned by the State of Hawaii-Hawaii Housing Authority identified as TMK: (4) 2-3-012:030. In addition, DHS/HPHA has indicated at this stage of the planning process, they are unclear whether this project area identified as TMK: (4) 3-8-012:030, will require any ground disturbance.

Our records indicate that no archaeological inventory survey has been conducted within the subject parcel and that no historic properties have been identified. However, based on nearby studies potential exists to encounter subsurface traditional Hawaiian and/or historic properties within the subject parcel.

Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA Section 106), and Hawaii Revised Statutes §6E-8 we have reviewed the undertaking at 4841 Laukona Street, Hanamaulu, Kaua‘i. The SHPO’s determination, for the purpose of NHPA Section 106, is that the proposed undertaking will have **no adverse effect** and that, for the purposes of HRS §6E-8, **no historic properties affected**, within the area of potential effects (APE) for the above cited undertaking **provided the following conditions are met:**

- If ground disturbing activity is anticipated, DHS must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation;
- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;

- Information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;
- Submit a TMK map showing the full extent of the project area within the affected parcel/s;
- Description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Summary of land use history, such as previous intensive cultivation, grubbing or grading; and
- Copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions regarding archaeological resources or concerns please contact MaryJane Naone at (808) 271-4940 or at MaryJane.Naone@hawaii.gov. For any history and cultural concerns please contact Kaʻāhiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov. Please contact Jessica Puff at Jessica.L.Puff@hawaii.gov or (808) 692-8023 for any questions regarding architectural concerns or this letter.

Sincerely,

Alan A. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

cc: Myles Hironaka, County of Kauai, mhironaka@kauai.gov

DAVID Y. IGE
GOVERNOR OF HAWAII

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

KEKOA KALUHIWA
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JEFFREY T. PEARSON
DEPUTY DIRECTOR - WATER

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LAND
STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555

December 2, 2015

IN REPLY REFER TO:
LOG: 2015.02939, 2015.03562
DOC NO: 1509JLP33
Architecture, Archaeology
History and Culture

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
P.O. Box 17907
Honolulu, HI 96817

SUBJECT: **Chapter 6E-8 and National Historic Preservation Act Section (NHPA) Section 106 Consultation – Department of Housing and Urban Development (HUD) Repair and Rehabilitation Project Department of Human Services, Hawai‘i Public Housing Authority (HPHA) Kapaa Homes Rehabilitation Project – 4726 Malu Road Kapa‘a Ahupua‘a, Puna District, Island of Kaua‘i TMK: (4) 4-5-015:007**

Thank you for your initial submittal dated July 23, 2015 (15:CMS/118) initiating the U.S. Department of Housing and Urban Development (HUD) and the Department of Human Services (DHS), Hawaii Public Housing Authority (HPHA) consultation with SHPD in accordance with 36 CFR 800.3 and Hawaii Revised Statutes (HRS), Chapter 6E. We received your supplemental submittal on August 28, 2015; we apologize for the delayed review and thank you for your patience.

The submittals indicate that the HPHA is requesting the State Historic Preservation Officer’s (SHPO) concurrence with a determination of “no effect” for the proposed HUD repair and rehabilitation improvement projects involving 43 existing public housing developments located throughout the State over the next fivd5 (5) years. In addition, HUD has authorized HPHA as its delegated authority to conduct Section 106 consultation on their behalf.

This letter addresses Kapaa Homes, 4726 Malu Road. The HPHA has identified the area of potential effects (APE) as the 4.33 acre area parcel owned by the State (HPHA) which is identified as TMK: (4) 4-5-015:007. DHS/HPHA have indicated at this stage of the planning process, they are unclear whether the subject 4.33-acre project area will require any ground disturbances.

Our records indicate that no archaeological inventory survey has been conducted within the subject parcel and that no historic properties have been identified. However, based on nearby studies potential exists to encounter subsurface traditional Hawaiian and/or historic properties within the subject parcel.

The SHPD has reviewed the undertaking at 4726 Malu Road, and the SHPO’s determination is **no adverse effect** pursuant to NHPA Section 106 and **no historic properties affected** pursuant to HRS §6E-8 within the APE **provided the following conditions are met:**

- If ground disturbing activity is anticipated, DHS must consult with the SHPD to determine effect to historic subsurface properties and to identify appropriate required archaeological documentation and/or mitigation;
- Submit detailed plans, specifications and a detailed scope of work once the plans have been developed;
- Submit information (maps, photos, addresses) regarding locations where mature trees (larger than 6 inches in diameter) associated with buildings or structures that are 50 years of age or older are to be removed, will be submitted to SHPD for review, comment, and meaningful consultation;

- Submit a TMK map showing the full extent of the project area within the affected parcel(s);
- Submit description and photographs of current vegetation cover and condition of the project area, including structures, roads, wall or other features within the project area;
- Submit summary of land use history, such as previous intensive cultivation, grubbing or grading; and
- Submit copies or dates of previously approved permits, survey reports, and/or prior SHPD review letters that pertain to the property.

If DHS/HPHA and HUD concur with the conditions outlined above, please submit to SHPD a letter of concurrence. **If DHS and HUD disagree with these conditions, then consultation with this office shall be reopened.**

The DHS/HPHA and HUD are the offices of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions regarding archaeological resources or concerns please contact MaryJane Naone at (808) 271-4940 or at MaryJane.Naone@hawaii.gov. For any history and cultural concerns please contact Kaʻāhiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov. Please contact Jessica Puff at Jessica.L.Puff@hawaii.gov or (808) 692-8023 for any questions regarding architectural concerns or this letter.

Sincerely,

Alan S. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

cc: Myles Hironaka, County of Kauai (mhironaka@kauai.gov)

HHF PLANNERS
places for people

35TH Anniversary 1980-2015

November 6, 2015

Dr. Alan Downer, Deputy State Historic Preservation Officer
State Historic Preservation Division
Department of Land and Natural Resources
State of Hawai‘i
Kakuhihewa Building
601 Kamokila Boulevard, Suite 555
Kapolei, Hawaii 96707

Dear Dr. Downer:

Subject: Environmental Reviews for Federally-Subsidized Public Housing Projects Statewide
Section 106 Consultation – No Adverse Effect Determination
Additional Consultation with State Historic Preservation Division (SHPD)

Thank you for the 20 letters dated September 28, 2015 addressing several of the housing projects included in the State of Hawai‘i (State), Hawai‘i Public Housing Authority's (HPHA) proposed determination letter (dated August 20, 2015). Based upon our conference call with HPHA staff and Ms. Puff of your office held on October 28, 2015, we have provided additional information needed to address SHPD's comments allow completion of your review.

The table below responds to the 20 response letters received from SHPD, and housing projects are identified by the Log No. and Document No. It also identifies 12 housing projects that are of significant age, and were determined to be eligible for the National Register or these housing projects just had certain buildings that were eligible. The remaining eight housing projects identified were determined to not be eligible for the National Register. This determination was based upon an architectural inventory survey and two historic property evaluations conducted for these housing projects and included with HPHA's September 28, 2015 letter.

	Housing Project	SHPD LOG No. Document No.	Comments
1.	Kalihi Valley Homes	2015.02939 1509JLP27	Eligible only for 14 original unaltered buildings. Other buildings have been renovated are were not eligible.
2.	Palolo Valley Homes	2015.03557 1509JLP28	Eligible except for three buildings in project that have been renovated.
3.	Wahiawa Terrace	2015.03563 1509JLP34	Eligible
4.	Makua Ali‘i	2015.03565 1509JLP36	Eligible
5.	Kalanihuia (Eld)	2015.03568 1509JLP39	Eligible

	Housing Project	SHPD LOG No. Document No.	Comments
6.	Nanakuli Homes	2015.03571 1509JLP42	Eligible
7.	Puuwai Momi	2015.03572 1509JLP43	Not Eligible – Plans review for any subsurface work.
8.	Kuhio Park Terrace High-Rise	2015.03574 1509JLP54	Eligible
9.	Kuhio Homes	2015.03575 1509JLP45	Not Eligible – Plans review for any subsurface work.
10.	Punchbowl Homes	2015.03576 1509JLP46	Eligible
11.	Mayor Wright Homes	2015.03579 1509JLP49	Not Eligible - Plans review for any subsurface work.
12.	Kaahumanu Homes	2015.03581 1509JLP50	Not Eligible - Plans review for any subsurface work.
13.	Kuhio Park Terrace Low-Rise	2015.03583 1509JLP51	Eligible except for one housing building and three newer community buildings.
14.	Lanakila I	2015.03578 1509JLP48	Eligible for original 21 buildings remaining.
15.	Lanakila II	2015.03573 1509JLP44	Not Eligible (redeveloped in 2000) - Plans review for any subsurface work.
16.	Lanakila III (formerly V)	2015.03577 1509JLP47	Eligible for original 10 buildings remaining.
17.	Lanakila IIIA	2015.03580 1509JLP52	Not Eligible (redeveloped in 2011) - Plans review for any subsurface work.
18.	Lanakila IV	2015.03582 1509JLP53	Not Eligible (redeveloped in 2005) - Plans review for any subsurface work.
19.	Pomaikai	2015.03566 1509JLP37	Not Eligible - Plans review for any subsurface work.
20.	Kahekili Terrace (A & B)	2015.03561 1509JLP32	Eligible

It was discussed, that HPHA cannot submit plans and specifications for projects at this time because it is not known what type of specific repair and renovation work will be implemented for each housing project. This Environmental Review process is used to obtain federal funding which is also supplemented with available State funding from the Legislature. Therefore, specific projects would be initiated depending upon the priority needs for each housing project at the time along with the amount of funding available for HPHA.

Information is provided identifying the types of typical “in-kind” repair and renovation improvements that could occur for existing structures, facilities, site, and utilities under various activity categories. Repair and rehabilitation work will not include increasing the density of housing projects, or other types of new development, such as adding new residential buildings. If a particular repair or rehabilitation improvement to a housing project involves a significant deviation from the typical types of “in kind” improvements identified, HPHA will consult with SHPD in obtaining their review of the improvement proposed.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing utilities or facilities by more than 20 percent.
    - Resurface or repave parking lots and striping, and cracked concrete curbing.
    - Repair concrete walkways and steps, ramps and railings.
    - Trim tree branches, reseed lawns, and re-grade areas to mitigate erosion.
    - Repair, replace, or upgrade sections of water and sewer lines within the property that are deteriorated or not functioning properly.
    - Repair, replace, or install solar hot water panels and piping, and tank less gas-fired instantaneous backup, hot water heaters, and gas lines within property.
    - Repair or replace backflow preventers, fire hydrants, fire systems, other water appurtenances, sewer manholes and cleanouts, and onsite wastewater systems (e.g. lift station, septic tank and system).
    - Repair or replace storm drainage catch basins, drain inlets, and drain lines.
    - Repair or replace gang mailboxes, street signs, trash bins and enclosures, playground equipment, etc.
    - Repair or replace site lighting and light fixtures, electrical and communication cabinets.
    - Repair or replace fencing and gates.
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons.
    - Renovate units to become ADA accessible.
    - Repair or provide accessible ramps between parking lot and units.
3. Rehabilitation of buildings and improvements when the land use is not changed, and the building footprint is not increased in a floodplain or wetland.
    - Implement modernization improvements for building exterior (e.g. replacing doors, windows, walls, roofs, etc.) and interior (e.g. renovate bathrooms, kitchens, flooring and living areas, etc. with new cabinets, fixtures, accessories, electrical, and lighting) renovations.
4. Rehabilitation of multi-family residential buildings that would not: 1) change the density; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation.
    - Implement modernization improvements which could include entire building exterior (e.g. replacing doors, windows, walls, roofs, etc.) and interior (e.g. renovate bathrooms, kitchens, flooring and living areas, etc. with new cabinets, fixtures, accessories, electrical, and lighting) renovations.
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity; and 2) involve changes in land use.
    - Repair or replace retaining walls or site walls (e.g. rock walls).
    - Repair or renovate common area buildings and accessory structures.
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls).
    - Repair or re-roof buildings, gutter systems, flashing, and roof hatches.
    - Repair or rehabilitate cracks or damaged exterior walls, stairs, handrails, lanais, and ledges.
    - Repair or upgrade elevators for those projects with elevators.

7. Interior and exterior renovations and rehabilitation.
   - Repainting building exteriors and unit interiors.
   - Repair or replace windows, doors, ceilings, and walls.
   - Repair or replace interior light fixtures, electrical outlets, unit control panels, smoke detectors, wiring, fire extinguishers, and air conditioning for required units.
   - Repair or replace kitchen cabinets and flooring, appliances, sinks, domestic water piping and sanitary sewer piping.
   - Repair or replace bathroom showers, tubs, walls, accessories, toilets, plumbing fixtures and exhaust fans.
   - Replacing flooring or ceiling that may have hazardous materials (asbestos).
8. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

For those housing projects that are not National Register eligible, preliminary plans or information involving subsurface work planned would be submitted for SHPD review. For housing projects that are National Register eligible, HPHA proposes to submit preliminary design plans or other pertinent information (e.g. narrative scope of work) to SHPD for review and comments as individual repair and renovation projects are initiated and prior to starting construction.

We would greatly appreciate your review of this additional information and proposed coordination measures with SHPD. This should support concurrence with: 1) a "no historic properties affected" determination for those housing projects or buildings determined to be not National Register eligible; and 2) a "no adverse effect" for those housing projects or buildings determined to be National Register eligible. HPHA's August 20, 2015 letter also included proposed mitigative measures for those housing projects that are National Register eligible.

We would greatly appreciate your prompt written response since these ER documents are already being finalized.

Please contact me via email or phone if you have any questions. Thanks.

Sincerely,

Ronald A. Sato, AICP
Senior Associate
HHF Planners

cc: Jessica Puff, SHPD
Lisa Izumi, Project Engineer, HPHA

DAVID Y. IGE
GOVERNOR OF HAWAII

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DEPUTY DIRECTOR - WATER

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ENGINEERING
FORESTRY AND WILDLIFE
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KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

September 28, 2015

IN REPLY REFER TO:
LOG: 2015.03566
DOC: 1509JLP37
"more information requested"

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
1002 North School Street
PO Box 17907
Honolulu, HI 96817

RE: Section: Section 106 – Cultural Resources Management and Chapter 6E-8 Historic Preservation Review
Agency: Department of Housing and Urban Development (HUD)
Project Name: Pomaikai rehabilitation project
Location: 929 Ululani Street, Hilo, Hawaii
TMK: (3) 2-4-025:092

Dear Mr. Ouansafi:

On August 28, 2015, the State Historic Preservation Division (SHPD) received a submittal from the Hawaii State Department of Human Services on behalf of the Department of Housing and Urban Development for the rehabilitation of Pomaikai. Please send the following information so that we may complete our review:

- Plans and specifications of the proposed work / elevations / project cut sheets;
- A complete narrative scope of work. A scope of work lists and describes all work to be completed within the proposed undertaking;

Please note that the Section 106 review process cannot proceed until we are able to consider the information requested above. This letter does not clear the project. If you have any questions regarding architectural resources, please contact Jessica Puff, Architectural Historian, at (808) 692-8023 or by email at jessica.l.puff@hawaii.gov.

Mahalo,

Dr. Alan Downer
Deputy State Historic Preservation Officer

DAVID Y. IGE
GOVERNOR OF HAWAII

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DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555

September 28, 2015

IN REPLY REFER TO:
LOG: 2015.03563
DOC: 1509JLP34
"more information requested"

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
1002 North School Street
PO Box 17907
Honolulu, HI 96817

RE: Section: Section 106 – Cultural Resources Management and Chapter 6E-8 Historic Preservation Review
Agency: Department of Housing and Urban Development (HUD)
Project Name: Wahiawa Terrace rehabilitation project
Location: 337 Palm Street, Wahiawa, Oahu
TMK: (1) 7-1-001:034

Dear Mr. Ouansafi:

On August 28, 2015, the State Historic Preservation Division (SHPD) received a submittal from the Hawaii State Department of Human Services on behalf of the Department of Housing and Urban Development for the rehabilitation of Wahiawa Terrace. Please send the following information so that we may complete our review:

- Plans and specifications of the proposed work / elevations / project cut sheets;
- A complete narrative scope of work. A scope of work lists and describes all work to be completed within the proposed undertaking;

Please note that the Section 106 review process cannot proceed until we are able to consider the information requested above. This letter does not clear the project. If you have any questions regarding architectural resources, please contact Jessica Puff, Architectural Historian, at (808) 692-8023 or by email at jessica.l.puff@hawaii.gov.

Mahalo,

Dr. Alan Downer
Deputy State Historic Preservation Officer

DAVID Y. IGE
GOVERNOR OF HAWAII

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KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

September 28, 2015

IN REPLY REFER TO:
LOG: 2015.03575
DOC: 1509JLP45
"more information requested"

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
1002 North School Street
PO Box 17907
Honolulu, HI 96817

RE: Section: Section 106 – Cultural Resources Management and Chapter 6E-8 Historic Preservation Review
Agency: Department of Housing and Urban Development (HUD)
Project Name: Kuhio Homes rehabilitation project
Location: 1430 Ahonui Street and 1449 Ahonui Street, Honolulu, Oahu
TMK: (1) 1-3-039:003 and 006

Dear Mr. Ouansafi:

On August 28, 2015, the State Historic Preservation Division (SHPD) received a submittal from the Hawaii State Department of Human Services on behalf of the Department of Housing and Urban Development for the rehabilitation of Lanakili II. Please send the following information so that we may complete our review:

- Plans and specifications of the proposed work / elevations / project cut sheets;
- A complete narrative scope of work. A scope of work lists and describes all work to be completed within the proposed undertaking;
- Photographs of Kuhio Homes and the surrounding project area.

Please note that the Section 106 review process cannot proceed until we are able to consider the information requested above. This letter does not clear the project. If you have any questions regarding architectural resources, please contact Jessica Puff, Architectural Historian, at (808) 692-8023 or by email at jessica.l.puff@hawaii.gov.

Mahalo,

Dr. Alan Downer
Deputy State Historic Preservation Officer

DAVID Y. IGE
GOVERNOR OF HAWAII

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KAHOOLAWE ISLAND RESERVE COMMISSION
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STATE PARKS

September 28, 2015

IN REPLY REFER TO:
LOG: 2015.03572
DOC: 1509JLP43
"more information requested"

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
1002 North School Street
PO Box 17907
Honolulu, HI 96817

RE: Section: Section 106 – Cultural Resources Management and Chapter 6E-8 Historic Preservation Review
Agency: Department of Housing and Urban Development (HUD)
Project Name: Puuwai Momi rehabilitation project
Location: 99-132 Kohomua Street, Aiea, Oahu
TMK: (1) 9-9-003:056 and 064

Dear Mr. Ouansafi:

On August 28, 2015, the State Historic Preservation Division (SHPD) received a submittal from the Hawaii State Department of Human Services on behalf of the Department of Housing and Urban Development for the rehabilitation of Puuwai Momi. Please send the following information so that we may complete our review:

- Plans and specifications of the proposed work / elevations / project cut sheets;
- A complete narrative scope of work. A scope of work lists and describes all work to be completed within the proposed undertaking;

Please note that the Section 106 review process cannot proceed until we are able to consider the information requested above. This letter does not clear the project. If you have any questions regarding architectural resources, please contact Jessica Puff, Architectural Historian, at (808) 692-8023 or by email at jessica.l.puff@hawaii.gov.

Mahalo,

Dr. Alan Downer
Deputy State Historic Preservation Officer

DAVID Y. IGE
GOVERNOR OF HAWAII

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KAHOOLAWE ISLAND RESERVE COMMISSION
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STATE PARKS

September 28, 2015

IN REPLY REFER TO:
LOG: 2015.03583
DOC: 1509JLP51
"more information requested"

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
1002 North School Street
PO Box 17907
Honolulu, HI 96817

RE: Section: Section 106 – Cultural Resources Management and Chapter 6E-8 Historic Preservation Review
Agency: Department of Housing and Urban Development (HUD)
Project Name: Kuhio Park Terrace rehabilitation project
Location: 1474 Linapuni Street, Honolulu, Oahu
TMK: (1) 1-3-039:008

Dear Mr. Ouansafi:

On August 28, 2015, the State Historic Preservation Division (SHPD) received a submittal from the Hawaii State Department of Human Services on behalf of the Department of Housing and Urban Development for the rehabilitation of Kuhio Park Terrace. Please send the following information so that we may complete our review:

- Plans and specifications of the proposed work / elevations / project cut sheets;
- A complete narrative scope of work. A scope of work lists and describes all work to be completed within the proposed undertaking;

Please note that the Section 106 review process cannot proceed until we are able to consider the information requested above. This letter does not clear the project. If you have any questions regarding architectural resources, please contact Jessica Puff, Architectural Historian, at (808) 692-8023 or by email at jessica.l.puff@hawaii.gov.

Mahalo,

Dr. Alan Downer
Deputy State Historic Preservation Officer

DAVID Y. IGE
GOVERNOR OF HAWAII

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KAHOOLAWE ISLAND RESERVE COMMISSION
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STATE PARKS

September 28, 2015

IN REPLY REFER TO:
LOG: 2015.03557
DOC: 1509JLP28
"more information requested"

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
1002 North School Street
PO Box 17907
Honolulu, HI 96817

RE: Section: Section 106 – Cultural Resources Management and Chapter 6E-8 Historic Preservation Review
Agency: Department of Housing and Urban Development (HUD)
Project Name: Palolo Valley Homes
Location: 2107 Ahe Street, Honolulu, Oahu
TMK: (1) 3-4-007:007

Dear Mr. Ouansafi:

On August 28, 2015, the State Historic Preservation Division (SHPD) received a submittal from the Hawaii State Department of Human Services on behalf of the Department of Housing and Urban Development for the rehabilitation of Palolo Valley Homes. Please send the following information so that we may complete our review:

- Plans and specifications of the proposed work / elevations / project cut sheets;
- A complete narrative scope of work. A scope of work lists and describes all work to be completed within the proposed undertaking;

Please note that the Section 106 review process cannot proceed until we are able to consider the information requested above. This letter does not clear the project. If you have any questions regarding architectural resources, please contact Jessica Puff, Architectural Historian, at (808) 692-8023 or by email at jessica.l.puff@hawaii.gov. If you have any questions regarding archaeological resources, please contact Dr. Susan Lebo, Acting Archaeology Branch Chief and Oahu Lead Archaeologist at (808) 692-8019 or by email at Susan.A.Lebo@hawaii.gov.

Mahalo,

Dr. Alan Downer
Deputy State Historic Preservation Officer

DAVID Y. IGE
GOVERNOR OF HAWAII

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JEFFREY T. PEARSON
DEPUTY DIRECTOR - WATER

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September 28, 2015

IN REPLY REFER TO:
LOG: 2015.02939
DOC: 1509JLP27
"more information requested"

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
1002 North School Street
PO Box 17907
Honolulu, HI 96817

RE: Section: Section 106 – Cultural Resources Management and Chapter 6E-8 Historic Preservation Review
Agency: Department of Housing and Urban Development (HUD)
Project Name: Kalihi Valley Homes
Location: 2250 Kalena Drive, Honolulu, Oahu
TMK: (1) 1-3-022:001

Dear Mr. Ouansafi:

On August 28, 2015, the State Historic Preservation Division (SHPD) received a submittal from the Hawaii State Department of Human Services on behalf of the Department of Housing and Urban Development for the rehabilitation of Kalihi Valley Homes. Please send the following information so that we may complete our review:

- Plans and specifications of the proposed work / elevations / project cut sheets;
- A complete narrative scope of work. A scope of work lists and describes all work to be completed within the proposed undertaking;

Please note that the Section 106 review process cannot proceed until we are able to consider the information requested above. This letter does not clear the project. If you have any questions regarding architectural resources, please contact Jessica Puff, Architectural Historian, at (808) 692-8023 or by email at jessica.l.puff@hawaii.gov. If you have any questions regarding archaeological resources, please contact Dr. Susan Lebo, Acting Archaeology Branch Chief and Oahu Lead Archaeologist at (808) 692-8019 or by email at Susan.A.Lebo@hawaii.gov.

Mahalo,

Dr. Alan Downer
Deputy State Historic Preservation Officer

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September 28, 2015

IN REPLY REFER TO:
LOG: 2015.03580
DOC: 1509JLP52
"more information requested"

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
1002 North School Street
PO Box 17907
Honolulu, HI 96817

RE: Section: Section 106 – Cultural Resources Management and Chapter 6E-8 Historic Preservation Review
Agency: Department of Housing and Urban Development (HUD)
Project Name: Lanakila IIIA rehabilitation project
Location: 600 Waioa Street, Hilo, Hawaii
TMK: (3) 2-4-028:007

Dear Mr. Ouansafi:

On August 28, 2015, the State Historic Preservation Division (SHPD) received a submittal from the Hawaii State Department of Human Services on behalf of the Department of Housing and Urban Development for the rehabilitation of Lanakila IIIA. Please send the following information so that we may complete our review:

- Plans and specifications of the proposed work / elevations / project cut sheets;
- A complete narrative scope of work. A scope of work lists and describes all work to be completed within the proposed undertaking;

Please note that the Section 106 review process cannot proceed until we are able to consider the information requested above. This letter does not clear the project. If you have any questions regarding architectural resources, please contact Jessica Puff, Architectural Historian, at (808) 692-8023 or by email at jessica.l.puff@hawaii.gov.

Mahalo,

Dr. Alan Downer
Deputy State Historic Preservation Officer

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September 28, 2015

IN REPLY REFER TO:
LOG: 2015.03568
DOC: 1509JLP39
"more information requested"

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
1002 North School Street
PO Box 17907
Honolulu, HI 96817

RE: Section: Section 106 – Cultural Resources Management and Chapter 6E-8 Historic Preservation Review
Agency: Department of Housing and Urban Development (HUD)
Project Name: Kalanihuia rehabilitation project
Location: 1220 Aala Street, Honolulu, Oahu
TMK: (1) 1-7-026:006

Dear Mr. Ouansafi:

On August 28, 2015, the State Historic Preservation Division (SHPD) received a submittal from the Hawaii State Department of Human Services on behalf of the Department of Housing and Urban Development for the rehabilitation of Kalanihuia. Please send the following information so that we may complete our review:

- Plans and specifications of the proposed work / elevations / project cut sheets;
- A complete narrative scope of work. A scope of work lists and describes all work to be completed within the proposed undertaking;

Please note that the Section 106 review process cannot proceed until we are able to consider the information requested above. This letter does not clear the project. If you have any questions regarding architectural resources, please contact Jessica Puff, Architectural Historian, at (808) 692-8023 or by email at jessica.l.puff@hawaii.gov.

Mahalo,

Dr. Alan Downer
Deputy State Historic Preservation Officer

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September 28, 2015

IN REPLY REFER TO:
LOG: 2015.03571
DOC: 1509JLP42
"more information requested"

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
1002 North School Street
PO Box 17907
Honolulu, HI 96817

RE: Section: Section 106 – Cultural Resources Management and Chapter 6E-8 Historic Preservation Review
Agency: Department of Housing and Urban Development (HUD)
Project Name: Nanakuli Homes rehabilitation project
Location: 87-1608 Farrington Highway, Waianae, Oahu
TMK: (1) 8-7-034:004

Dear Mr. Ouansafi:

On August 28, 2015, the State Historic Preservation Division (SHPD) received a submittal from the Hawaii State Department of Human Services on behalf of the Department of Housing and Urban Development for the rehabilitation of Nanakuli Homes. Please send the following information so that we may complete our review:

- Plans and specifications of the proposed work / elevations / project cut sheets;
- A complete narrative scope of work. A scope of work lists and describes all work to be completed within the proposed undertaking;

Please note that the Section 106 review process cannot proceed until we are able to consider the information requested above. This letter does not clear the project. If you have any questions regarding architectural resources, please contact Jessica Puff, Architectural Historian, at (808) 692-8023 or by email at jessica.l.puff@hawaii.gov.

Mahalo,

Dr. Alan Downer
Deputy State Historic Preservation Officer

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September 28, 2015

IN REPLY REFER TO:
LOG: 2015.03574
DOC: 1509JLP54
"more information requested"

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
1002 North School Street
PO Box 17907
Honolulu, HI 96817

RE: Section: Section 106 – Cultural Resources Management and Chapter 6E-8 Historic Preservation Review
Agency: Department of Housing and Urban Development (HUD)
Project Name: Kuhio Park Terrace High-Rise rehabilitation project
Location: 1485, 1531, and 1545 Linapuni Street, Honolulu, Oahu
TMK: (1) 1-3-039:007; 009; and 010

Dear Mr. Ouansafi:

On August 28, 2015, the State Historic Preservation Division (SHPD) received a submittal from the Hawaii State Department of Human Services on behalf of the Department of Housing and Urban Development for the rehabilitation of Kuhio Park Terrace High-Rise. Please send the following information so that we may complete our review:

- Plans and specifications of the proposed work / elevations / project cut sheets;
- A complete narrative scope of work. A scope of work lists and describes all work to be completed within the proposed undertaking;

Please note that the Section 106 review process cannot proceed until we are able to consider the information requested above. This letter does not clear the project. If you have any questions regarding architectural resources, please contact Jessica Puff, Architectural Historian, at (808) 692-8023 or by email at jessica.l.puff@hawaii.gov.

Mahalo,

Dr. Alan Downer
Deputy State Historic Preservation Officer

DAVID Y. IGE
GOVERNOR OF HAWAII

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KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555

September 28, 2015

IN REPLY REFER TO:
LOG: 2015.03581
DOC: 1509JLP50
"more information requested"

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
1002 North School Street
PO Box 17907
Honolulu, HI 96817

RE: Section: Section 106 – Cultural Resources Management and Chapter 6E-8 Historic Preservation Review
Agency: Department of Housing and Urban Development (HUD)
Project Name: Kaahumanu Homes rehabilitation project
Location: 760 McNeill Street, Honolulu, Oahu
TMK: (1) 1-5-024:001

Dear Mr. Ouansafi:

On August 28, 2015, the State Historic Preservation Division (SHPD) received a submittal from the Hawaii State Department of Human Services on behalf of the Department of Housing and Urban Development for the rehabilitation of Kaahumanu Homes. Please send the following information so that we may complete our review:

- Plans and specifications of the proposed work / elevations / project cut sheets;
- A complete narrative scope of work. A scope of work lists and describes all work to be completed within the proposed undertaking;

Please note that the Section 106 review process cannot proceed until we are able to consider the information requested above. This letter does not clear the project. If you have any questions regarding architectural resources, please contact Jessica Puff, Architectural Historian, at (808) 692-8023 or by email at jessica.l.puff@hawaii.gov.

Mahalo,

Dr. Alan Downer
Deputy State Historic Preservation Officer

DAVID Y. IGE
GOVERNOR OF HAWAII

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DEPUTY DIRECTOR - WATER

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September 28, 2015

IN REPLY REFER TO:
LOG: 2015.03579
DOC: 1509JLP49
"more information requested"

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
1002 North School Street
PO Box 17907
Honolulu, HI 96817

RE: Section: Section 106 – Cultural Resources Management and Chapter 6E-8 Historic Preservation Review
Agency: Department of Housing and Urban Development (HUD)
Project Name: Mayor Wright Homes rehabilitation project
Location: 521 North Kukui Street, Honolulu, Oahu
TMK: (1) 1-7-029:003

Dear Mr. Ouansafi:

On August 28, 2015, the State Historic Preservation Division (SHPD) received a submittal from the Hawaii State Department of Human Services on behalf of the Department of Housing and Urban Development for the rehabilitation of Mayor Wright Homes. Please send the following information so that we may complete our review:

- Plans and specifications of the proposed work / elevations / project cut sheets;
- A complete narrative scope of work. A scope of work lists and describes all work to be completed within the proposed undertaking;

Please note that the Section 106 review process cannot proceed until we are able to consider the information requested above. This letter does not clear the project. If you have any questions regarding architectural resources, please contact Jessica Puff, Architectural Historian, at (808) 692-8023 or by email at jessica.l.puff@hawaii.gov.

Mahalo,

Dr. Alan Downer
Deputy State Historic Preservation Officer

DAVID Y. IGE
GOVERNOR OF HAWAII

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DEPUTY DIRECTOR - WATER

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September 28, 2015

IN REPLY REFER TO:
LOG: 2015.03561
DOC: 1509JLP32
"more information requested"

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
1002 North School Street
PO Box 17907
Honolulu, HI 96817

RE: Section: Section 106 – Cultural Resources Management and Chapter 6E-8 Historic Preservation Review
Agency: Department of Housing and Urban Development (HUD)
Project Name: Kahekili Terrace rehabilitation project
Location: 2015 Holowai Place, Wailuku, Maui
TMK: (2) 3-4-033:023

Dear Mr. Ouansafi:

On August 28, 2015, the State Historic Preservation Division (SHPD) received a submittal from the Hawaii State Department of Human Services on behalf of the Department of Housing and Urban Development for the rehabilitation of Kahekili Terrace. Please send the following information so that we may complete our review:

- Plans and specifications of the proposed work / elevations / project cut sheets;
- A complete narrative scope of work. A scope of work lists and describes all work to be completed within the proposed undertaking;

Please note that the Section 106 review process cannot proceed until we are able to consider the information requested above. This letter does not clear the project. If you have any questions regarding architectural resources, please contact Jessica Puff, Architectural Historian, at (808) 692-8023 or by email at jessica.l.puff@hawaii.gov.

Mahalo,

Dr. Alan Downer
Deputy State Historic Preservation Officer

DAVID Y. IGE
GOVERNOR OF HAWAII

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DEPUTY DIRECTOR - WATER

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KAHOOLAWE ISLAND RESERVE COMMISSION
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September 28, 2015

IN REPLY REFER TO:
LOG: 2015.03577
DOC: 1509JLP47
"more information requested"

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
1002 North School Street
PO Box 17907
Honolulu, HI 96817

RE: Section: Section 106 – Cultural Resources Management and Chapter 6E-8 Historic Preservation Review
Agency: Department of Housing and Urban Development (HUD)
Project Name: Lanakila V (Lanakila III) rehabilitation project
Location: 600 Wailoa Street, Hilo, Hawaii
TMK: (3) 2-4-028:007

Dear Mr. Ouansafi:

On August 28, 2015, the State Historic Preservation Division (SHPD) received a submittal from the Hawaii State Department of Human Services on behalf of the Department of Housing and Urban Development for the rehabilitation of Lanakila V. Please send the following information so that we may complete our review:

- Plans and specifications of the proposed work / elevations / project cut sheets;
- A complete narrative scope of work. A scope of work lists and describes all work to be completed within the proposed undertaking;

Please note that the Section 106 review process cannot proceed until we are able to consider the information requested above. This letter does not clear the project. If you have any questions regarding architectural resources, please contact Jessica Puff, Architectural Historian, at (808) 692-8023 or by email at jessica.l.puff@hawaii.gov.

Mahalo,

Dr. Alan Downer
Deputy State Historic Preservation Officer

DAVID Y. IGE
GOVERNOR OF HAWAII

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601 KAMOKILA BLVD, STE 555

September 28, 2015

IN REPLY REFER TO:
LOG: 2015.03578
DOC: 1509JLP48
"more information requested"

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
1002 North School Street
PO Box 17907
Honolulu, HI 96817

RE: Section: Section 106 – Cultural Resources Management and Chapter 6E-8 Historic Preservation Review
Agency: Department of Housing and Urban Development (HUD)
Project Name: Lanakila I rehabilitation project
Location: 600 Wailoa Street, Hilo, Hawaii
TMK: (3) 2-4-028:007

Dear Mr. Ouansafi:

On August 28, 2015, the State Historic Preservation Division (SHPD) received a submittal from the Hawaii State Department of Human Services on behalf of the Department of Housing and Urban Development for the rehabilitation of Lanakila I. Please send the following information so that we may complete our review:

- Plans and specifications of the proposed work / elevations / project cut sheets;
- A complete narrative scope of work. A scope of work lists and describes all work to be completed within the proposed undertaking;

Please note that the Section 106 review process cannot proceed until we are able to consider the information requested above. This letter does not clear the project. If you have any questions regarding architectural resources, please contact Jessica Puff, Architectural Historian, at (808) 692-8023 or by email at jessica.l.puff@hawaii.gov.

Mahalo,

Dr. Alan Downer
Deputy State Historic Preservation Officer

DAVID Y. IGE
GOVERNOR OF HAWAII

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DEPUTY DIRECTOR - WATER

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STATE HISTORIC PRESERVATION DIVISION
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601 KAMOKILA BLVD, STE 555

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IN REPLY REFER TO:
LOG: 2015.03573
DOC: 1509JLP44
"more information requested"

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
1002 North School Street
PO Box 17907
Honolulu, HI 96817

RE: Section: Section 106 – Cultural Resources Management and Chapter 6E-8 Historic Preservation Review
Agency: Department of Housing and Urban Development (HUD)
Project Name: Lanakili II rehabilitation project
Location: 600 Wailoa Street, Hilo, Hawaii
TMK: (3) 2-4-028:007

Dear Mr. Ouansafi:

On August 28, 2015, the State Historic Preservation Division (SHPD) received a submittal from the Hawaii State Department of Human Services on behalf of the Department of Housing and Urban Development for the rehabilitation of Lanakili II. Please send the following information so that we may complete our review:

- Plans and specifications of the proposed work / elevations / project cut sheets;
- A complete narrative scope of work. A scope of work lists and describes all work to be completed within the proposed undertaking;
- Photographs of Lanakili II and the surrounding project area.

Please note that the Section 106 review process cannot proceed until we are able to consider the information requested above. This letter does not clear the project. If you have any questions regarding architectural resources, please contact Jessica Puff, Architectural Historian, at (808) 692-8023 or by email at jessica.l.puff@hawaii.gov.

Mahalo,

Dr. Alan Downer
Deputy State Historic Preservation Officer

DAVID Y. IGE
GOVERNOR OF HAWAII

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HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555

September 28, 2015

IN REPLY REFER TO:
LOG: 2015.03582
DOC: 1509JLP53
"more information requested"

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
1002 North School Street
PO Box 17907
Honolulu, HI 96817

RE: Section: Section 106 – Cultural Resources Management and Chapter 6E-8 Historic Preservation Review
Agency: Department of Housing and Urban Development (HUD)
Project Name: Lanakila IV rehabilitation project
Location: 600 Waioa Street, Hilo, Hawaii
TMK: (3) 2-4-028:007

Dear Mr. Ouansafi:

On August 28, 2015, the State Historic Preservation Division (SHPD) received a submittal from the Hawaii State Department of Human Services on behalf of the Department of Housing and Urban Development for the rehabilitation of Lanakila IV. Please send the following information so that we may complete our review:

- Plans and specifications of the proposed work / elevations / project cut sheets;
- A complete narrative scope of work. A scope of work lists and describes all work to be completed within the proposed undertaking;

Please note that the Section 106 review process cannot proceed until we are able to consider the information requested above. This letter does not clear the project. If you have any questions regarding architectural resources, please contact Jessica Puff, Architectural Historian, at (808) 692-8023 or by email at jessica.l.puff@hawaii.gov.

Mahalo,

Dr. Alan Downer
Deputy State Historic Preservation Officer

DAVID Y. IGE
GOVERNOR OF HAWAII

'15 OCT -7

RECEIVED
HAWAII PUBLIC
HOUSING AUTHORITY

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

KEKOA KALUHIWA
FIRST DEPUTY

JEFFREY T. PEARSON
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

September 28, 2015

IN REPLY REFER TO:
LOG: 2015.03565
DOC: 1509JLP36
"more information requested"

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
1002 North School Street
PO Box 17907
Honolulu, HI 96817

RE: Section: Section 106 – Cultural Resources Management and Chapter 6E-8 Historic Preservation Review
Agency: Department of Housing and Urban Development (HUD)
Project Name: Makua Alii rehabilitation project
Location: 1541 Kalakaua Avenue, Honolulu, Oahu
TMK: (1) 2-3-019:004

Dear Mr. Ouansafi:

On August 28, 2015, the State Historic Preservation Division (SHPD) received a submittal from the Hawaii State Department of Human Services on behalf of the Department of Housing and Urban Development for the rehabilitation of Makua Alii. Please send the following information so that we may complete our review:

- Plans and specifications of the proposed work / elevations / project cut sheets;
- A complete narrative scope of work. A scope of work lists and describes all work to be completed within the proposed undertaking;

Please note that the Section 106 review process cannot proceed until we are able to consider the information requested above. This letter does not clear the project. If you have any questions regarding architectural resources, please contact Jessica Puff, Architectural Historian, at (808) 692-8023 or by email at jessica.l.puff@hawaii.gov.

Mahalo,

Dr. Alan Downer
Deputy State Historic Preservation Officer

DAVID Y. IGE
GOVERNOR OF HAWAII

'15 OCT -7

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HAWAII PUBLIC
HOUSING AUTH

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
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ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

September 28, 2015

IN REPLY REFER TO:
LOG: 2015.03576
DOC: 1509JLP46
"more information requested"

Hakim Ouansafi
Executive Director
Department of Human Services
Hawaii Public Housing Authority
1002 North School Street
PO Box 17907
Honolulu, HI 96817

RE: Section: Section 106 – Cultural Resources Management and Chapter 6E-8 Historic Preservation Review
Agency: Department of Housing and Urban Development (HUD)
Project Name: Punchbowl Homes rehabilitation project
Location: 730 Captain Cook Avenue, Honolulu, Oahu
TMK: (1) 2-1-039:012

Dear Mr. Ouansafi:

On August 28, 2015, the State Historic Preservation Division (SHPD) received a submittal from the Hawaii State Department of Human Services on behalf of the Department of Housing and Urban Development for the rehabilitation of Punchbowl Homes. Please send the following information so that we may complete our review:

- Plans and specifications of the proposed work / elevations / project cut sheets;
- A complete narrative scope of work. A scope of work lists and describes all work to be completed within the proposed undertaking;

Please note that the Section 106 review process cannot proceed until we are able to consider the information requested above. This letter does not clear the project. If you have any questions regarding architectural resources, please contact Jessica Puff, Architectural Historian, at (808) 692-8023 or by email at jessica.l.puff@hawaii.gov.

Mahalo,

Dr. Alan Downer
Deputy State Historic Preservation Officer

Ronald Sato

From: Ronald Sato
Sent: Thursday, September 24, 2015 2:40 PM
To: Jessica Puff (jessica.l.puff@hawaii.gov); 'anna.e.broverman@hawaii.gov'
Cc: Lisa Izumi (lisa.m.izumi@hawaii.gov); Scott Ezer (sezer@hhf.com)
Subject: HPHA PNA Projects - Section 106 No Adverse Effect Concurrence

Follow Up Flag: Follow up
Flag Status: Completed

This message contains attachments delivered via ShareFile.

- 00 HPHA SHPD NAE PKG COMPLETE 8-20-15.pdf (23.2 MB)

Download the attachments by clicking here.

Hello Jessica and Anna,

A letter with project information was submitted by the State HPHA on August 20, 2015 for various housing projects statewide as part of Section 106 consultation seeking SHPO/SHPD's comments or concurrence with a no adverse effect determination subject to proposed mitigative measures. We just wanted to follow-up with SHPD to see if your agency will have any comments or will be sending a concurrence letter to HPHA. The 30-day comment period has recently ended.

The HPHA is conducting environmental reviews for their existing State housing projects as part of HUD funding requirements. The funding would be used for repair and rehabilitation improvements to the existing housing projects. This letter addressed 28 housing projects.

I've included a link to our ShareFile website where you can download the pdf file since it is fairly large.

We are completing the environmental review documentations for HPHA for these housing project due to their deadline in September. We understand the numerous requests your department has, but just wanted to follow-up with you regarding this.

Please let me know if you have any questions. Thanks.

Ronald A. Sato, AICP
Senior Associate
rsato@hhf.com

35th Anniversary 1980-2015
HHF PLANNERS
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813

808.457.3172 Direct
808.545.2055 General Office
www.hhf.com

DAVID Y. IGE
GOVERNOR

HAKIM OUANSAFI
EXECUTIVE DIRECTOR

BARBARA E. ARASHIRO
EXECUTIVE ASSISTANT

STATE OF HAWAII
DEPARTMENT OF HUMAN SERVICES
HAWAII PUBLIC HOUSING AUTHORITY
1002 NORTH SCHOOL STREET
POST OFFICE BOX 17907
Honolulu, Hawaii 96817

IN REPLY PLEASE REFER TO:

15:CMS/122

August 20, 2015

The Honorable Suzanne Case, Director
Department of Land and Natural Resources
State of Hawai'i
Kalanimoku Building
1151 Punchbowl Street
Honolulu, Hawaii 96813

Dear Ms. Case:

Subject: Environmental Reviews for Federally-Subsidized Public Housing Projects Statewide Section 106 Consultation – No Adverse Effect Determination

The State of Hawai'i, Hawai'i Public Housing Authority (HPHA) is proposing to conduct repair and rehabilitation improvement projects on all of its 70 existing public housing projects located throughout the State over the next five (5) years (2015-2020). Of the 70 projects, the State HPHA is subsequently conducting environmental reviews for 28 of these existing public housing projects in conformance with U.S. Department of Housing and Urban Development (HUD) requirements specified under 24 CFR Part 58 because Federal funds may be used.

One of the environmental review requirements is to conduct Section 106 consultation with the State Historic Preservation Officer under the National Historic Preservation Act, as amended (NHPA) (16 U.S.C. 470(f)). Repair and rehabilitation improvements using Federal funds is considered an "undertaking" under these regulations, and the State HPHA is serving as the Agency Official initiating this Section 106 consultation process for this project. A "no adverse effect" on historic properties determination is proposed for 10 of these projects, and a "no historic properties affected" determination is proposed for the remaining 18 projects. These projects are listed under Exhibit A. Further information justifying this determination is provided with this letter.

Description of Undertaking

Funding for these housing projects is being expended utilizing Federal funds under the Economic Development Initiative (EDI) Special Project Grant, Capital Fund Grants, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a "major construction activity" and would involve one or a combination of the following actions identified below.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent.
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons.
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland.
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation.
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls).
7. Interior and exterior renovations and rehabilitation.
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site.
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tankless gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

Area of Potential Effect

A listing of the 28 housing projects included under this Section 106 consultation is provided in Exhibit A along with information on existing land use. This list also includes the year the housing projects were completed and initially occupied, along with dates for rehabilitated projects. The "area of potential effect" (APE) on historic properties was established based upon the improvements that would occur which consist of repair and renovation work to existing buildings, units, and common area facilities. Utility repair or rehabilitation work would occur within the project site. The APE was therefore determined to consist of the property boundary associated with each housing project. Exhibit B includes a summary of each housing project, a location map, and an APE boundary map.

There are no known historic properties associated with native Hawaiian culture or archaeological sites present within the properties of these housing projects. This is based upon: 1) similar HUD required environmental reviews conducted by HPHA in 2010, which included site visits; 2) information on the State's listing of historic sites on the State and National Registers of Historic Places; and 3) HPHA's experience with prior repair and renovation work occurring at these housing project sites. All of these properties have generally been altered as part of initial construction establishing these housing projects.

Identification of Historic Properties

An architectural inventory survey along with two previous historic property evaluations (2010 and 2006) evaluated the 28 housing projects to determine if they meet the National Register eligibility criteria. A total of 10 housing projects were identified as meeting the National Register eligibility criteria due to: 1) their role in the social history of Hawaii and housing reform movement; and 2) having architecture reflective of the type and style during that period. The remaining 18 housing projects were determined not to meet National Register eligibility criteria because they have lost their architectural integrity. A summary of studies conducted are discussed.

1. Fung Associates, Inc. (2015). An architectural inventory survey was conducted for 17 housing projects that are either over 50 years old or close to it (occupied in 1969). This evaluation determined that the buildings within eight (8) of the housing projects do meet the National Register eligibility criteria. Those projects determined not to be eligible for listing were due to prior renovations changing several architectural features that have compromised the historic character of the project's initial design. A listing of these housing projects evaluated is provided, and a copy of their report is included as Exhibit C.

	Island	Project Name	Year Built	National Register Eligibility
1.	Oahu	Kalihi Valley Homes	1953	Eligible (Only original unaltered buildings)
2.	Oahu	Palolo Valley Homes	1957	Eligible (Except for three buildings)
3.	Maui	David Malo Circle	1966	Not Eligible
4.	Kauai	Eleele Homes	1966	Not Eligible
5.	Kauai	Hui O'Hanamaulu	1966	Not Eligible
6.	Maui	Kahekili Terrace (A & B)	1966	Eligible
7.	Kauai	Kapaa	1966	Not Eligible
8.	Oahu	Wahiawa Terrace	1966	Eligible
9.	Kauai	Kalaheo Homes	1967	Not Eligible
10.	Oahu	Makua Alii (Eld)	1967	Eligible
11.	Hawaii	Pomaikai	1967	Not Eligible
12.	Hawaii	Punahele Homes	1967	Eligible
13.	Oahu	Kalanihuia (Eld)	1969	Eligible
14.	Oahu	Koolau Village	1969	Not Eligible
15.	Oahu	Maili I	1969	Not Eligible

16.	Oahu	Nanakuli Homes	1969	Eligible
17.	Oahu	Puuwai Momi	1969	Not Eligible

2. Mason Architects, Inc. (2015). An historic property evaluation was conducted for the Kuhio Park Terrace (KPT) High-Rise and KPT Low-Rise housing projects. The KPT High-Rise project was previously evaluated in 2006 and determined not to meet National Register eligibility criteria at that time. It was subsequently evaluated again in 2015, and still did not meet eligibility criteria. The KPT Low-Rise did meet eligibility criteria. A copy of this report is included in Exhibit C.

3. Mason Architects, Inc. (2010). A historic property evaluation was conducted for five (5) housing projects in June 2010. Three (3) of those housing projects did meet the National Register eligibility criteria, and one of those eligible projects (Kalihi Valley Homes) was also re-evaluated by Fung Associates, Inc.'s current survey. This evaluation report was submitted by HPHA to the State Historic Preservation Division (SHPD) for review under Section 106 with a proposed "no adverse effect" determination, and no objection to this determination was received from SHPD (Exhibit C).

	Island	**Project Name**	**Year Built**	**National Register Eligibility**
1.	Hawaii	Lanakila II	1951	Not Eligible
2.	O'ahu	Kalihi Valley Homes	1953	Eligible (Only 14 original unaltered buildings)
3.	O'ahu	Kuhio Homes	1953	Not Eligible
4.	O'ahu	Punchbowl Homes	1960	Eligible
5.	Hawaii	Lanakila V (Currently renamed back to Lanakila III)	1962	Eligible (10 original remaining buildings)

4. Mason Architects, Inc. (2006). A historic property evaluation was conducted for six (6) housing projects in April 2006 (Exhibit C). Two (2) of those housing projects did meet the National Register eligibility criteria which included Palolo Valley Homes, which was also re-evaluated by Fung Associates, Inc. The KPT (High-Rise and Low Rise) project was not eligible in 2006, but was re-evaluated by Mason Architects, Inc.'s current update.

	Island	Project Name	Year Built	National Register Eligibility
1.	Hawaii	Lanakila I (Now divided into Lanakila I, IIIA and IV)	1951	Eligible (21 original remaining buildings)
2.	O'ahu	Mayor Wright Homes	1952	Not Eligible
3.	O'ahu	Palolo Valley Homes	1957	Eligible
4.	O'ahu	Kaahumanu Homes	1958	Not Eligible
5.	Hawaii	Lanakila III (Renamed to Lanakila V)	1962	Not Eligible
6.	O'ahu	Kuhio Park Terrace	1965	Not Eligible (<50 years old at the time)

Site inspections conducted of all 28 housing projects did not identify any existing or potential surface archaeological sites (e.g., heiau) on the property. These project sites have undergone extensive ground-altering activities since they were initially developed and constructed with buildings, driveways, parking lots, sidewalks, and other related improvements. Interviews with the site manager and/or maintenance supervisor of these housing projects also indicated that no known historic sites or features were present on these properties.

Consultation with Native Hawaiian Organizations

Letters with supporting documentation on the project and preliminary assessment of effects were distributed to several native Hawaiian organizations on June 26, 2015 for review and comments as part of the Section 106 consultation process. The following is a list of those organizations consulted, and comments received from those organizations are identified with a in bold.

- **Office of Hawaiian Affairs, Administrator**
- City Department of Planning and Permitting (DPP), Director
- County of Kauai, Department of Planning, Director
- County of Maui, Planning Department, Director
- **County of Hawaii, Planning Department, Director**
- Historic Hawai'i Foundation, Executive Director
- Hui Mālama I Nā Kūpuna 'O Hawai'i Nei
- Association of Hawaiian Civic Clubs, President
- Association of Hawaiian Civic Clubs, Hawaii Council, President
- Association of Hawaiian Civic Clubs, Kauai Council, President
- Association of Hawaiian Civic Clubs, Maui Council, President
- Association of Hawaiian Civic Clubs, O'ahu Council, President

Two comment letters were received, and these consultation efforts were considered in evaluating the project's effect on historic properties. A summary of comments received along with discussion addressing them is provided, and copies of letters received are included in Exhibit D.

1. The County of Hawaii, Planning Department concurs with the "no adverse effect" on historic properties preliminary determination as long as proposed mitigative measures are followed. The Hawaii County, Cultural Resources Commission would appreciate the opportunity to review and comment on any Historic American Building Survey, or HABS, document prepared for a housing project.

   Discussion:Concurrence with the no adverse effect determination is noted, and HPHA will implement the mitigative measures identified. HPHA will allow the County's Cultural Resources Commission to review and comment on any HABS document prepared for the Hawaii County housing projects identified prior to the document being finalized.

2. The State Office of Hawaiian Affairs responded that it had no comments at this time.

   Discussion:The agency's "no comment" response is noted.

Proposed Project Effect and Determination

The State HPHA has determined that proposed repair and rehabilitation improvements implemented for the 18 housing projects that do not meet National Register eligibility criteria as identified in Exhibit A has a "no historic properties affected" determination. The State HPHA has determined that proposed repair and rehabilitation improvements implemented for the 10 housing projects determined to meet National Register eligibility criteria as identified in Exhibit A would have "no adverse effect" subject to certain mitigative measures. These determinations are based upon the current architectural inventory survey, prior historic property evaluations, consultations with native Hawaiian organizations, and evaluation of repair and rehabilitation improvements on existing housing projects.

Mitigative measures are proposed to be implemented for the 10 housing projects to mitigate effects to buildings consisting of the following:

1. When considering rehabilitation improvements or building modifications: 1) the buildings' character defining features shall be retained to the extent practicable; and 2) the renovations shall adhere to the Secretary of the Interior's Standards for Rehabilitation.
2. If rehabilitation improvements or building modifications cannot retain the character defining features or adhere to the Secretary of the Interior's Standards for Rehabilitation, a Historic American Buildings Survey (HABS) will be conducted subject to the following conditions:
   a. Level II HABS documentation will be conducted in accordance with the National Park Service standards; and
   b. A representative sample of multiple building types would be selected for HABS documentation due to multiple types of buildings constructed for housing projects.

Other measures are proposed to be implemented by HPHA for all 28 housing projects to mitigate potential effects to the housing site. These measures consist of the following:

1. In the event subsurface human remains or other indications of human activity older than 50 years are encountered during construction activities, all work would stop immediately and the SHPD notified. The treatment of any human remains encountered would be determined, and conducted in accordance with applicable requirements of Chapter 6E, Hawaii Revised Statutes and Chapter 13-300, Hawaii Administrative Rules.
2. After completing this Section 106 review process, and prior to the next environmental review process due in five years, HPHA would enter into a Programmatic Agreement with the State Historic Preservation Officer to address future repair and rehabilitation improvements to State housing projects.

We are soliciting your review and concurrence with this "no historic properties affected" and "no adverse effect" determinations for these housing projects. We would greatly appreciate your written response within 30 days of receipt of this letter, or sooner if possible.

Please contact Ms. Becky Choi, State Housing Development Administrator, at 832-6020 or via email at becky.l.choi@hawaii.gov if you have any questions.

Sincerely,

Hakim Ouansafi
Executive Director

Enclosures – Exhibits A, B, C, and D

c: Alan Downer, Administrator, SHPD
Ronald Sato, HHF Planners

EXHIBIT A
LISTING OF HOUSING PROJECTS

HPHA Project No.	Housing Project Name	Street Address	City/Town	Island	Zip Code	Tax Map Key	Year Completed & Occupied
Kaua'i County (4 Projects)							
1020	Eleele Homes	340 Ahe Street	Eleele	Kauai	96705	2-1-01:13 & 42	1966
	APE Acreage: 2.11	Land Use: Used as residential housing project			**National Register Eligible: No**		
1021	Hui O Hanamaulu	4841 Laukona Street	Hānama'ulu	Kauai	96715	3-8-12:30	1966
	APE Acreage: 3.92	Land Use: Used as residential housing project			**National Register Eligible: No**		
1022	Kalaheo	2625 Pu'u Road	Kalaheo	Kauai	96741	2-3-12:30	1967
	APE Acreage: 1.09	Land Use: Used as residential housing project			**National Register Eligible: No**		
1018	Kapaa	4726 Malu Road	Kapa'a	Kauai	96796	4-5-15:07	1966
	APE Acreage: 4.33	Land Use: Used as residential housing project			**National Register Eligible: No**		
Maui County (2 Projects)							
1016	David Malo	723 Mill Street	Lahaina	Maui	96761	4-6-10:28	1966
	APE Acreage: 1.60	Land Use: Used as residential housing project			**National Register Eligible: No**		
1017	Kahekili Terrace (A&B)	2015 Holowai Place	Wailuku	Maui	96793	3-4-33:23	1966
	APE Acreage: 5.45	Land Use: Used as residential housing project			**National Register Eligible: Yes**		
Hawai'i County (7 Projects)							
1004	Lanakili I	600 Wailoa Street	Hilo	Hawaii	96720	2-4-28:07	1951; 2000
	APE Acreage: 10.21 *Redeveloped – 4.29* *Original Site – 5.92*	Land Use: Used as residential housing project			**National Register Eligible: Yes (Original 21 remaining buildings)**		
1013	Lanakili II	600 Wailoa Street	Hilo	Hawaii	96720	2-4-28:07	1952; 2000
	APE Acreage: 7.82 (I-IV)	Land Use: Used as residential housing project			**National Register Eligible: No**		
1014	Lanakila III	600 Wailoa Street	Hilo	Hawaii	96720	2-4-28:07	1962

	APE Acreage: 3.84 (I-IV)	Land Use: Used as residential housing project			**National Register Eligible: Yes (Original 10 remaining buildings)**		
1105	Lanakila IIIA	600 Wailoa Street	Hilo	Hawaii	96720	2-4-28:07	2011
	APE Acreage: 2.36 (I-IV)	Land Use: Used as residential housing project			**National Register Eligible: No**		
1104	Lanakila IV	600 Wailoa Street	Hilo	Hawaii	96720	2-4-28:07	1951; 2005
	APE Acreage: 5.07 (I-IV)	Land Use: Used as residential housing project			**National Register Eligible: No**		
1029	Pomaikai	929 Ululani Street	Hilo	Hawaii	96720	2-4-25:92	1966
	APE Acreage: 0.96	Land Use: Used as residential housing project			**National Register Eligible: No**		
1028	Punahele	5 Lokahi Place	Hilo	Hawaii	96720	2-4-52:22	1967
	APE Acreage: 3.97	Land Use: Used as residential housing project			**National Register Eligible: Yes**		

EXHIBIT A
LISTING OF HOUSING PROJECTS (Continued)

HPHA Project No.	Housing Project Name	Street Address	County	Island	Zip Code	Tax Map Key	Year Completed & Occupied
City and County of Honolulu (15 Projects)							
1026	Puuwai Momi	99-132 Kohomua Street	Aiea	Oahu	96701	9-9-03:56, 64	1969
	APE Acreage: 11.54	Land Use: Used as residential housing project			**National Register Eligible: No**		
1005	Kalihi Valley Homes	2250 Kalena Drive	Honolulu	Oahu	96819	1-3-22:01	1953
	APE Acreage: 24.53	Land Use: Used as residential housing project			**National Register Eligible: Yes (Original 14 unaltered buildings)**		
1003	Mayor Wright Homes	521 North Kukui Street	Honolulu	Oahu	96817	1-7-29:03	1952
	APE Acreage: 14.84	Land Use: Used as residential housing project			**National Register Eligible: No**		
1009	Kaahumanu Homes	760 McNeill Street	Honolulu	Oahu	96817	1-5-24:01	1958
	APE Acreage: 7.35	Land Use: Used as residential housing project			**National Register Eligible: No**		
1012	Makua Ali'i	1541 Kalakaua Avenue	Honolulu	Oahu	96826	2-3-19:04	1967
	APE Acreage: 2.60	Land Use: Used as residential housing project			**National Register Eligible: Yes**		
1024	Kalanihuia	1220 Aala Street	Honolulu	Oahu	96817	1-7-26:06	1969
	APE Acreage: 1.88	Land Use: Used as residential housing project			**National Register Eligible: Yes**		
1011	Punchbowl Homes	730 Captain Cook Avenue	Honolulu	Oahu	96813	2-1-39:12	1960
	APE Acreage: 2.94	Land Use: Used as residential housing project			**National Register Eligible: Yes**		
1007	Kuhio Homes	1430 Ahonui Street 1449 Ahonui Street	Honolulu	Oahu	96819	1-3-39:03 & 06	1953
	APE Acreage: 6.45	Land Use: Used as residential housing project			**National Register Eligible: No**		
1010	Kuhio Park Terrace Low-Rise	1474 Linapuni Street	Honolulu	Oahu	96819	1-3-39:08	1965
	APE Acreage: 3.36	Land Use: Used as residential housing project			**National Register Eligible: Yes (Except for one building and three newer community**		

					buildings)		
1033	Maili I	87-172 Maliona Street	Waianae	Oahu	9679 2	8-7-02:11	1969
	APE Acreage: 2.29	Land Use: Used as residential housing project			**National Register Eligible: No**		
1035	Nanakuli Homes	87-1608 Farrington Highway	Waianae	Oahu	9679 2	8-7-34:04	1969
	APE Acreage: 4.24	Land Use: Used as residential housing project			**National Register Eligible: Yes**		
1030	Koolau Village	45-1027 Kamau Place	Kaneohe	Oahu	9674 4	4-5-23:08	1969
	APE Acreage: 14.02	Land Use: Used as residential housing project			**National Register Eligible: No**		
1015	Wahiawa Terrace	337 Palm Street	Wahiawa	Oahu	9678 6	7-1-01:34	1966
	APE Acreage: 2.75	Land Use: Used as residential housing project			**National Register Eligible: Yes**		
1008	Palolo Valley Homes	2107 Ahe Street	Honolulu	Oahu	9681 6	3-4-07:07	1957
	APE Acreage: 6.62	Land Use: Used as residential housing project			**National Register Eligible: Yes (Except for three buildings)**		
1010	Kuhio Park Terrace High-Rise	1485 Linapuni Street 1531 Linapuni Street 1545 Linapuni Street	Honolulu	Oahu	9681 9	1-3-39:07, 09, & 10	1970
	APE Acreage: 18.36	Land Use: Used as residential housing project			**National Register Eligible: Yes**		

EXHIBIT B

Housing Project Summaries

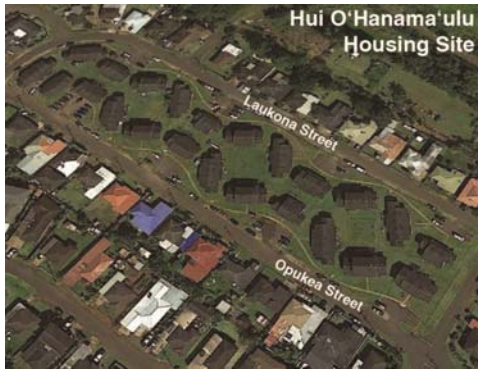
EXHIBIT B
HOUSING PROJECT SUMMARY

‘Ele‘ele Homes (HA #1020)

The ‘Ele‘ele Homes housing project is located in the town of ‘Ele‘ele on the island of Kaua‘i. ‘Ele‘ele is a rural community located along Kauai‘s southern shoreline. It is positioned directly east of Hanapēpē and to the north of the Port Allen Small Boat Harbor. The housing site is bordered by Kaumuali‘i Highway to the west and Mehana Road to the east.

‘Ele‘ele Homes was constructed in 1966 and has a street address of Ahe Street. The property consists of two tax parcels with a combined area of 2.11 acres, and are identified as Tax Map Key (TMK) No. (4) 2-01-001: 013 & 042. The housing project is comprised of 12 single-story duplexes with 1-, 2-, 3-, or 4-bedroom units. The State’s land use designation for the majority of the property is the “Urban District,” but a small portion of the properties northeast corner falls in the “Agricultural District.” The County’s zoning for the parcel is Residential District (R-10), maximum 10 dwelling units per acre.

Hui O Hanamaulu (HA #1021)



The Hui O‘Hanama‘ulu housing project is located in the in the town of Hanama‘ulu on the island of Kaua‘i. Hanama‘ulu is situated directly north of Līhu‘e on Kaua‘i‘s eastern shoreline. The housing project site is positioned along Laukona Street and to the north of Kuhio Highway.

Hui O‘Hanama‘ulu was first occupied in 1966 and has a street address of 4841 Laukona Street. The property consists of 3.92 acres, and it is identified as Tax Map Key (TMK) No. (4) 3-8-012:030. The housing project is comprised of 23 single and two-story duplexes with 1-, 2-, 3-, and 4-bedroom units. The State’s land use designation for the property is the “Urban District.” The County’s zoning for the parcel is Residential (R-10), maximum 10 dwelling units per acre.

Kalāheo (HA #1022)

The Kalāheo housing project is located in the community of Kalāheo on the island of Kaua‘i. Kalāheo is situated west of Koloa on the south shore of Kaua‘i. The housing site is positioned directly across the street from Kalāheo Elementary School at the corner of Pu‘u Road and Maka Road.

Kalāheo was constructed in 1967 and has a street address on Pu‘u Road. The property consists of 1.09 acres, and it is identified as Tax Map Key (TMK) No. (4) 2-3-012: 030. The housing project is comprised of 4 single-story duplexes with 2-, 3-, and 4-bedroom units. The State's land use designation for the property is the "Urban District." The County's zoning for the parcel is Residential (R-4/ST-P), maximum 4 dwelling units per acre and special treatment for public facilities.

Kapaa (HA #1018)

The Kapa‘a housing project is located in the town of Kapa‘a on the island of Kaua‘i. Kapa‘a is situated along Kaua‘i‘s eastern shoreline, south of Anahola and north of Wailua. The housing site is positioned near the intersection of Kapa‘a Bypass and Olohena Road and directly east of Kapa‘a Town Park.

Kapa‘a was constructed in 1966 and has a street address of 4726 Malu Road. The property consists of 4.33 acres, and it is identified as Tax Map Key (TMK) No. (4) 4-5-015: 007, 038, and 042. The housing project is comprised of 18 single-story duplexes with 1-, 2-, 3-, and 4-bedroom units. One single-story common area building serves as a community center. The State's land use designation for the property is the "Urban District." The County's zoning for the parcel is Residential District (R-10), maximum density of 10 dwelling units per acre.

David Malo (HA #1016)

The David Malo Circle housing project is located in the community of Lahaina on the island of Maui. Lahaina is situated south of Kā'anapali along Maui's west shore. The housing site is bordered by Honoapi'ilani Highway to the southwest, and access is provided off of Mill Street.

David Malo Circle was first occupied in 1966 and has a street address of 723 Mill Street. The property consists of 1.60 acres and is identified as Tax Map Key (TMK) No. (2) 4-6-010:028. The housing project is comprised of 8 single-story duplexes with one, two, and three bedroom units, and 1 two-story duplex with four bedroom units. The State land use designation for the property is the "Urban District." The parcel is zoned R-2 Residential District by the County.

Kahekili Terrace A&B (HA #1017)

The Kahekili Terrace A&B housing project is located in the community of Wailuku on the island of Maui. Wailuku is situated west of Kahului along Maui's north shore. The housing project consists of two separate sites built at the same time. Site A is bordered by Holowai Place to the northwest and North Market Street to the northeast with access provided by both streets. Site B is bordered by North Market Street to the west and Piihana Road to the northwest with access provided by Piihana Road.

Kahekili Terrace A&B was first occupied in 1966 and has a street address of 2015 Holowai Place. This property consists of 5.45 acres, and it is identified as Tax Map Key (TMK) No. (2) 3-4-033:023 and (2) 3-4-017:146. The housing project is comprised of 15 two and three-story buildings providing a total of 82 housing units having a range of one, two, three, and four-bedrooms per unit. One common area building houses administrative offices and a small preschool. The State land use designation for the property is the "Urban District." The parcel is located in the County's "Urban Growth Boundary."

Kahekili Terrace A&B (HA #1017) (continued)

Lanakila I and II (HA #1004 and #1013)

The Lanakila Homes I and II housing projects are located in the community of Hilo on the island of Hawai‘i. Hilo is the Hawai‘i County seat, and it is located on the island’s windward coast. The housing site is situated to the south of downtown Hilo and is bordered to the east by Popolo Street.

Lanakila Homes I and II were originally built in 1951 and 1952, but were later rehabilitated and occupied in 2000. The entire Lanakila property (I – IV) consists of 29.3 acres, and Phases I and II are identified as Tax Map Key (TMK) No. (3) 2-4-028: portion of 007. The housing project is comprised of 20 one and two-story townhouses with a range of 1, 2, 3, and 4-bedrooms per unit. The State’s land use designation for the property is the “Urban District” and the County’s zoning for the parcel is RD-3.75 Double-Family Residential District.

Lanakila III (HA #1014)

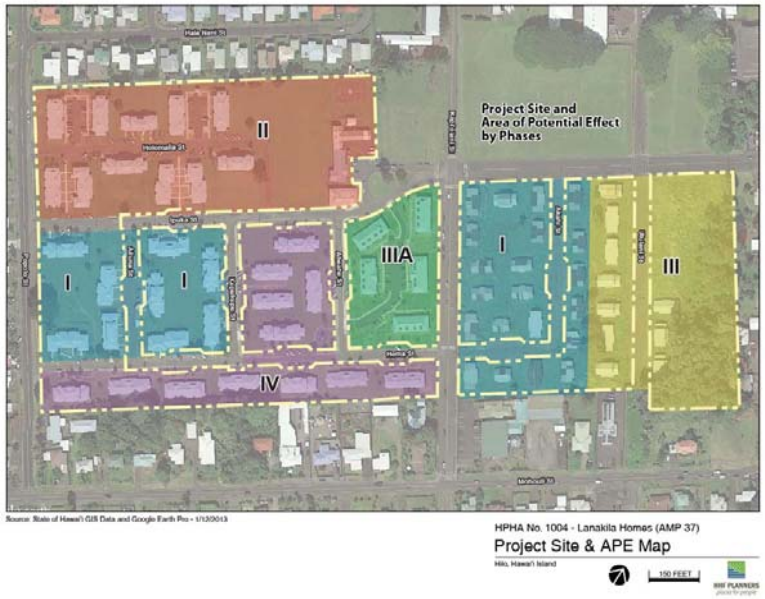
The Lanakila Homes III housing project is located in the community of Hilo on the island of Hawai‘i. Hilo is the Hawai‘i County seat, and it is located on the island’s windward coast. The housing site is situated to the south of downtown Hilo and is bordered to the east by Popolo Street.

The Phase III portion of Lanakila Homes along Ululani Street was originally built in 1962. It was later renamed to Lanakila V before 2006, and more recently changed back to Lanakila III. This phase is currently unoccupied and is restricted from access due to existing building conditions. The Phase III site is a portion of the entire 29.3-acre property for the overall Lanakila development, and is identified as Tax Map Key (TMK) No. (3) 2-04-028: portion of 007. The project is comprised of 10 one- and two-story townhouses with a range of one to four bedrooms per unit. The State’s land use designation for the property is the “Urban District” and the County’s zoning for the parcel is RD-3.75 Double-Family Residential District.

Lanakila IIIA (HA #1105)

The Lanakila Homes IIIA housing project is located in the community of Hilo on the island of Hawai‘i. Hilo is the Hawai‘i County seat, and it is located on the island’s windward coast. The housing site is situated to the south of downtown Hilo and is bordered to the east by Popolo Street.

The IIIA phase of Lanakila Homes was originally built in 1951 as part of Lanakila I, but was later rehabilitated, separated into Phase IIIA, and then occupied in 2011. The property consists of 2.38 acres of the entire 29.3-acre property for the overall Lanakila development. Phase IIIA is identified as Tax Map Key (TMK) No. (3) 2-04-028: portion of 007. The housing project is comprised of 5 one-story ADA townhouses with a range of 1, 2, and 3-bedrooms per unit. The State’s land use designation for the property is the “Urban District” and the County’s zoning for the parcel is RD-3.75 Double-Family Residential District.



Lanakila IV (HA #1104)

The Lanakila Homes IV housing project is located in the community of Hilo on the island of Hawaiʻi. Hilo is the Hawaiʻi County seat, and it is located on the island's windward coast. The housing site is situated to the south of downtown Hilo and is bordered to the east by Popolo Street.

Phase IV of Lanakila Homes was originally built in 1951 as part of Lanakila I, but was later rehabilitated, separated into Phase IV, and then occupied in 2005. The property consists of 4.84 acres of the entire 29.3-acre property for the overall Lanakila development. Phase IV is identified as Tax Map Key (TMK) No. (3) 2-04-028: portion of 007. The housing project is comprised of 12 one and two-story townhouses with a range of one to four bedrooms per unit. The State's land use designation for the property is the "Urban District" and the County's zoning for the parcel is RD-3.75 Double-Family Residential District.

Pōmaikaʻi (HA #1029)

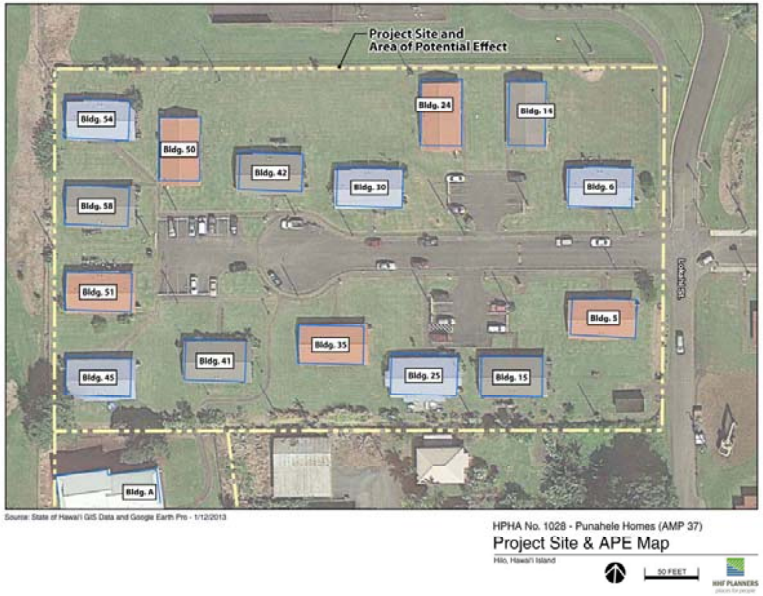
The Pōmaikaʻi elderly housing project is located in the community of Hilo on the island of Hawaiʻi. Hilo is the Hawaiʻi County seat, and it is located on the island's windward coast. The housing site is positioned south of downtown Hilo at the intersection of Ululani Street and Hualalai Street.

Pōmaikaʻi was constructed in 1966 and has a street address of 929 Ululani Street. The property consists of 0.96 acres, and it is identified as Tax Map Key (TMK) No. (3) 2-4-025: 092. The housing project is comprised of 2 single-story apartment buildings with studio and 1-bedroom units and one single-story community building. The State's land use designation for the property is the "Urban District." The County's zoning for the parcel is CG-7.5 General Commercial District.

Punahele (HA #1028)

The Punahele Homes housing project is located in the Waiākea neighborhood of Hilo on the island of Hawai‘i. Waiākea is a suburban community located to the east of downtown Hilo. The housing site is bordered to the east by Waiākea Elementary School, to the south and west by the Kauhale ‘O Hanakahi and Lokahi housing projects, respectively.

Punahele Homes was constructed in 1967 and is located at Lokahi Place. The property consists of 4.01 acres, and it is identified as Tax Map Key (TMK) No. (3) 2-4-052: 022. The housing project is comprised of 15 single-story duplexes with 2-bedroom units. The State land use designation for the property is the “Urban District.” The County zoning for the parcel is RD-3.75 Double-Family Residential District.



Pu‘uwai Momi (HA #1026)

The Pu‘uwai Momi housing project is located in the community of ‘Aiea on the island of O‘ahu. ‘Aiea is located between the residential communities of Pearl City to the west, and Moanalua to the east. The housing project site is situated just south of Aloha Stadium off of Kamehameha Highway with access provided by Kohomua Street. The property is bordered by Kamehameha Highway and the Makalapa Neighborhood Park to the west, apartment complexes to the south, and Salt Lake Blvd. to the north.

Puuwai Momi was first occupied in 1969 and has a street address of 99-132 Kohomua Street. This property consists of 11.54 acres, and it is identified as Tax Map Key (TMK) No. (1) 9-9-003:056 & 064. The housing project is comprised of 27 two and three-story townhome buildings providing a total of 260 housing units having a range of one-, two-, three-, and four-bedrooms per unit. One single-story common area building houses administrative offices. The State land use designation for the property is the “Urban District,” and the City zoning for the site is A-2 Medium-density Apartment.

Kalihi Valley Homes (HA #1005)

The Kalihi Valley Homes housing project is located in the Kalihi community in the Honolulu district on the island of O‘ahu. Kalihi is located west of the Honolulu urban center and east of the Fort Shafter Army Base. The housing project site is situated west of Likelike Highway and Kamehameha IV Road with access provided by Kalena Drive. The property is located less than a quarter mile north east of Ka‘ewai Elementary School.

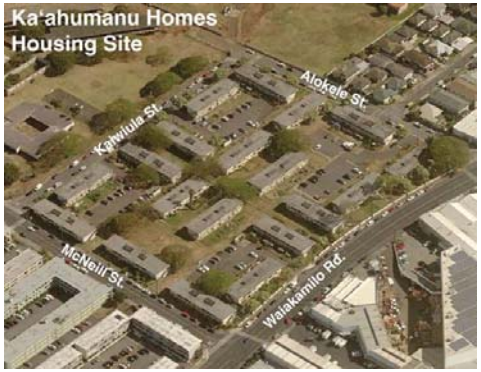
Kalihi Valley Homes was first occupied in 1953 and has a street address of 2250 Kalena Drive. This property consists of 24.53 acres, and it is identified as Tax Map Key (TMK) No. (1) 1-1-022:001. The housing project is comprised of 42 two-story buildings providing a total of 373 housing units having a range of one-, two-, three-, four-, and five-bedrooms per unit. Additionally, two common area buildings are present at the site including a raised second story community building, and a single-story administrative building. The State’s land use designation for the property is the “Urban District,” and the City’s zoning for the site is A-2 Medium-Density Apartment.

Mayor Wright Homes (HA #1003)

The Mayor Wright Homes housing project is located in the Liliha community of the Honolulu district on the island of O‘ahu. Liliha is located directly northwest of the Honolulu urban center and east of the Kalihi community. The housing project site is bounded by North King Street, Liliha Street, Vineyard Boulevard, and Pua Lane. The property is located approximately a quarter mile east of Honolulu Community College.

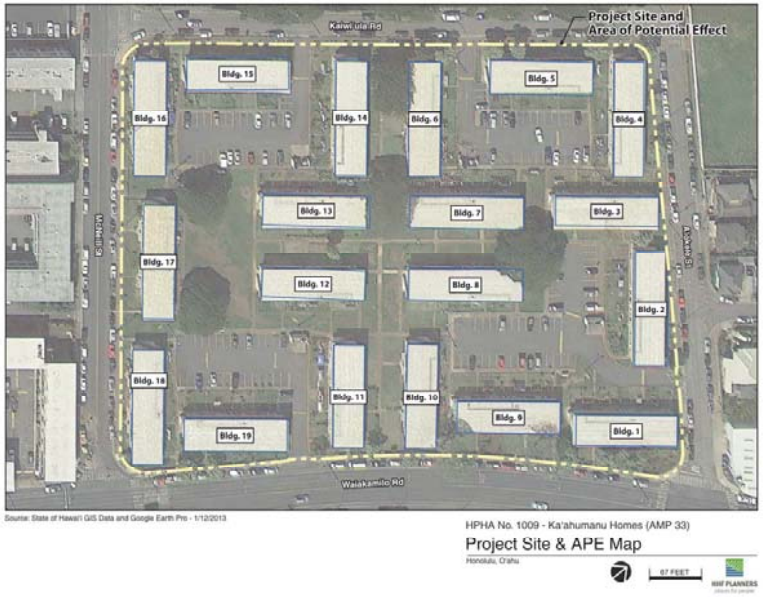
Mayor Wright Homes was first occupied in 1952 and has a street address of 521 North Kukui Street. This property consists of 14.84 acres, and it is identified as Tax Map Key (TMK) Number (1) 1-07-029:003. The housing project is comprised of 35 two-story townhouse buildings providing a total of 364 housing units having a range of one, two, three, four, and five bedrooms per unit, and a two-story common area building that houses a community center and administrative offices. The State land use designation for the property is the “Urban District,” and the City zoning for the site is A-2 Medium-Density Apartment.

Ka‘ahumanu Homes (HA #1009)



The Ka‘ahumanu Homes housing project is located in the Kalihi community of the Honolulu district on the island of O‘ahu. Kalihi is located west of the Honolulu urban center. The housing project site is situated off of Waiakamilo Road, with access provided by Alokele and Kaiwiula Streets. The property is bordered to the west by the Kalakaua District Park.

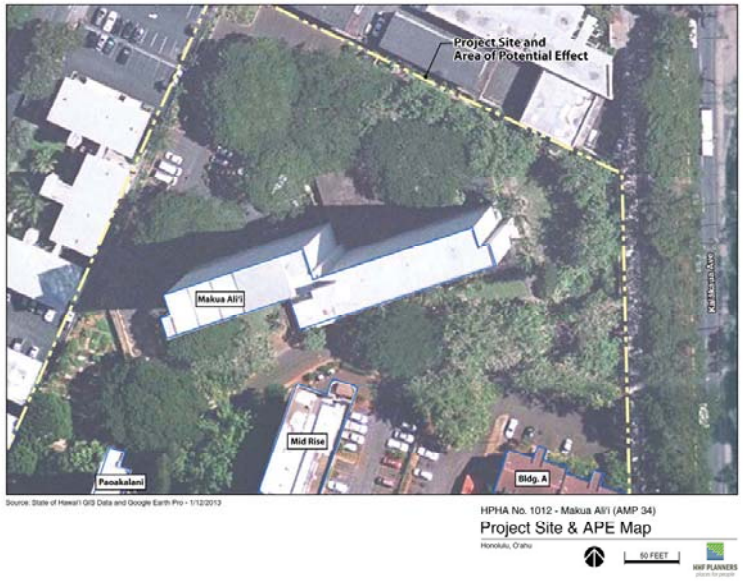
Ka‘ahumanu Homes was constructed in 1958 and has a street address of Alokele and Kaiwiula Street. This property consists of 7.35 acres, and it is identified as Tax Map Key (TMK) No. (1) 1-5-024:001. The housing project is comprised of 19 two-story townhome buildings providing a total of 152 housing units having a range of 2- and 3-bedrooms per unit. The State’s land use designation for the property is the “Urban District,” and the City’s zoning for the site is A-1 Low-Density Apartment.



Makua Ali‘i (HA #1012)

The Makua Ali‘i elderly housing project is located in the McCully-Mo‘ili‘ili community of the Honolulu district on the island of O‘ahu. McCully-Mo‘ili‘ili is located in urban Honolulu, northeast of Ala Moana Shopping Center. The housing project site is situated off of Kalākaua Avenue and is located on the same tax parcel as the Kalākaua Homes and Paoakalani housing projects. The property is located less than a quarter mile west from Washington Middle School.

Makua Ali‘i was first occupied in 1967 and has a street address of 1541 Kalākaua Avenue. This property consists of 2.6 acres, and it is identified as Tax Map Key (TMK) No. (1) 2-3-019:004. The housing project is comprised of a single 19-story high-rise apartment building with 210 one-bedroom units and 1 three-bedroom unit reserved for live-in maintenance staff. The State’s land use designation for the property is the “Urban District,” and the City’s zoning for the site is A-3 High-density Apartment.



Kalaninuia (HA #1024)

The Kalanihuia project is located in the Liliha community of the Honolulu district on the island of O‘ahu. This higher density mixed-use community is located just outside (north of) Honolulu’s central business district, and mauka of the industrial Iwilei area. The housing project site is situated along North Beretania Street at the intersection with ‘A‘ala Street.

Kalanihuia was constructed in 1969 and has a street address of 1220 A‘ala Street. This property consists of 1.88 acres, and it is identified as Tax Map Key (TMK) No. (1) 1-7-026:006. The housing project is comprised of a single 15-story high-rise apartment building complex with 90 studio units, 60 one-bedroom units, and a three-bedroom unit for live-in maintenance staff. Connected to this complex is a single-story common area wing of the building that includes a community hall, laundry area, kitchen, maintenance storage and staff offices. The State’s land use designation for the property is the “Urban District,” and the City’s zoning for the site is A-2 Medium-Density Apartment.

Punchbowl Homes (HA #1011)

The Punchbowl Homes housing project is located south of the Punchbowl crater and the National Memorial Cemetery of the Pacific. The Punchbowl crater and surrounding neighborhood are located directly northeast of downtown Honolulu. The site is bordered by Captain Cook Avenue and the H-1 Freeway to the south, Emerson Street to the east, Green Street to the north, and Alapai Street to the west.

Punchbowl Homes was constructed in 1960 and has a street address of 730 Captain Cook Avenue. This property consists of 2.94 acres, and it is identified as Tax Map Key (TMK) No. (1) 2-1-039:012. The housing project is comprised of one 7-story mid-rise apartment building (Building A) that has three wings (Wings A-1 to A-3) and one 3-story low-rise apartment building (Building B). The two buildings have housing units ranging from one to three bedrooms per unit. The State’s land use designation for the property is the “Urban District”, and the City’s zoning for the site is A-2 Medium-Density Apartment.

Kūhiō Homes (HA #1007)

The Kūhiō Homes housing project is located in the Kalihi community of Honolulu on the island of O‘ahu. Kalihi is an urban neighborhood situated west of downtown Honolulu and east of Fort Shafter. The housing site is positioned along Ahonui Street and is bordered to the south by the Kūhiō Park Terrace Low-rise housing project.

Kūhiō Homes was established in 1953 and has a street address of 1441 Ahonui Street. The property consists of a combined area of 6.45 acres and encompasses two parcels, Tax Map Key (TMK) Nos. (1) 1-03-039:003 & 006. The housing project is comprised of 21 two-story low-rise apartment buildings with housing units having a range of 1, 2, 3, 4, and 5-bedrooms per unit. The State’s land use designation for the property is the “Urban District,” and the City’s zoning for the parcel is A-2 Medium-Density Apartment.

Kūhiō Park Terrace Low-Rise (HA #1010)

The Kūhiō Park Terrace (KPT) Low-Rise housing project is located in the Kalihi community of Honolulu on the island of O‘ahu. Kalihi is an urban neighborhood situated west of downtown Honolulu and east of Fort Shafter. The housing site is positioned along Linapuni Street and is bordered to the north by the Kūhiō Homes housing project.

KPT Low-Rise was first occupied in 1965 and has a street address of 1475 Linapuni Street. This property consists of 3.36 acres, and it is identified as Tax Map Key (TMK) No. (1) 1-03-039:008. The housing project is comprised of 8 two-story townhouses and 4 single story duplexes, all with 4-bedroom units. The State’s land use designation for the property is the “Urban District.” The City’s zoning for the parcel is A-2 Medium-Density Apartment.

Mā‘ili I (HA #1033)

The Mā‘ili I housing project is located in the Mā‘ili community of the Wai‘anae Coast on the island of O‘ahu. Māili is situated between the communities of Wai‘anae to the North and Nanakuli to the south. The housing site straddles Maliona Street to the west of Mā‘ili Community Park.

Mā‘ili I was constructed in 1969 but underwent a major renovation project in 2002. The site has a street address of Maliona Street, and the property consists of a combined area of 2.29 acres encompassing two parcels, Tax Map Key (TMK) No. (1) 8-7-002:011 & 014. The housing project is comprised of 20 single family homes with a mix of two and three bedrooms per home. The State's land use designation for the property is the "Urban District." The City's zoning for the parcel is R-5 Residential.

Nānākuli Homes (HA #1035)

The Nānākuli Homes housing project is located in the Nānākuli community on the island of O‘ahu. Nānākuli is situated at the southern end of the Wai‘anae Coast. The housing site is bordered by Farrington Highway to the west, and Lualei Place to the north. The site driveway is accessed off of Farrington Highway, and Ulehawa Beach Park is located across the highway.

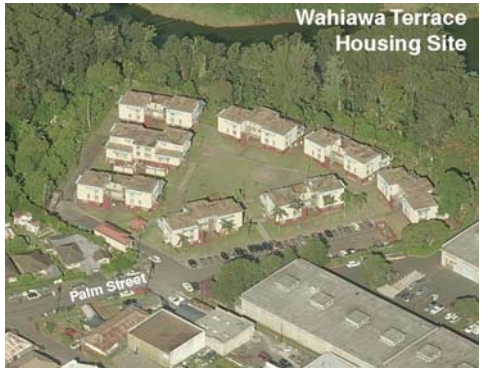
Nānākuli Homes was first occupied in 1969 and has a street address of 87-1606 Farrington Highway. The property consists of 4.24 acres, and it is identified as Tax Map Key (TMK) No. (1) 8-07-034:004. The housing project is comprised of a 36 single family homes with 3 bedrooms each. The State's land use designation for the property is the "Urban District," and the City's zoning for the parcel is R-5 Residential.

Ko‘olau Village (HA #1030)

The Ko‘olau Village housing project is located in the Kāne‘ohe community on the island of O‘ahu. Kāne‘ohe is situated in Windward O‘ahu, to the west of Kailua and the Kāne‘ohe Marine Corps Base. The housing site is bordered by Kahekili Highway to the west and Kea‘ahala Road to the south with access provided by Kamau Place.

Ko‘olau Village was constructed in 1969 and has a street address of 45-1027 Kamau Place. The property consists of 14.02 acres, and it is identified as Tax Map Key (TMK) No. (1) 4-05-023: 008. The housing project is comprised of 18 two-story townhouses with a range of 1-, 2-, 3-, and 4-bedroom units, and one single-story common area building that serves as a community center. The State’s land use designation for the property is the “Urban District.” The City’s zoning for the parcel is Medium-density Apartment (A-2).

Wahiawā Terrace (HA #1015)



The Wahiawā Terrace housing project is located in the Wahiawā community on the island of O‘ahu. Wahiawā is situated in Central O‘ahu to the east of Schofield Barracks Army Base. The housing site is situated at the end of Palm Street and backs up to the North Fork of Kaukonahua Stream.

Wahiawā Terrace was first occupied in 1966 and has a street address of 337 Palm Street. The property consists of 2.75 acres, and it is identified as Tax Map Key (TMK) No. (1) 7-1-001:034. The housing project consists of 8 three-story townhouses with a range of one, two, three, and four bedrooms per unit. The State’s land use designation for the property is the “Urban District.” The City’s zoning for the parcel is A-2 Medium-Density Apartment.

Pālolo Valley Homes (HA #1008)

The Pālolo Valley Homes housing project is located in the Pālolo community of urban Honolulu on the island of Oʻahu. Pālolo is situated between the neighborhoods of Kaimuki to the South, Saint Louis Heights to the west, and Wilhemina Rise to the east. The housing site is bordered by Pālolo Stream and Kīwila Street, and access is provided by ʻĀhē Street.

Pālolo Valley Homes was first occupied in 1957 and has a street address of 2107 ʻĀhē Street. The property is split by ʻĀhē Street and consists of two parcels [TMK No. (1) 3-04-007:015 & 017] with a combined area of 6.62 acres. The housing project consists of 20 two-story apartment buildings with a range of one-, two-, three-, four-, and five-bedrooms per unit. The State's land use designation for the property is the "Urban District." The City's zoning for the parcel is A-1 Low-density Apartment.

Kūhiō Park Terrace High-Rise (HA #1010)

The Kūhiō Park Terrace High-Rise housing project is located in the Kalihi community of Honolulu on the island of Oʻahu. Kalihi is an urban neighborhood situated west of downtown Honolulu and east of Fort Shafter. The housing site is situated along Linapuni Street and is bordered to the north by the Kūhiō Park Terrace Low-rise housing project.

Kūhiō Park Terrace High-Rise apartments were first occupied in 1965 and have street addresses 1474 and 1545 Linapuni Street. This property consists of three parcels identified as Tax Map Key (TMK) No. (1) 1-3-039:007, 009, & 010, with a combined area of 18.36 acres. The housing project is comprised of two 16-story High-Rise apartment buildings (Towers A and B) with one-, two-, and three-bedroom units. Three common area buildings on the property include a Community Center, a laundry area, and administrative offices. The State's land use designation for the property is the "Urban District." The City's zoning for the parcel is A-2 Medium-density Apartment for the portion of the property containing the High-Rise apartment buildings, and P-2 General Preservation for the portion of the property containing the common areas and open space.

EXHIBIT C

Architectural Inventory Survey; Hawaii Public Housing Authority

Prepared By:

Fung Associaties, Inc.

July 2015

ARCHITECTURAL INVENTORY SURVEY
HAWAII PUBLIC HOUSING AUTHORITY
(FEDERAL PROJECTS)

Prepared by
Fung Associates, Inc.
1833 Kalakaua Avenue, Suite 1008
Honolulu, HI 96815

For

Hawaii Public Housing Authority
and
HHF Planners

July, 2015

EXECUTIVE SUMMARY

This report records the findings of a historic architectural reconnaissance survey of selected public housing projects operated by the Hawaii Public Housing Authority (HPHA), which was previously known as Housing and Community Development Corporation of Hawaii (HCDCH); and Hawaii Housing Authority (HHA). It was undertaken in anticipation of future HPHA projects utilizing federal funding and fulfills the 36 CFR.800 requirement for identification of historic properties.

The objective of the survey was to study 17 HPHA housing projects targeted for repairs and rehabilitation, and to evaluate which properties should be considered historic resources. In keeping with Advisory Council for Historic Preservation guidelines, this report identifies those which appear to meet the criteria for listing in the National Register of Historic Places.

Each of the housing projects covered in this report was visited, photographed, researched, and evaluated for historic significance. After consideration of each resource, eight of the 17 projects were considered to meet National Register eligibility criteria. Their significance is based on their role in the social history of Hawaii, being representative of the efforts of a Territory-wide and State-wide housing reform movement, and also for their architecture, being reflective of a type, style, method of construction, and materials utilized during the period in which they were constructed. All of the properties which were considered to not meet the criteria for listing in the National Register of Historic Places, were so evaluated because of their loss of integrity.

Table 1 summarizes these evaluations. The eight projects determined National Register eligible are highlighted.

Table 1: Summarizing National Register Eligibility Evaluation (Chronological Order)

	Island	Project Name	Project Type	Year Built	National Register Eligibility
1	Oahu	Kalihi Valley Homes	Federal	1953	Eligible
2	Oahu	Palolo Valley Homes	Federal	1957	Eligible
3	Maui	David Malo Circle	Federal	1966	Not Eligible
4	Kauai	Eleele Homes	Federal	1966	Not Eligible
5	Kauai	Hui O'Hanamaulu	Federal	1966	Not Eligible
6	Maui	Kahekili Terrace (A & B)	Federal	1966	Eligible
7	Kauai	Kapaa	Federal	1966	Not Eligible
8	Oahu	Wahiawa Terrace	Federal	1966	Eligible
9	Kauai	Kalaheo Homes	Federal	1967	Not Eligible
10	Oahu	Makua Alii (Eld)	Federal	1967	Eligible
11	Hawaii	Pomaikai	Federal	1967	Not Eligible
12	Hawaii	Punahele Homes	Federal	1967	Eligible
13	Oahu	Kalanihuia (Eld)	Federal	1969	Eligible
14	Oahu	Koolau Village	Federal	1969	Not Eligible
15	Oahu	Maili I	Federal	1969	Not Eligible
16	Oahu	Nanakuli Homes	Federal	1969	Eligible
17	Oahu	Puuwai Momi	Federal	1969	Not Eligible

Organization of Report

The first section of the report summarizes the National Register eligibility criteria. The second section covers the survey scope and methodology, third is evaluation process and consideration, while the fourth is a brief history of public housing in Hawaii. Section five includes historic resource information and assessments for each of the housing projects. These include historic contexts, descriptions, maps or site plans, and one-page historic assessment photo and summary sheets. The sixth section is a summary of National Register findings and recommendations as to how to most efficiently comply with Section 106 requirements. A bibliography is provided at the end of the report.

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NATIONAL REGISTER OF HISTORIC PLACES' ELIGIBILITY CRITERIA

In order to determine the significance of a historic property, the property must be evaluated based on the National Register of Historic Places' Criteria for Evaluation. The following excerpt was taken from the National Register Criteria, Title 36 CFR, §60.4, Criteria for Evaluation:

> *The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and*
>
> *A. that are associated with events that have made a significant contribution to the broad patterns of our history; or*
>
> *B. that are associated with the lives of persons significant in our past; or*
>
> *C. that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or*
>
> *D. that have yielded, or may be likely to yield, information important in prehistory or history.*

National Register Bulletin No. 15, How to Apply the National Register Criteria for Evaluation provides an explanation on how to apply the criteria listed above. In summary, historic resources are evaluated by applying the four significance criteria A through D, and then determining which of the seven aspects of integrity are present to convey its significance: location, design, setting, materials, workmanship, feeling, or association.

RESEARCH DESIGN AND SURVEY METHODS

This report records the findings of a historic architectural survey of selected public housing projects operated by the Hawaii Public Housing Authority (previously known as Housing and Community Development Corporation of Hawaii [HCDCH]; and Hawaii Housing Authority [HHA]). The survey was undertaken in anticipation of future repairs and rehabilitation that will be funded with federal monies. It will fulfill the initial steps of Section 106 of the National Historic Preservation Act (NHPA) which requires identification and evaluation of potential historic and cultural resources in the area affected by a federal action, so that federal agencies may take into account the effects of their undertakings on historic properties and afford the Advisory Council on Historic Preservation an opportunity to comment on such undertakings.

The objective of this survey is to study 17 HPHA housing projects targeted for repairs and rehabilitation, and to evaluate which should be considered historic resources. In keeping with Section 106 guidelines, this report identifies those which appear to meet the criteria for listing in the National Register of Historic Places.

Note that there are other HPHA housing projects which are also targeted for repairs and rehabilitation, but these are not included in this report for two different reasons. The first reason is that eleven public housing projects were previously studied in 2006 and 2010 by Mason Architects, Inc. The 2006 report evaluated Lanakila Homes I and III (both in Hilo), as well as Mayor Wright Homes, Palolo Valley Homes, Kaahumanu Homes, and Kuhio Park Terrace, all on Oahu. The 2010 report evaluated Lanakila Homes II and V (in Hilo), Kalihi Valley Homes, Kuhio Homes, and Punchbowl Homes, all in Honolulu. The second reason is that other HPHA housing projects were constructed after 1969 and, thus, have not reached the age threshold normally associated with historic resources.

The National Register uses a general age threshold of 50 years or older. Of the 17 public housing projects operated by HPHA included in this study, two were originally built over 50 years ago, while the other 15 are over 45 years old and in all likelihood will be 50 years old or older when projects are initiated for them. As such, this report evaluates them from a perspective that they have attained 50 years of age.

In addition, information was gathered which may serve as a base for the development of a historic context relating to public housing in Hawaii. However, no historic contexts were prepared in conjunction with this survey, as it was not requested by the SHPO and not included in the scope of work. Additional work would need to be undertaken which would consider not only all properties associated with the history of the HPHA but also the variety of public housing programs under the jurisdiction of the counties.

A field survey of all the buildings in the various project areas was conducted by Mayu Ohama and Don Hibbard, during January and February 2015. Both Ms. Ohama and Dr. Hibbard meet the Secretary of Interior's Professional Qualifications Standards for architectural historians. A total of 336 public housing buildings were surveyed, with all the exteriors examined and representative interiors inspected for each of the 17 housing projects. The

buildings were photographed, using a Sony Cyber-shot DSC-W70 camera at 7.2 megapixels and a Canon Power Shot A620 camera at 7.1 megapixels.

All the buildings were originally rendered in a modern style, although some have been remodeled to reflect post-modern sensibilities. They vary in type ranging from single family residences and duplexes to high-rise apartments. Dates of construction range from the early 1950s through 1969, with different materials used in their construction, with either wood, reinforced concrete or cmu being the primary material. They almost always sit on poured in place concrete slab foundations. Some of the earlier buildings utilize double hung sash windows, but generally those dating from the 1960s employ jalousie windows. Awning, hopper, and sliding windows are also present. The buildings remain in relatively good condition.

Archival background research was undertaken by consulting the annual reports of the HHA which are located in the Hawaii State Library. Newspaper research was pursued, with the Honolulu Star Bulletin, Honolulu Advertiser, Maui News, and Hilo Tribune examined. In addition the HPHA's architectural plan files were examined in depth. No SHPD files existed for any properties in the survey's scope, other than the Mason Architect reports prepared in 2005 and 2010. These reports were also carefully reviewed. In addition to the above sources, which provided specific information on public housing in Hawaii, books and articles were also read which provided a larger national perspective on public housing efforts, which could be applied to Hawaii. These sources also gave a broader understanding of the architectural and planning concepts incorporated in the buildings. The internet was also searched for materials along these veins. The information obtained from the research is included in this report's section titled, "History of Public Housing in Hawaii," and in the history and significance sections of the individual properties.

EVALUATION PROCESS AND CONSIDERATIONS

To evaluate the historic significance of the 17 public housing projects examined in this architectural survey required taking a number of factors into consideration. These included:

1. is the project associated with the development of public housing in Hawaii,
2. is the project architecturally a good example of its type and period,
3. could the project architect be considered a master,
4. to what degree did the project as a whole retain its historic integrity, and
5. to what degree did the individual buildings within the housing project retain their historic integrity.

All the projects, simply by their being constructed by or for the Hawaii Housing Authority, appeared to meet criteria A for listing in the National Register of Historic Places, as they are associated with events that have made a significant contribution to the broad patterns of our history. In this instance the event is the development of public housing in Hawaii including development of elderly housing.

In evaluating each of the projects to determine if they appeared to meet criteria C, that is, whether they were architecturally a good example of their type and period, several different design and policy paradigms were identified:

1. The use of the Zeilenbau plan and the international style of architectural design. Projects which were identified with this design approach included: Palolo Valley Homes and Kalihi Valley Homes.
2. The embracing of more informal, garden city, suburban planning precepts in the layout of a project. Projects which employed this design approach included: David Malo Circle, Hui o Hanamaulu, Kapaa, Eleele Homes, Kalaheo Homes, Punahele Homes, and Koolau Village.
3. The use of a perimeter block plan, or a modification of such a planning precept. Projects which employed or modified this design precept included: Kahekili Terrace, Wahiawa Terrace, and Puuwai Momi.
4. The use of high-rise construction. These projects included: Makua Alii, and Kalanihuia.
5. The use of the turn key approach to project development which employs subdivision forms in private sector. These projects included: Nanakuli Homes and Maili I.

In addition, the list of project architects was reviewed, and both Takashi Anbe, and Wong & Wong were considered to be masters. Housing projects by them included: Kahekili Terrace, Wahiawa Terrace and David Malo Circle.

The final issue to be addressed in the evaluation process is that of historic integrity. Almost all the housing projects considered not eligible in the previous studies resulted from the buildings not retaining their historic integrity. The historic integrity of the projects were evaluated from two perspectives. First the projects were evaluated in terms of the how well they reflected the project's overall plan and layout. All of the projects studied retained their original building locations and circulation patterns. However, very few displayed any evidence of their original landscape plan which is very common for public housing and as such was not a factor in evaluating the overall historic integrity of the various projects. However, where remnants of the historic landscape design remained, these were noted in the descriptions of the individual projects, and were considered when evaluating the significance of the various projects.

The assessment of the integrity of the individual buildings comprising each project was a less straight forward task, as all of the buildings in the various projects had undergone some degree of changes. The most common alterations involved the replacement of windows and doors, the remodeling of kitchens and bathrooms, the removal of bedroom closet doors, the replacement of floor materials, changes made to laundry areas, and cladding or replacement of exterior walls with T-111. Usually windows and wall surfaces, as well as interior layouts and finishes are considered to be character defining elements of a building, and any changes to these elements are carefully scrutinized. Frequently kitchens, bathrooms and bedrooms are viewed as secondary spaces and greater flexibility with regards to interior changes in these areas is granted. Also, more leeway is given to alterations to the rear of a building as opposed to its facade.

In addition, buildings in several projects had been re-designed to reflect a post-modern sensibility. The latter included certain buildings at Palolo Valley Homes, Kalihi Valley Homes, and all of Koolau Village. These remodeled buildings no longer reflected their original architectural designs and were deemed not to be meet the criteria for listing in the National Register of Historic Places due to their loss of historic integrity in terms of their design.

To facilitate the evaluation of integrity, and in turn, the determination of significance, the various projects were examined in relation to their design and policy paradigms. As a result, a better understanding of similar types of properties and specific episodes in the history of public housing in Hawaii could be gained. The following conclusions were reached from this examination:

1. Projects adhering to the Zeilenbau plan and the international style of architectural design included: Palolo Valley Homes and Kalihi Valley Homes. Certain buildings in Palolo Valley Homes and Kalihi Valley Homes had been remodeled in a post-modern style and these were deemed not significant for lack of design integrity. All the remaining buildings in these three projects were considered to be good examples of their type and style. Both Palolo Valley Homes and Kalihi Valley Homes still retain their original windows. Palolo Valley Homes' units also retain their original kitchen designs including the stainless steel sink and counter tops, and also retain much of the original flooring. The rear laundry areas at Palolo Valley Homes have been enclosed. Kalihi Valley Homes' units also retain their original stainless steel sinks and counter tops. In addition, housing projects following the Zeilenbau plan examined in previous studies, most notably Mayor Wright Housing and Kuhio Homes, were considered to not meet the criteria for listing in the National Register of Historic Places. As a result, the non-remodeled buildings at Palolo Valley Homes and Kalihi Valley Homes appear to best retain their historic integrity and were evaluated as the criteria for listing in the National Register of Historic Places as excellent examples of public housing in Hawaii to follow the Zeilenbau plan.

2. Seven projects were identified as embracing the informal, garden city, suburban planning precepts. These included: David Malo Circle, Hui o Hanamaulu, Kapaa, Eleele Homes, Kalaheo Homes, Punahele Homes, and Koolau Village. Koolau Village was remodeled in accordance with post-modern design and was determined to have lost its integrity and does not meet the criteria for listing in the National Register of Historic Places.

   David Malo Circle, although it can be considered the work of a master and possesses distinctive double pitched hipped roofs, has had a number of alterations in addition to the application of T-111 to its exterior walls. On the interior the kitchens and bathrooms have been remodeled, also, more recent jalousies have replaced the original

windows. All interior doors are non-historic, and the bedroom closets have no doors.

In addition to the application of T-111 to their exterior walls, the four projects surveyed on Kauai also had other alterations to their units. Hui o Hanamaulu, has had its units completely gutted and remodeled and the windows replaced with more modern ones. Similarly, Eleele Homes has had the windows replaced in its units, and the kitchens and bathrooms remodeled. Kalaheo Homes also had its original sliding windows replaced with jalousie windows. Kapaa has had its kitchens and bathrooms remodeled.

Punahele Homes was given careful consideration. It was constructed as an addition to Lokahi Homes (State project). T-111 siding has been applied to its exterior walls; however the character defining material on its façade is shadow block, a material utilized on a number of buildings in Hawaii during the 1960s and rarely used since. While this material can still be found on approximately a dozen buildings on Oahu, this is the only example of this material known to exist on the neighbor islands. As a result Punahele was considered to meet the criteria for listing in the National Register of Historic Places as a rare example of the use of shadow block on the neighbor islands.

3. Three projects were identified as adhering to the precepts of the perimeter block plan: Wahiawa Terrace, Kahekili Terrace, and Puuwai Momi. Wahiawa Terrace most closely adhered to this plan, modifying the plan only slightly by separating the apartment buildings to allow for the free flow of trade winds throughout the complex. In addition, the distinctive and high level of design of the individual apartment buildings was strongly considered. Furthermore, Wong & Wong are considered master architects of the post-war period in Hawaii. Having designed former Chinese Consulate, Nuuanu Community Church and First Baptist Church at Pensacola and Kinau streets, this housing project reflects the firm's strong design capabilities. The distinctiveness and quality of design and layout of the housing project became its primary character defining features, thus although the interiors of the units had been remodeled and the original windows replaced with aluminum awning windows, Wahiawa Terrace is considered an excellent example of perimeter block plan public housing project adopted to Hawaii.

   Similarly, Kahekili Terrace is also considered the work of a master, Takashi Anbe. The buildings in this project reflect his design ingenuity and the modernist design quality apparent in much of his work. The individual units retain a fairly high degree of integrity with only their bathrooms and kitchens having been remodeled. The original jalousie windows have been replaced in-kind with newer jalousie windows, which is an acceptable treatment under the Secretary of Interior's standards. As such, Kahekili Terrace is considered to meet the criteria for listing in the National Register of Historic Places as an excellent example of a modified perimeter block plan public housing project built in Hawaii.

   Puuwai Momi utilizes a modification of the perimeter block plan similar in manner to that used by Kahekili Terrace. Its buildings also display a number of design variations in an attempt to make the housing project appear less institutional and visually engaging. However, its historic windows have all been replaced with bronzed anodized aluminum windows, original interior and exterior doors were replaced, and kitchen and bathrooms were completely renovated, which compromise the historic integrity of the project sufficiently so that the project does not appear to meet the criteria for listing in the National Register of Historic Places.

4. The only two high-rise buildings studied in the survey were Makua Alii and Kalanihuia. In addition both were built to address the needs of elderly housing. Both retain a high degree of historic integrity, and in addition the former won a design award from the Hawaii Chapter of the American Institute of Architects. As such both projects appear to meet the criteria for listing in the National Register as excellent examples of high-rise public housing and also as excellent examples of public housing provided for the elderly. A third elderly housing project, Pomaikai, was also included in the survey. This was a low rise apartment complex. It had its entire interiors gutted, original windows replaced, and the original corrugated metal roofs replaced with standing seam roofs. It did not appear to retain its integrity of materials, and as such was considered to not meet the criteria for listing in the National Register of Historic Places.

5. Two turn key projects were also included in the survey: Nanakuli Homes and Maili I. The latter project's buildings no longer retain their historic integrity as the walls have been clad in T-111, new windows and doors have replaced the originals, and the historic pitch and gravel roofs have been replaced by standing seam metal roofs. Also the entry has been modified by the addition of a roof over the front doorway. Nanakuli Homes remains much more intact, although it has undergone certain modifications. However, other than the kitchen and bath remodeling, most of the alterations have replaced original materials with in-kind materials. New tile floors replaced the old tile, old masonite ceilings were replaced with new masonite ceilings, the original corrugated metal roofs were repaired with new corrugated metal, and a number of the original jalousies have been replaced by new jalousie windows. Similarly the wooden steps leading to the entries have been replaced by new wooden steps. The only conspicuous new modification is the replacement of the carport's original wood posts with cmu posts. Several other turn key projects were constructed for HHA, but these were not included in this survey and were not visited or evaluated. Thus at this moment Nanakuli Homes appears to be the most historically intact turn key project, and as such is a good example of the HHA's implementation of this federal program.

As a result of this evaluation process eight of the 17 housing projects included in this survey were considered to meet the criteria for listing in the National Register of Historic Places.

HISTORY OF PUBLIC HOUSING IN HAWAII

HISTORY OF PUBLIC HOUSING IN HAWAII

Introduction

In the eyes of many observers the government of the United States has been a tentative, if not reluctant, participant in the realm of public housing, whose growth has been stunted by the real estate lobby, segments of the business community, and the media.[1] Between 1937 and 1973, approximately 900,000 federally aided, low cost units were constructed throughout the United States, and an additional 100,000 units resulted from State and City efforts. This represented approximately two percent of all housing stock in America. In comparison, by 1974, all mass housing in the Soviet Union had been built under government auspices, and in France at that time, 15% of the housing stock was public and one third of the then current production was undertaken by the government. In both Denmark and West Germany 33% of the housing was under the control of the government, unions or cooperatives, and in Great Britain 35% of the housing was governmental.

In large part, the United States' reluctance has been the result of the strong belief in private enterprise. The housing industry trade associations led by the National Association of Home Builders (NAHB) and the National Association of Real Estate Boards (NAREB) over the years led national campaigns against public housing, which they characterized as socialist and an unwarranted give-away. The persuasiveness of their arguments can be seen in the stance expressed by a 1956 Star Bulletin editorial, "Basically the business of providing homes for people is not, under the American free enterprise system, the business of government. It is the business of private capital."[2]

The history of public housing in Hawaii is one of an attempt on the part of the government to address the housing needs of persons with low income in one of the most expensive housing markets in the United States. The Hawaii Housing Authority (HHA) administers 47 housing projects which date from the period 1952-1979. Of this number nine date from the 1950s, 20 from the 1960s, and 18 from the 1970s. No pre-World War II project remains standing.

History

In response to the Great Depression the Public Works Administration (PWA) was established in June 1933 as part of President Franklin D. Roosevelt's "New Deal." With one third of the nation's unemployed being construction workers, the President hoped the PWA would help get this sector of the economy active again. The agency was charged with administering the construction of large scale, public works projects such as highways, dams, bridges, schools, hospitals, and housing, by contracting with private construction companies to undertake the work. In an effort to not only stimulate the construction industry but also improve living conditions of low income families, the Housing Division of the PWA oversaw the development and operation of publically owned housing projects in selected localities throughout the nation. Although the primary objective of the PWA was to solve the unemployment problem, through their efforts the idea of government built and managed permanent

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1 Bennett, Smith and Wright, 2006, page 19 and Fuerst, 1974, page 134.

2 Star Bulletin, May 18, 1956.

public housing was introduced to the United States.[3]

The Housing Division undertook a series of 51 demonstration projects in 36 states, as well as Puerto Rico and the Virgin Islands. These were built usually in large cities, focusing on lower income communities, where the agency hoped to replace slums with new model neighborhoods. Adopting the planning and architectural ideals of European social housing, the projects grouped dwelling units into apartment blocks. Most of these were one and two stories, although in some larger cities they reached three and four stories. They were commonly laid out on large acreage sites, and often followed the 1920s, German Bauhaus inspired, Zeilenbau plan with the apartment buildings aligned in parallel rows in an east-west orientation with their ends open to optimize ventilation and sunlight. Areas between the buildings were landscaped in an attempt to provide a park like setting, and there was a strict separation of vehicular and pedestrian traffic. The buildings themselves reflected the emerging ideas of functional modernism, and featured long, unembellished lines, flat roofs, and minimal architectural ornamentation. Such design sensibilities carried forth after the end of the PWA and would typify American public housing up into the 1960s.

Following the completion of Techwood Homes in Atlanta in 1935, some of the other pioneer PWA projects included: Harlem River Houses in New York City, Cedar Springs Place in Dallas, Langston Terrace Dwellings in Washington D. C., Carl Mackley Houses in Philadelphia, Lockfield Garden Apartments in Indianapolis, Laurel Homes in Cincinnati, and Neighborhood Gardens Apartments in St. Louis, all of which are listed in the National Register of Historic Places. No PWA housing projects were undertaken in Hawaii.

Charged with the construction of low-cost housing and slum clearance, the PWA was involved in the construction of 29,000 housing units across the nation between 1933 and 1939, a much lower number than its supporters had envisioned at the program's inception. However, the efforts of the PWA's Housing Division were augmented, and ultimately supplanted by, the passage of the National Housing Act of 1934 (Public Law 73-479, 73rd Congress), which formed the Federal Housing Administration (FHA) and the United States Housing Authority. The latter was authorized to make low interest, long term loans to local public agencies for slum clearance and construction of low income dwellings. In response to this federal program, Hawaii's Territorial Legislature established the HHA through Act 190, SL 1935.

In July 1936, Honolulu Mayor Fred Wright convened a conference to discuss low cost housing, bringing together representatives of the military, the FHA, the Honolulu Real Estate Board, City Planning Commission, City Building Department, and the Hawaiian Trust Company. All agreed there was a need for low cost housing in the city, and recognized that it could not be undertaken by the private sector without substantial government assistance, as any anticipated rental returns would not cover land acquisition and construction expenses. As a

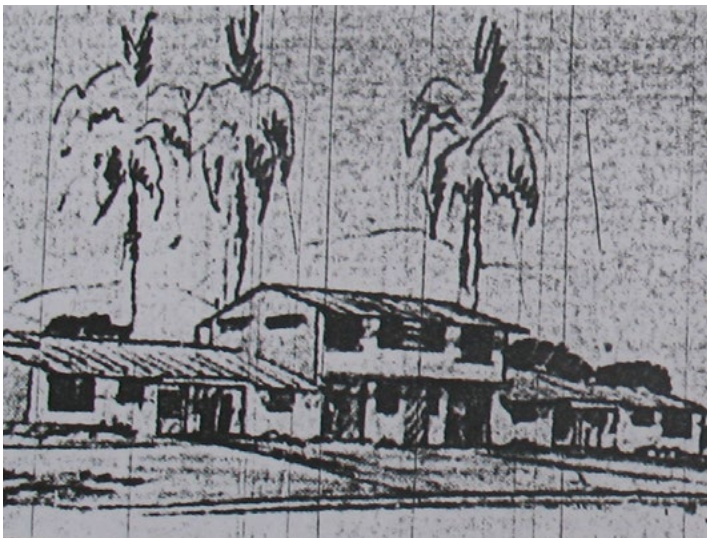
3 During World War I the U.S. Housing Corporation was formed to build, organize and manage housing for defense workers. Less than 5,000 units were produced, and immediately following the war the productive and supervisory structures for this government agency were dismantled and the housing units quickly sold.

result of the conference the mayor requested the Planning Commission to undertake a study of low cost housing needs and the possibility of obtaining government aid for such an endeavor.

The passage of the United States Housing Act of 1937 (Public Law 75-412, 75th Congress) placed public housing in the United States on a firm foundation, establishing policies and procedures which would remain in place for over 30 years. The new law established: (1) a permanent federal agency to administer subsidized housing, (2) a method for transferring federal moneys to local authorities, (3) slum clearance as a government function, (4) the principle of charging rent relative to income, (5) the principle of using federal subsidies to make up the difference between operating costs and rents paid by low income tenants, (6) the principle that planning, building and managing public housing was the responsibility of local government.

The Housing Act of 1937 also authorized the necessary subsidies to allow the HHA to begin developing public housing projects in Hawaii. With $2,400,000 earmarked for Honolulu, Charles J. Pietsch, the chairman of the HHA, began in the spring of 1938 to hire staff and distribute a housing application to determine the housing needs of the city. By August 1938 the HHA was considering the acquisition of the 14 acre site at the corner of King and Kalihi streets, a 16.411 acre portion of the site formerly occupied by Kamehameha Schools. Opposition to the development of the property for low-cost housing almost immediately came forth from the Kalihi Improvement Club, spearheaded by Hiram Fong, who claimed the project would be an “eyesore” and a detriment to the area. In response to this public criticism, Pietsch informed the press, “While opinion may differ as to the best location for our initial low cost housing project, the character of the project can certainly not be called detrimental to any particular neighborhood. . . . it is not only not going to hurt the Kalihi neighborhood but will actually be of benefit to it.”[4]

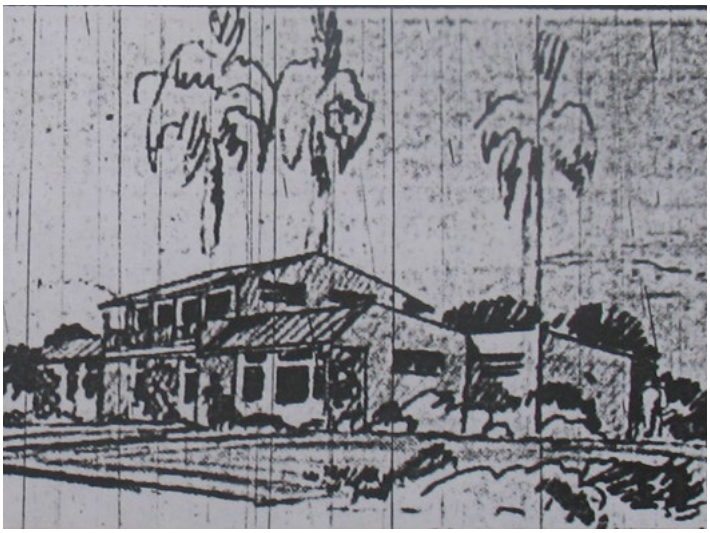
The design of the housing project supported Pietsch’s assertion. Designed by C.W. Dickey, Guy Rothwell and Claude Stiehl, with Dickey as the senior architect, the project did not follow a functional modernist approach so commonly associated with public housing, but rather adopted a Mediterranean revival style of architecture with stuccoed concrete hollow tile first stories, redwood second, and low pitched red tile gable roofs. The three, four and five room units all had lanai. The 55 one- and two-story buildings contained 221 dwelling units and were laid out in a plan which was a compromise between the garden apartment and Zeilenbau configurations with the structures placed in parallel lines along a curving roadway.



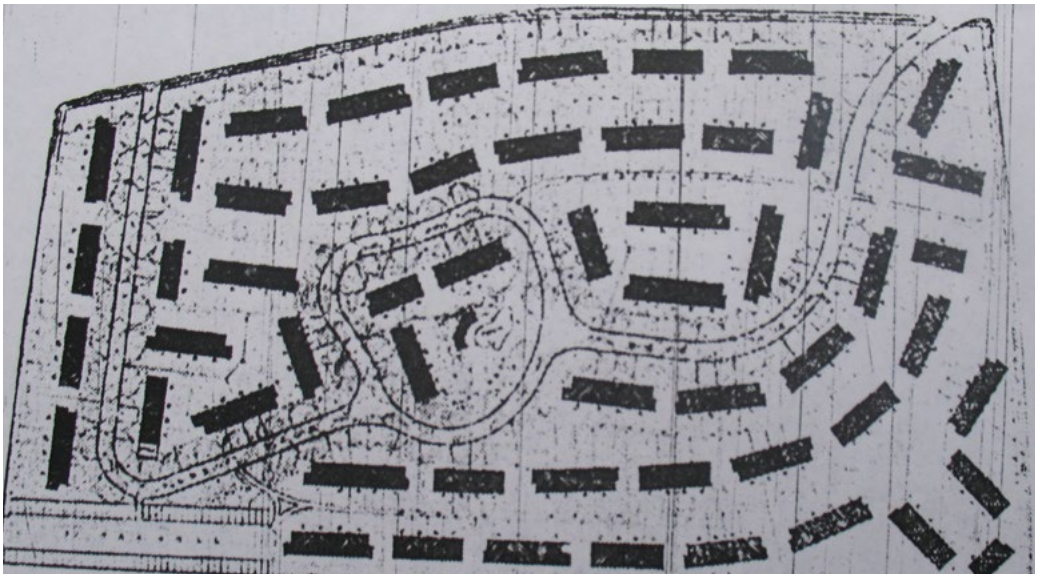
Rendering of Kamehameha Homes

4 Honolulu Star Bulletin, September 14, 1938, p. 16.

Contractor James Glover broke ground on the project in August 1939, and in early 1940 the HHA commenced accepting tenant applications. The agency successfully obtained authorization from the United States Housing Authority to include aliens in the pool of applicants to be considered, thus establishing a national policy on this matter. At the end of June 1940, the Kamehameha Homes (no longer extant) was dedicated and in mid-July opened as Hawaii's first public housing project. The 56 one-bedroom units rented for $9 to $16/month, the 129 two-bedroom units for $10 to $17 /month, and the 36 three-bedroom units for $10 to $18/month. In addition tenants had to pay for gas and electric, which was set at $4.30/month for one-bedroom units, $4.70/month for two-bedroom, and $5.05 for three-bedroom. There was no charge for water. C. W. Dickey, speaking at the dedication of the housing alluded to their quality and affordability by noting, "Many of the homes could be placed at Waikiki and rented for three or four times as much as charged by the authority."[5]



Rendering of Kamehameha Homes



Kamehameha Homes Plan

The housing was open to low income families living in substandard housing, defined as housing which was, "unsafe, unsanitary, over-crowded, or detrimental to morals."[6] In addition to Oahu residents, members of the U. S. Navy were allowed to apply. Due to the shortage of military housing on Oahu, as a one year, emergency measure 74 of the available units were reserved for Navy families with one or more children. The 221 families selected to live in the new development were ethnically diverse, with 45 being Hawaiian or part-Hawaiian, 27

5 Honolulu Star Bulletin, September 14, 1938, p. 16.

6 Honolulu Advertiser, June 28, 1940, page 11.

Filipino, 23 Korean, 21 Japanese, 14 Puerto Rican, 9 Chinese, and 82 Caucasian. The latter figure included Portuguese as well as the 73 Navy families. The average family size was 4.7, and the average income level was between $900-$999/year.

With Kamehameha Homes under construction, the HHA next turned its eyes to undertaking two slum clearance projects, one on Kalakaua Avenue and the other at King and Liliha streets. In July 1940 the HHA submitted plans to Washington D. C. for the Kalakaua Homes project (no longer extant). This 122 unit housing development was designed by collaborating architects Ray Morris, Roy Kelley, Vladimir Ossipoff, and William Furer, with Ray Morris as the senior architect. Intended to primarily house native Hawaiians, it was to occupy 9.33 acres of land owned by the John I`i estate. In February 1941, a contract was awarded to Hansen & Strauser to construct the project, including the housing units, roads, playgrounds, and an administration building. Following the outbreak of World War II, three of the housing units were turned over to the Office of Civilian Defense (OCD) for use by an emergency fire fighting unit in April 1942.

Planning for the Mayor Wright Housing project at King and Liliha streets was started before the Kalakaua Homes, but due to more complicated land acquisition issues did not get started as quickly. In September 1939 R. M. Towill had already completed a survey of the project area, and C. W. Dickey had been hired to draw the plans. In May 1940 the HHA obtained federal authorization to proceed with the condemnation of the 159,406 square foot property owned by the heirs of James Robinson at the corner of King and Liliha streets. One of twelve parcels to comprise the proposed Mayor Wright Homes, the Robinson property contained 26 buildings, including stores, business houses, and tenements, which the HHA planned to raze. Condemnation proceedings moved slowly as many of the Robinson heirs lived on the mainland and in Asia, and it was not until June 1941 that the HHA had $1,841,000 in hand to commence demolition and construction. The immediate start of the project was further hampered by trying to find a relocation solution for the approximately 1,500 persons who would be displaced by the clearing of the area. With the bombing of Pearl Harbor and the United States' entry into World War II the Mayor Wright Homes project was placed on hold, as was HHA's proposed Lanakila Homes in Hilo.

With the coming of World War II Hawaii was confronted with a serious housing shortage, as Honolulu saw an influx of over 100,000 civilian defense workers, while a lack of building materials and laborers brought residential construction to a virtual halt, with only 137 residential building permits issued during 1942. The housing situation became more acute in 1943, as workers continued to come to the islands, and a HHA sponsored survey estimated an additional 1,000 dwelling units were needed to ease the city's housing difficulties. The military further compounded the problem in 1944 by permitting families to join war workers.

Four evacuation camps, which the OCD had erected in Palolo and Kalihi valleys in case of another Japanese attack, were turned over to the HHA and converted into wartime public housing for several hundred families. To further try to address the housing shortage, the HHA developed emergency public housing areas in Palolo,

Kapalama, and Lanikila during 1944 and 1945, and the Federal Public Housing Authority opened Kalihi War Homes with its 248 units in February 1945. In addition, the Federal Public Housing Authority started to build another 1,000 dwelling units in Manoa, but these were not completed until 1946, after the war was over. Members of a Congressional subcommittee which came to investigate Honolulu's housing situation in March 1945, learned of "hot bed apartments" where as many as 18 men occupied one room in three shifts. The sub-committee found that adequate housing had not been provided for approximately 60,000 of the 107,679 civilian newcomers who came to Hawaii during the war.[7]

The conclusion of World War II did not result in an end to Honolulu's housing problem. Between 1940 and 1946, the city's population jumped from 179,326 to 267,710, while only 15,920 building permits for dwelling units were issued between 1936 and 1946. During the same ten year period, the board of health issued 34,333 marriage licenses for Honolulu. During 1947, the City issued 3,110 building permits for dwelling units, but the population of Honolulu increased by 1,203, and the number of weddings jumped to 4,017.

With the conclusion of World War II, three of the evacuation camps, Kalihi Evacuation Camp, Kalihi School Camp, and Palolo School Camp, were closed as they were deemed unsatisfactory for occupancy. The Palolo Evacuation Camp adjacent to the 362 unit emergency housing project in Palolo remained in operation. In 1946 the HHA secured financial assistance from the federal government under the Lanham Act to provide 350 units in Halawa and 250 units at Hilo's Lyman Field. These primarily utilized surplus Navy barracks and the families of veterans were given priority.

The Lanham Act (Public Law No.76–862) was passed by Congress in 1940 to provide federal funds for the housing of defense workers, and after the war was extended to provide housing for returning veterans. Under the auspices of this act, during 1948 and 1949 additional veteran oriented projects were undertaken at Red Hill and Manana on Oahu and Kahului on Maui. By 1948 HHA was managing 16 housing projects totaling 4,500 units on Oahu and the Big Island, including permanent homes, temporary war homes, temporary veterans' homes, and emergency homes.

With the U.S. Housing Authority mandating federally funded public housing be essentially reserved for veterans and their families, the HHA voted in April 1947 to undertake a housing project in Palolo for "civilians." Intended to provide shelter for those who could not be accommodated in other public housing because of federal regulations, it exclusively used moneys appropriated by the 1947 Territorial Legislature. In September 1949, the HHA approved architect Louis Davis's final plans for 82 one-, two- and three-bedroom units, and in January 1950, contractor J. M. Tanaka broke ground on the twenty five reinforced concrete buildings, nine of which were duplexes and the remainder quadraplexes. Built on the Ewa side of Palolo Avenue, the project had to be self-sustaining, as there would be no federal subsidy for operations. As such the rents were set at $43 for a one-bed room, $48 for a two-bedroom, and $53 for a three-bedroom, with utilities included in the rent.

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7 Ilen, pages 353-364.

Upon the close of World War II the HHA submitted a request to the federal government in December 1945 to reactivate the Mayor Wright and Lanakila projects. However, because of the critical shortage of construction materials, it was anticipated the two projects would not start in the immediate future, and indeed they did not get underway until after the passage of the United States Housing Act of 1949 (Public Law 81-171), which reactivated the federal slum eradication and low rent housing program by authorizing $1,000,000,000 in loans and grants over a 5-year period for that purpose. A part of President Harry Truman's "Fair Deal" program, the new law intended to provide, "a decent home and suitable living environment for every American family." To fulfill such a lofty goal, it was anticipated that 810,000 low income units would be built nationwide over six years, or 135,000 units per year, starting in 1950. In addition to providing funding, the law required housing authorities to coordinate with local planning agencies on the location of their projects, and also stipulated that within five years after the completion of a public housing project, an equal number of substandard dwellings had to be removed. A substandard house was one that had no flush toilet, or lacked a bathtub, or was in need of major repairs. For new housing upper limits were placed on per unit costs, and the law explicitly stated, "in no event may a project be undertaken which is of elaborate or extravagant design or materials."[8]

In the spring of 1950, a time when Honolulu's housing market had only a 2.4% vacancy level, the HHA obtained authorization to reactivate the Mayor Wright Housing project. The approximately 16 acre site had been acquired by the Territory prior to the start of World War II, and some of the property had been cleared. However, a number of the tenements, containing 312 housing units, remained in use throughout the war and had to be demolished and their occupants relocated before construction could commence. The original project plans by C. W. Dickey were discarded, and Law & Wilson prepared new plans. These called for the construction of 36, two- and three-story, masonry buildings to house 365 units, ranging from one- to five- bedrooms in size. In May 1951 Hawaiian Dredging was awarded the contract for the project, and ground was broken on August 13, 1951. The modern style apartments were laid out in a modified Zeilenbau configuration, with most of the buildings sited in rows parallel to each other, with some of the structures near the periphery positioned perpendicular to the others. By August 1952, 166 of the units were ready for occupancy and as more were completed they too were incrementally occupied, with the project being finished by the end of the year. A distinct feature of the buildings was the placement of drying areas for laundry on the roofs of the buildings instead of on the ground.[9]

The HHA also received federal authorization to reactivate the Lanakila Homes project in Hilo, with a contract awarded to Hawaiian Dredging in November 1950 for 150 dwelling units, the earliest known low income federal housing project initiated on a neighbor island. However, prior to the start of this project, the HHA was active in Hilo providing emergency housing following the conclusion of the war and then again after the April 1946 tidal wave, which killed 159 people, destroyed 283 homes and damaged over 300 more. In response to the tidal wave, former Navy barracks at Lyman Field, initially intended for veterans' use, were redesigned by HHA as also were a group of billets near Hoolulu Park, which were converted into duplex apartments to ease the city's

8 "Committee on Banking and Currency, United States Senate, Summary of Provisions of the Housing Act of 1949," page 4.

9 See Mason Architects, 2006 for more information.

critical, post-inundation housing shortage.

Initially planned before World War II to be along Banyan Drive, the reactivated Lanakila project was relocated to 35 acres on Mohouili Street, as the former area began to be developed for hotel use. Designed by Hilo architect, Bruce P. Harden, the one- and two- story duplexs and quadraplexs were of reinforced concrete up to window height and redwood above, which differed from most of the HHA's postwar projects which were entirely masonry. Many of those who had sought shelter in the emergency housing were relocated into Lanakila. The new dwellings were ready for occupancy by October 1951, and by February 1952 the project was fully occupied, with 713 persons, for an average of 4.7 persons per unit. To qualify for consideration applicants could earn no more than $2,300/year.[10]

In addition to the two reactivated housing projects, the HHA submitted a request to Washington D.C. for $19million to build 2,083 low income housing units during the years 1950-1952. The U.S. Housing Authority during 1950 initially allocated sufficient funds to Hawaii to construct 800 new units, with 400 to be for Kalihi Valley Homes, 132 to be an annex to the Kalihi War Homes, and the remaining units to be constructed at an undetermined site, but most likely Palolo. The HHA expected the new housing would be used to help accommodate the families living in the Manoa Housing, as this was on leased land, and the one thousand units were scheduled to be razed and the land returned to the property owner.

However, everything did not proceed as anticipated. Within a year of the passage of the U.S. Housing Act of 1949 and President Truman's lofty proclamation of constructing 135,000 new low cost houses a year across America, the Commander and Chief ordered a cutback of 30,000 units in the United States Housing Authority's agenda. As a result of this almost twenty five percent reduction in the national program, Hawaii lost its federal funding for 268 units, allowing only the Kalihi Homes and Kalihi War Homes Annex proposals to move forward. In addition to the loss of funds, public housing also suffered a loss in quality, as cost containment became the cornerstone of public housing. Construction costs were constrained by a dollar limitation of $2,400/unit, which remained in place until 1965.

This lessening of federal support came at an inopportune time for Hawaii, as a study completed for the HHA in July 1950 disclosed Honolulu had approximately 10,507 substandard dwellings. Substandard housing was defined as either being a dilapidated dwelling or one that either had no hot and cold running water inside the unit, or no tub or shower for exclusive use of the occupants, or no private flush toilet for the exclusive use of the occupants. The most prevalent deficiency was the lack of hot running water, which was found in 68% of the substandard dwellings. Sixty percent of the units were judged to be dilapidated. In January 1951 the HHA and the Honolulu Rent Control Commission announced that Honolulu was facing a housing shortage as critical as during the war. The two agencies noted that housing starts were not keeping pace with the rising population, and the price of dwellings was escalating, pricing a number of people out of the market. This situation continued into

10 See Mason, 2006 and 2010 for further information.

1952, with rent control administrator William E. Miles claiming in June of that year that urban Honolulu needed an additional 9,000 dwellings. Construction costs continued to escalate, as in 1950-51 40% of the residential building permits issued were for dwellings costing over $13,000; while by the following year that number jumped to 82% of the permits. By April 1953, the HHA had a waiting list of 1,850 applicants desiring housing.

In an effort to further address the housing shortage, in February 1951, the HHA moved forward on another strictly territorial funded project, on the site of the Lanakila Emergency Housing near School Street in Palama. Designed by Edwin Bauer, the project featured 28, four- and five-bedroom, one and a half bath units, to address the needs of larger families. This action was in part catalyzed by a January 21, 1951 Honolulu Advertiser report on housing conditions in Kalihi, which included the discovery of a family of 12 living in an abandoned Army latrine. Renting for $50/month, the former latrine had no windows or hot running water. In June 1951 the HHA awarded a construction contract to Walker-Moody for the new housing project, which in October 1951 was named Puahala Homes, to avoid confusion with the Lanikila Homes project in Hilo. The buildings were of concrete block construction.

In addition to Puahala Homes, HHA expanded Palolo Homes, by incrementally demolishing the World War II emergency housing and replacing it with reinforced concrete structures, a project that ran from 1952 to 1957 and saw 532 temporary units supplanted by 424 permanent units. As with Puahala Homes, the new housing project was designed by Edwin Bauer. Bids for the first 111 units were opened on June 19, 1952, with Walker-Moody being the low bidder. As these units received no federal subsidy, rents were higher than at the federally supported housing projects, and were initially set in a range from $50/month for a one-bedroom to $75/month for a five-bedroom. The second phase, which obtained federal funding, was completed in June 1954, and the third phase, calling for 118 units in twenty buildings, commenced in June 1956.

The 400 unit Kalihi Valley Homes, received federal approval for funding in 1951, however, due to a protracted land acquisition process, Hawaiian Dredging did not commence construction until 1952. Built on 28 acres bordering Kamehameha IV Road above School Street, which included a former piggery and slum area, the project included 45, two-story, buildings, containing an array of dwelling sizes, ranging from one-bedroom to five. The reinforced concrete, row houses were designed by Merrill, Simms & Roehrig and rendered in a modern international style with long, unembellished lines, flat roofs, and minimal architectural ornamentation, and continued the already well established Zeilenbau layout, being terraced in parallel rows. Ample parking was provided and playgrounds also were included with jungle gyms, see-saws, slides and tunnels. To be eligible for a unit a family had to fall below certain income requirements and also be either homeless or living in a substandard home in overcrowded circumstances. In accordance with the Independent Offices Appropriations Act of 1952 passed by Congress, the signer of the lease had to be a U. S. citizen, this requirement, as well as the living in substandard housing, was waived for veterans and armed services personnel. The project opened in November 1953, and for its time was the Islands' largest permanent, low rent public housing project. John G. Melville, the regional director of the Public Housing Administration, spoke at the formal dedication ceremony in

February 1954, and asserted, "that decent homes are training grounds for better citizens and make for better Americans. He pointed out that Communism, which feeds on dissatisfaction, filth and over-crowded living conditions, wouldn't have a chance to breed in wholesome homes."[11] On average, the units rented for $34/ month, thanks to a federal subsidy.[12]

On the eve of the formal dedication of the Kalihi Valley Homes, the Star Bulletin editorialized:

> The principle of government housing of this type is by no means universally accepted. It has been attacked as unfair competition with private enterprise. It has been attacked as 'creeping socialism,' and it has been attacked as government paternalism.
>
> But the fact remains that when the Federal housing program was initiated, private enterprise was not meeting the need for this type of accommodations, and, in many instances, could not meet it and make a profit.
>
> Consequently, supporters of public housing insist, the government was not competitive with private enterprise, but was providing a public service not otherwise available and clearly within the public welfare provisions of the Constitution.
>
> However one regards public housing in principle, there is no question that the housing projects which have been carried through here since the war have been popular with tenants.
>
> They are a boon to poor families.
>
> They have relieved a critical housing shortage and have brought us to the point where we can take a long-range look at our housing needs and perhaps turn more of the job over to private enterprise. That certainly needs to be done.[13]

An additional qualification for residing in low cost housing emerged in 1953, in response to the wave of anti-Communist sentiment sweeping the nation, in part engendered by Senator Joseph McCarthy. In accordance with an amendment to the Independent Offices Appropriation Act of 1952 introduced by Republican House Representative Ralph W. Gwinn of New York, "no housing unit constructed under the U. S. Housing Act on 1937 as amended shall be occupied by a person who is a member of an organization designated as subversive by the U.S. Attorney General." Following this federal directive, existing tenants of Kamehameha Homes, Kalakaua Homes, and Lanakila Homes, and future applicants for Mayor Wright Homes, Kalihi Valley Homes, and Kuhio

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11 Honolulu Advertiser, February 27, 1954.

12 See Mason, 2010 for further information

13 Star Bulletin February 25, 1954.

Homes, were required to sign loyalty oaths.[14]

In May 1952 the Federal Public Housing Authority agreed to turn over to the HHA the Manoa War Homes, Hilo Veterans' Housing and the Kalihi War Homes. In addition to purchasing the lands on which the latter were located, the HHA also commenced condemnation proceedings for nine acres of nearly vacant land adjoining the site, on which HHA intended to construct an annex to the Kalihi War Homes. Renamed Kuhio Homes, Pacific Construction Company was awarded the contract to build the 134 unit housing project in January 1953, and in 1954 the project with its 21, two-story masonry buildings opened. They featured slab roofs and hollow tile partition walls, both of which had proven to be satisfactory in Mayor Wright Homes. Bauer was again responsible for the design.[15]

With the election of Dwight D. Eisenhower as president in November 1952, and the Republican Party controlling both houses of Congress, the glowing future for low cost public housing in America was all but extinguished for the next several years, with a nationwide average of less than 20,000 units/year being built between 1954 and 1956. Appropriations for public housing were substantially reduced, and in September 1953, the President established an Advisory Committee on Government Housing Policies and Programs, under Executive Order 10486. This advisory committee placed a larger priority on urban redevelopment than low cost housing, and this new emphasis became the core of the Housing Act of 1954 (Public Law 83-560). Whereas the Housing Act of 1949 included an urban redevelopment component to eliminate slums, these slums were defined as predominantly residential in character, and were to be redeveloped for residential use. However, the new law, which called for "urban renewal" by name, broadened the objective to eliminate urban blight and only required the construction of low income housing to accommodate those families displaced by the urban renewal project. The new law further required a community to have a workable program for the prevention and elimination of slums and blight as a prerequisite for Federal assistance for public housing and urban renewal. As a result during the ensuing years, in many parts of the nation, this new direction resulted in the removal of poor people from their homes, and the construction of higher scale projects which proved profitable to speculators, and yielded a higher per square-foot tax revenue base for the city. As a result, in the ensuing years, the Honolulu Redevelopment Agency (HRA) would come to the fore in providing such low and moderate income housing projects as Queen Emma Gardens and Kukui Gardens, both of which were respectively designed by nationally known architects Minoru Yamasaki and Caesar Pelli,. These urban renewal projects were constructed and managed by the private sector aided by government incentives and powers of condemnation. This agency was also responsible for the partial demolition of Chinatown and the more intense development of the areas mauka of Beretania Street.

In April 1955, the HRA announced Honolulu had 100,428 dwellings, the most the city ever had, thanks to a record high annual increase of 4,543 new dwelling units over the past year. Yet despite this expansion in

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14 Honolulu Star Bulletin, November 25, 1952 and November 22, 1955.

15 See Mason, 2010 for further information.

housing stock, the supply could not keep up with demand, and the newspapers reported housing over the past year had increased at a rate of 3.9%, while the population of Oahu had increased by 7.1%. As a result during 1955 Honolulu had a 1.7 % vacancy rate for rental properties and 1.3 % for all housing. In comparison in June 1954 the rate had been 4%, and in mid-1952 2.4%. In large part the higher demand for housing resulted from an influx of military personnel to Hawaii, commencing in September 1954 with the stationing of the 25th Division at Schofield Barracks, more than doubling the population of Wahiawa. The stress placed on Oahu's housing market by the armed forces was not relieved until the implementation of the military's Capehart housing program in 1959, which added approximately 5,000 new housing units.

In addition to the increased military presence, other government projects also increased the demand for housing on Oahu. In July 1956 it was anticipated that over the next four years the expansion of Honolulu Airport, construction of such highway projects as the Lunalilo Freeway and Vineyard Boulevard, and the elimination of wartime emergency housing, including those in Manoa and Palolo valleys, would combine to displace approximately 4,700 families, with approximately one third considered to be low income, and another third in need of some sort of assistance to be relocated without undue hardship. The Star Bulletin in May 1956, editorialized,

> Not all, but most of the [housing] need is for low rent housing, the very type that private subdividers and builders have usually passed up in favor of the more lucrative commercial and deluxe residential construction.
>
> The field of low rent housing has been left entirely to the Government. And the Government is not in a position now to meet the new crisis---it needs not only money, but probably new legislation to cope with the problem. . . .
>
> There is a challenge to private industry to move into housing on a "supermarket" scale---that is, on a big volume, small unit-profit basis. . . . This would, of course, be preferable to any government program. The government is in the rental business only because private enterprise has failed to meet a need.
>
> Honolulu's critical housing shortage could be the means of stimulating an unprecedented building boom. But it is first of all an impelling social need, and one to which every government and private agency should apply itself diligently and immediately.[16]

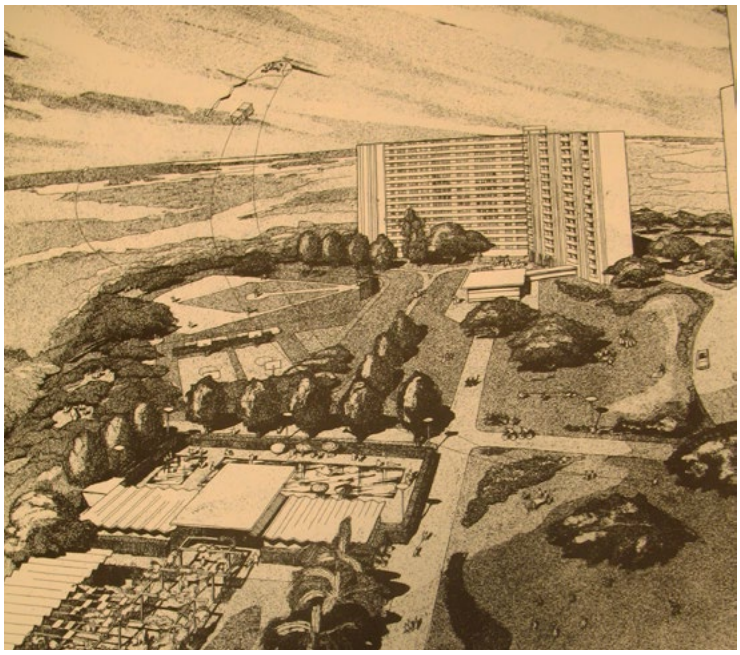
The newspaper editor correctly predicted the "unprecedented building boom" which engulfed Hawaii over the ensuing decades, although the low income market would not be its aim.

Partially in response to this anticipated need, the HHA announced in May 1956, that it would build a low

16 Star Bulletin, May 15, 1956.

rent housing project between Kamehameha Homes and Kalakaua Intermediate School. Designed by Law & Wilson, this federally funded project, named in June 1956 Kaahumanu Homes, opened in 1958.[17] In addition to this152 unit project, the HHA also expanded Palolo Valley Homes by 118 units, using moneys appropriated by the Territorial Legislature. In addition, in an effort to accommodate the 420 families displaced by the airport expansion, the HHA in 1956 tried to procure the last area occupied by the Palolo Emergency Housing for its use, but this was designated park by the City and County Master Plan and the recreational needs of the area prevailed. The HHA in May 1957 also commenced planning to build a 624 unit project on 17 acres of Bishop Estate land at the mauka-Ewa corner of Dillingham and Waiakamilo, and in June 1958 the Authority proposed to build a 144 unit project off Kapiolani on lands behind KGMB near the Kapiolani Drive-In, in a portion of the lands later comprising the Kapiolani Improvement Area. The County Board of Supervisors found neither site suitable for low-cost housing and rejected the Authority's request for authorization, killing both projects. In the case of the latter, the property owner, Consolidated Amusement, was able to sway the minds of the Board of Supervisors by arguing the City master plan envisioned the extension of Rycroft from Keeaumoku to Kalakaua which would provide extremely important street frontage for commercial development and a low income housing project would cause a blight in this high-priced area. David C. McClung, the executive secretary of the A.F.L.-C.I.O. Building Trades Council, who supported the project, told the Board that "Every time you look at a site, the owners immediately pull out plans from their drawers. You can go around the Island looking for sites [for low-income housing] and you probably can get development plans for every property you look at." McClung went on to say the A.F.L.-C.I.O. was opposed to a concentration of low rent housing because it tends to pull down an area, but one project placed in a residential area will be pulled up and grow with that community.[18] The HHA's efforts to find suitable lands on which to develop housing was further compounded by federal requirements that a site be in close proximity to schools, work areas, mass transportation, utilities, and other facilities.

When Palolo Valley Housing's final increment opened in June 1957, Honolulu's housing shortage was a major issue in the newspapers, which reported stories of people getting out bid for rentals. A newspaper employee answered an advertisement offering a house for $130/month only to have the landlord inform him a Major had called and offered $200 sight unseen. The Army officer did not get the house, as someone else offered $250/month.



Rendering of Kuhio Park Terrace

At the time of this housing crisis in Honolulu, the new federal direction towards urban redevelopment relegated the construction of low income housing by

17 See Mason, 2006 , for additional information.

18 Star Bulletin, June 10, 1958.

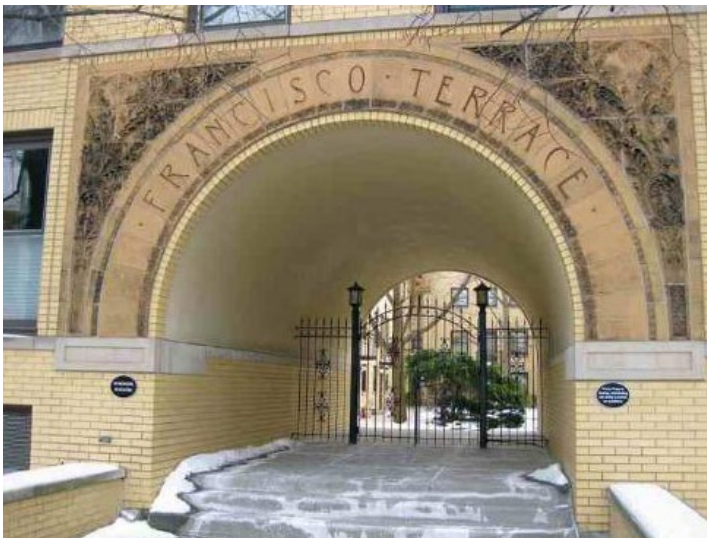
HHA to a secondary role. Primary emphasis was placed on the clearing of slum and blight, and the City's HRA moved to the fore to address the housing needs of those displaced by their redevelopment activities, which included the Vineyard Boulevard corridor, Aala Park, Chinatown,and Kauluwela. These resulted in such HRA sponsored projects as Queen Emma Gardens, Kukui Plaza, Kukui Gardens, Three-story walk-up at Kewalo-Lunalilo project opens in 1967 for moderate income families displaced by the Kauluwela urban renewal project. With the HRA addressing so much of the public housing needs of urban Honolulu, the HHA primarily turned its attention to areas of Oahu outside of Honolulu and the neighbor islands. Its last major in-town project was the 614 unit Kuhio Park Terrace, which supplanted the Kuhio War Housing, and for its time was the largest federally aided low rent housing project in Hawaii.[19] Ground breaking for the two sixteen-story, Y-shaped towers took place in April 1963 and the apartments were ready for occupancy in 1965. By 1968 HHA director Yoshio Yanagawa informed the Hawaii Senate Ways and Means Committee that the Authority was attempting to turn the building over to the federal government for military housing, as the project was plagued with vandalism, juvenile delinquency and an unusually high vacancy rate. Yanagawa told the committee that the project was too impersonal in design and ill-suited to meet the needs of low income people in Hawaii. For two years, between 1961 and 1963 both the Oahu Committee on Children and Youth and the State Commission on Children and Youth met with HHA to discourage the construction of the proposed project opposing HHA's use of high-rises for families, emphasizing that mothers could not adequately supervise children from upper floors. They also criticized, the institutional character of the project, the lack of gardens and private areas, and predicted the high likelihood of vandalism and delinquency. A report they prepared stressed that projects should not be larger than 250 units, buildings should not contain more than four units and units for families with children should not be higher than two stories. Kuhio Park Terrace would be the HHA's last high-rise project intended for families with children.

The only other in town housing project undertaken by the HHA during the 1960s was Hauiki Homes. Built on a State owned parcel, the former location of the Kapiolani Girls Home, the project exclusively used moneys appropriated by the State Legislature as the 23 duplexes were intended for families whose income levels were just above the limits established by the federal government. Walker-Moody was awarded a contract to build Hauiki Homes in February 1963, and the first families moved in during 1964. Sited about a curving roadway, with the dwellings set back from the street with landscaped lots, the project followed the garden village precepts set forth in the late nineteenth century for suburban residential neighborhoods. This shift in project design reflected the HHA's new direction, succinctly articulated in 1962 by then HHA director, Alonzo V. Sullivan, who mentioned to the press that the Authority was joining the national trend to "get away from the institutional-type look in public housing."[20]

The rural Oahu and neighbor island HHA projects would almost all reflect HHA's new approach to project

19 For additional information, see Mason, 2006.

20 Star Bulletin, September 25, 1962.



Entrance of Francisco Terrace Apartments in Chicago

design. Lokahi Homes (1962) and a second and third increment to Lanakila Homes (1961)[21] were developed with State funds appropriated in response to the tsunami of 1960 that devastated a portion of Hilo. Lokahi Homes especially well illustrated the housing agency's move away from the Zeilanbau plan and international style design with its 15 single wall, single story duplexes with corrugated metal, hip-gablet roofs sited along a curving roadway, surrounded by spacious lawns, and generous set backs from the street. In 1966-67, Lokahi was expanded using federal funds, with the new project being named Punahele Homes.

Wahiawa Terrace, the earliest known rural Oahu HHA project, also moved away from the Zeilanbnau plan, adopting instead a modified perimeter block plan. The perimeter block plan emerged in the late nineteenth century in Europe, and featured buildings constructed along the perimeter of a city block, while leaving the middle of the block open for a quasi-public, landscaped courtyard defined by the enclosing buildings. It was felt it fulfilled two seemingly opposed design goals: the desire for open space and the desire for a continuous urban streetscape. It was espoused in the Berlin tenement reform law of 1897, and implemented on a large scale in H. P. Berlage's plan of 1917 for Amsterdam South and J. J. P. Oud's Tusschndyken housing built in Rotterdam after 1918. During the 1920s the form enjoyed a brief period of popularity in central Europe as the standard model for low cost urban housing. As such its presence was felt on the outskirts of cities as far removed from each other as Berlin, Vienna, and Helsinki. In America, William Field's Riverside Tenament in Brooklyn (1890) and Frank Lloyd Wright's Francisco Terrace Apartments in Chicago (1895)had followed a similar line of thought, on a smaller scale, but the form was not widely accepted or applied in this nation.

Architects Wong & Wong resurrected a modified version of the perimeter block plan in their layout of Wahiawa Terrace by placing the buildings at the perimeter of the property and keeping the center open as a landscaped open space. Placed in a non-urban setting, there was little need to maintain a continuous streetscape, so the buildings were separated from each other, allowing the trade winds to circulate freely throughout the complex. Although employing a modern style of architecture, the buildings incorporated a rather open central core and employed bold decorative elements. The configuration of the apartments within each building was also non-traditional, utilizing side entries and only one apartment accessed on the second floor. The project was in planning phase in 1962, and completed in 1966.

Two other HHA projects also entered their planning stage in 1962, David Malo Homes and Kahekili Terrace, both on Maui and both designed by Takashi Anbe. The former followed the lead of Lokahi Homes by being duplexes

21 See Mason, 2006 and 2010 for more information.

Interior Photo of Punchbowl Home

organized around a semi-circular drive; however, the 18 unit project was constricted to a much smaller, two acre, parcel. In response to a request from the Lahaina Restoration Foundation, the HHA placed double pitched hipped, or Hawaiian style, roofs, on all the single wall buildings, despite a 25% higher cost for the roof. The latter project followed design precepts more akin to Wahiawa Terrace. Utilizing a very clean, modern design, the buildings utilized side entries for their end units, and were spaced in a manner to allow for open green space in the center of the project. Both these projects, along with Wahiawa Terrace, opened in 1966. The HHA also developed low rent housing projects in Kaneohe (1969) and Waimanalo (1968), which also adhered to a non-institutional look.

Exterior of Punchbowl Home

In addition to expanding its activities to Maui, the HHA also undertook several projects on Kauai, once Kauai County had completed its federally approved housing assessment. Opening four housing projects on the island between 1965-1967, the HHA continued its non-institutional appearance policy. All of the buildings in the four projects used redwood tongue and groove, single wall construction and featured hipped roofs with broad overhanging eaves. The 23 duplexes in the earliest of the projects, Hui o Hanamaulu, were laid out in an approximately double eight configuration. The buildings were primarily sited in groups of three, facing a curving driveway/pullout off the public street, resulting in an extremely modified perimeter block plan with large open spaces in the interior parts of the project. Eleele Homes and Kapaa sit at the peripheries of larger residential areas, and follow the semi-circular layout earlier utilized at Lokahi Homes on the island of Hawaii. The fourth project, Kalaheo Homes, only has four duplexes and is sited on a surplus remnant parcel opposite Kalaheo Elementary School, again on the edge of a larger residential neighborhood.

Another area of need for which HHA assumed responsibility beginning in the late 1950s was low rent senior citizen housing, as the Housing Act of 1956 added special provisions to give preference to the housing of the elderly. Having experienced a 20% increase in its population over the age of 65 between 1950 and 1956, Hawaii was a natural to be one of the pioneers in this area. Thus, in late 1956 planning commenced for what would eventually be called Punchbowl Homes. The project was delayed as difficulties arose in obtaining a suitable land parcel, with the State-owned site of the former Normal School at Emerson and Captain Cook finally selected. In August 1959 HHA awarded a contract to Pacific Construction Company for a seven-story, three wing building to include 96 one-bedroom apartments for the elderly and 48 two-bedroom units for low income families, with the four upper floors dedicated to the senior citizen housing.[22] When Punchbowl Homes opened in 1960, its senior citizen units were not immediately filled, as there were insufficient applicants. This was attributed to the Islands' strong tradition of multi-generational households, but over the next few years, senior citizens' attitudes towards independent living, as well as residing in a high-rise apartment, began to change.

Planning commenced for a second elderly housing project in 1965, and in May 1966 the HHA awarded a contract to Hawaiian Dredging for the construction of a 19-story high-rise building on a portion of the site used for Kalakaua Homes. At the same time the HHA initiated planning for a 20 unit senior citizen apartment in Hilo, called Pomaikai. The Honolulu project was named Makua Alii, and was dedicated in January 1968. At the time of its opening the HHA received 427 applications for the 210 units, with 75% of the applicants being women. In part, the response to Makua Alii encouraged the HHA to proceed with other high- rise buildings for senior citizens, including the high-rise apartment, Kalanihuia, which opened in 1969, and smaller elderly housing projects in Waimea on Kauai and Honokaa on the island of Hawaii.

In large part, the later senior citizens low income housing projects were facilitated by the Housing and Urban Development Act of 1965 (Public Law 89-117), which revised federal housing policy in the United States by providing several major expansions to federal housing programs. Part of President Lyndon B. Johnson's "Great Society" initiative, the new law greatly increased funding for existing federal housing programs, and added new programs to provide rent subsidies for the elderly and disabled, housing rehabilitation grants to poor homeowners, provisions for veterans to make very low down-payments to obtain mortgages, and construction of community centers in low-income areas. Four weeks after the passage of this act, the President provided housing with its own cabinet-level department, the Department of Housing and Urban Development (HUD).

HHA programs almost immediately benefitted from the increased funding. The relocation of the Halawa Emergency Housing residents for the new Aloha Stadium and the H-1 and H-3 highways and their interchanges was rising to the fore as a local housing issue. The HHA obtained in 1967 federal approval for its 260 unit Puuwai Momi project, which helped the State fulfill its pledge to provide replacement housing for the Halawa Emergency Housing tenants. Additional federal funds were used to construct the 150 unit Hale Ola housing

22 See Mason 2010 for additional information.

project (1968) , and then later Makalapa Manor. Both of these projects provided needed units for the relocation of Halawa residents.

To augment HHA's construction efforts, the Hawaii State Legislature of 1967 passed an omnibus housing law which provided $50,000 for rent subsidies to go to renters displaced as a result of HRA projects. The subsidy program allowed HHA to give landlords a subsidy of $25 to $50/month in return for their charging a specified rate for a specified amount of time. The rent subsidies were primarily aimed at those families whose incomes were too high to qualify for federally funded HHA housing, but too low to meet the prevailing rates in Honolulu. The program benefitted approximately eighty families.

The idea of government and the private sector working together to solve society's problems was not unique with the Hawaii legislature, as "public-private partnership" ideas were afloat across the nation. Marie McGuire, the director of the federal Public Housing Administration, in 1966 introduced a new "Turn Key" housing program. Under this program a private developer would approach a local housing authority with a proposed site and a building proposal which met the federal Public Housing Authority standards. Prior to the start of construction the local authority would provide the developer a letter of intent to purchase the development once it was constructed, and the federal government would provide the developer interim financing until a private source of funding was secured. Thus dwellings were built by private developers just as any other subdivision, but with the guarantee that the local housing authority would purchase the entire subdivision upon its completion. This new vehicle for the construction of low cost housing not only involved the private sector in a much greater manner, but also was designed to aid in distributing low-income families throughout the community. Through this approach lower income families would live in the same environment with families of higher income levels, which, it was believed, would elevate the life styles of the lower income families. Maile I (1969) was the first such project undertaken in Hawaii, and Nanakuli Homes (1969) followed on its success.

The turn key projects were a small indication of the new direction federal housing policy would move in the late 1960s and early 1970s. In June 1967, President Johnson formed the President's Committee on Urban Housing, better known as the Kaiser Commission after its chair, industrialist Edgar Kaiser. Appointing business executives to the committee, the President asked them to propose ways that businesses – not government – could rebuild the slums, and to find a way to harness the productive power of America to provide the basic necessities of a decent home and healthy surroundings for every American family. Catalyzed by the riots that had erupted in the Los Angeles Watts district in 1965 and the West Side of Chicago and the Hough section of Cleveland the following year, as well as those in Newark and Detroit during the summer of 1967, the Commission developed a new public housing direction for the United States based on government incentives to encourage the private sector's provision of low income housing.

The Housing Act of 1968, incorporated much of the Commission's recommendations, and profoundly altered the direction of American housing policy, by shifting production and management of low-income dwellings

decisively away from government and toward the use of private companies. It firmly established the idea of "public-private partnerships" in social policy. Until the law was passed, public housing was the nation's principal social-welfare program. In the 1960s, few federal programs used private developers to provide social housing, and those that did had produced only small numbers of dwelling units. Major features of the act included three new, major housing programs, of which the most successful was the rental housing scheme, called Section 236. It provided private developers of low-income housing with financial incentives, including subsidizing the interest rate they paid on their mortgages.

With the premise established that the private sector could provide low cost housing with the assistance of government incentives, President Richard Nixon in 1973 ordered a moratorium on the construction of government owned housing projects. In the following year Section 8 rental assistance supplanted Section 236 as the most broadly utilized government incentive, providing direct subsidies to landlords who rented their units to qualified applicants, an idea originally proposed by the Kaiser Commission. Federal operating subsidies have risen from $6.5 million in 1969 to $4.4 billion by 2009.

Over the course of the 1960s the federal Public Housing Authority had made great strides. The proportion of families living in substandard housing, that is, housing lacking indoor plumbing, was greatly reduced, dropping from 20% in 1960 to 11% a decade later.

HISTORIC PROPERTY INFORMATION

AND

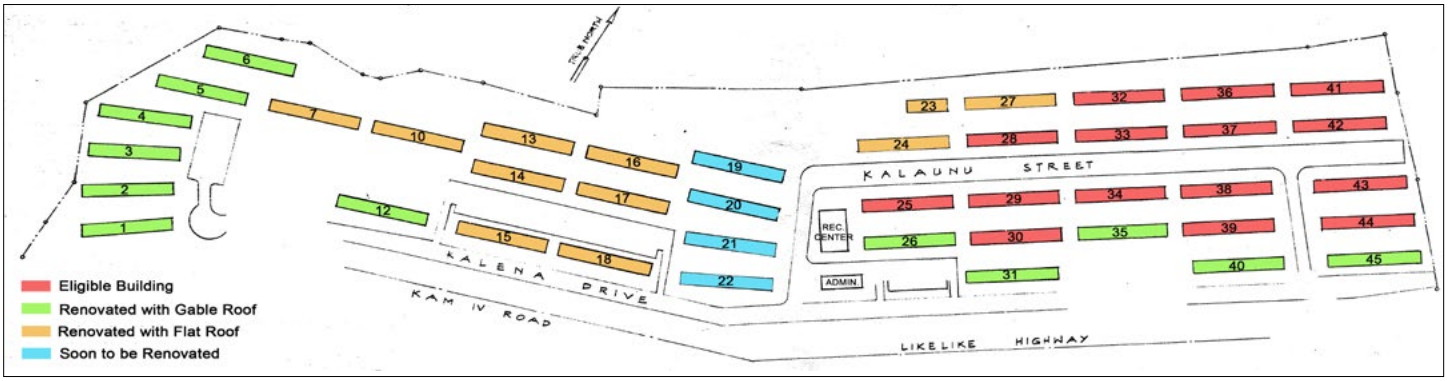
ASSESSMENT SUMMARIES

KALIHI VALLEY HOMES

KALIHI VALLEY HOMES

Project	Kalihi Valley Homes
Architect	Merrill, Simms & Roehrig
Built	1953 (Remodeled from 2000 to present)
National Register Eligibility	Buildings 25, 28, 29, 30, 32, 33, 34, 36, 37, 38, 39, 41, 42, 43 and 44
Criteria	A and C
Significance	Association with public housing and general social history in Hawaii. Intact and early example of concrete construction used for the housing project by the Territory of Hawaii, as well as the largest project at its date of competition.
Character Defining Features	Flat roof, canopies over windows and entry doors, wood framed windows with concrete block base, wood panel exterior and interior doors, and intact bathroom fixtures. Some has original building numbers. Low-rise buildings terraced on hillside.

This housing project was previously evaluated by Mason Architects in 2010, at which time 14 buildings on the property (Buildings 28, 29, 30, 32, 33, 34, 36, 37, 38, 39, 41, 42, 43 and 44) were considered to meet the criteria for listing in the National Register of Historic Places. It appears these buildings still retain their integrity and appear to meet the criteria for listing in the National Register of Historic Places. In addition, Building 25, which is contiguous with the row which includes Buildings 29, 34, 38 and 43, also appears to meet the criteria.



Site Plan Showing Eligible Buildings

Description

The 373 unit Kalihi Valley Homes are located on 24.43 acres bordering the intersection of Kamehameha IV Road and Likelike Highway. It is an enclave unto itself, with a police station and warehouse buildings as neighbors on its makai end, and a residential area on its mauka side. The project originally included 45, two-story, residential buildings, containing an array of dwelling sizes, ranging from one bedroom to five. In addition, there are an administration building and a recreation center on the property. However, three of the residential buildings have been demolished and many others substantially remodeled. The reinforced concrete, row houses are rendered in a modern style with flat roofs and concrete canopies above doorways and windows, and sits on poured-in-place concrete slab foundations. The site layout continues the already well established Zeilenbau plan, being terraced in four or five parallel rows. Because the buildings are along the slope of the valley wall, there is a view of Honolulu and the ocean from many of the apartments' upper floors.

KALIHI VALLEY HOMES

Two different remodelings have been completed at Kalihi Valley Homes, between 2001 and the present, and three buildings have been demolished. Twelve buildings have been altered by adding standing seam metal, hip-gablet roofs and porches, replacing the windows and doors, adding sliding glass doors at the rear of the kitchen, and renovating the kitchens. Another 13 buildings, received most of the same changes; however, pitched roofs and porches were not added, leaving the flat roof profile and façade of the original buildings intact.

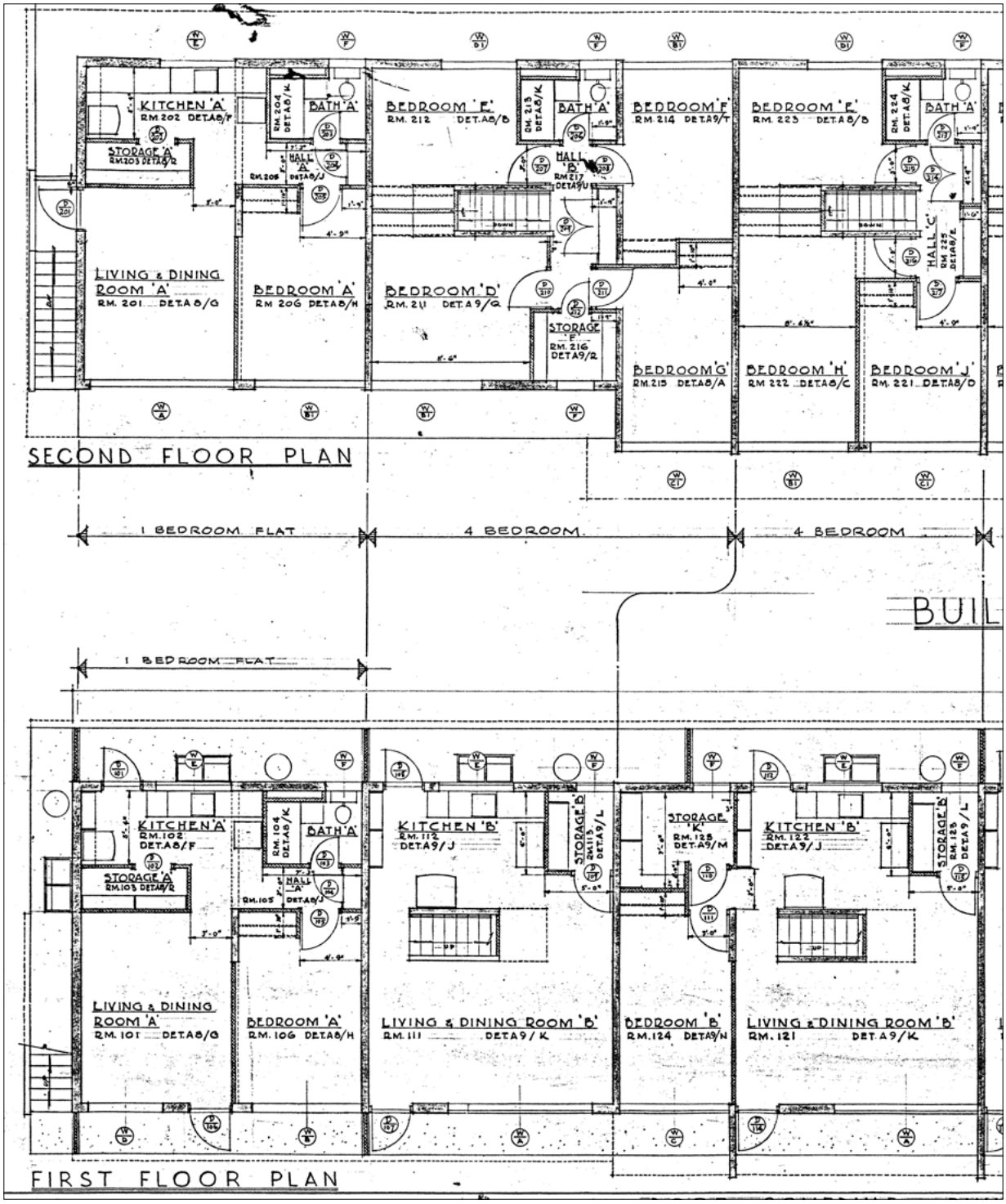
Renovated Building with Hip-Gablet Roof and Porch

Renovated Building with Flat Roof

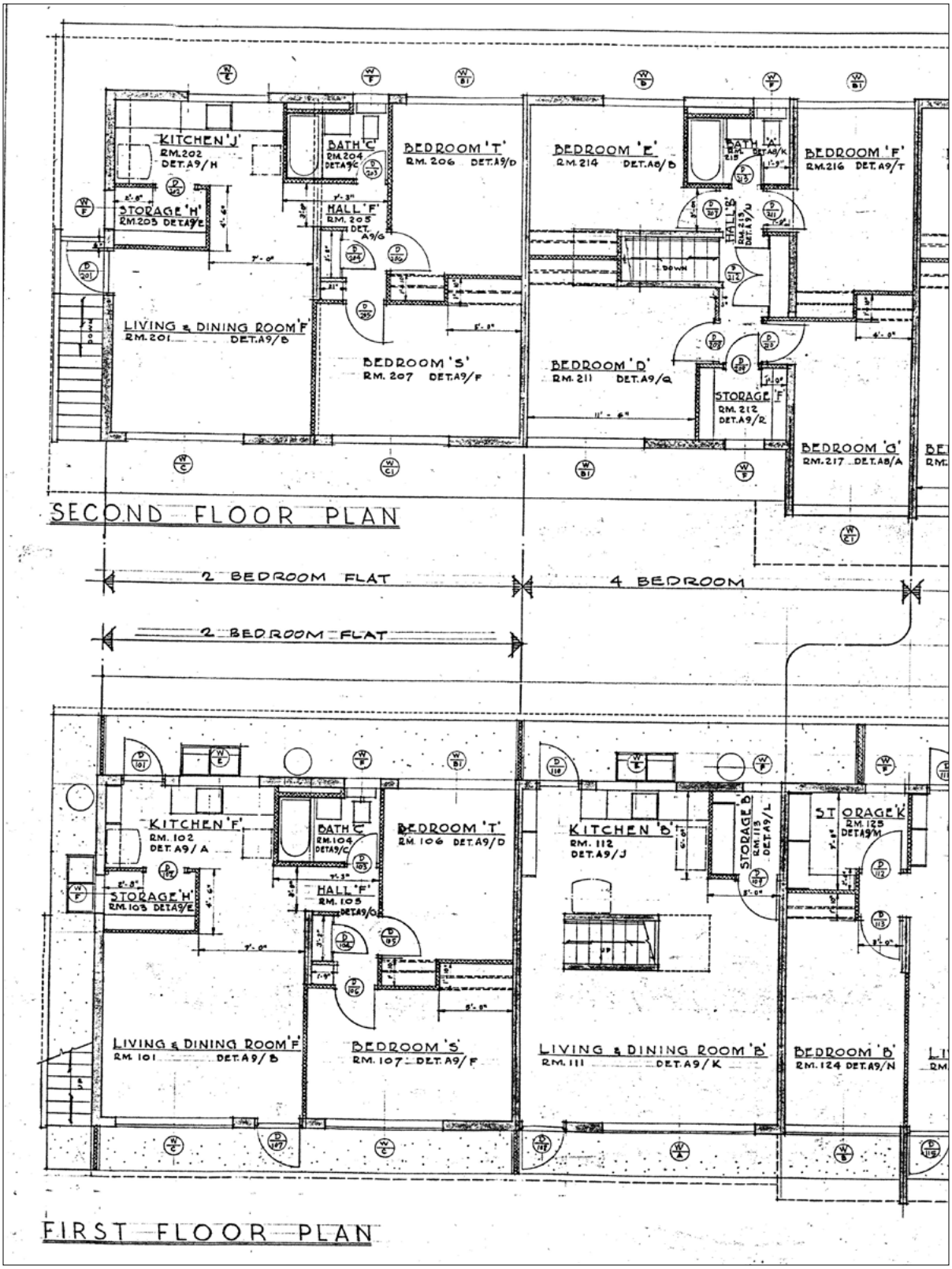
The remaining 15 residential buildings at Kalihi Valley Homes, comprised of eight Type A Buildings and seven Type B, are relatively unaltered, and remain next to each other, located above and below Kalaunu Street, with two terraced rows above and two below. A historic lava rock wall, approximately 8 feet high, retains the terrace immediately above the roadway in front of Buildings 28 and 33. Original wood-frame sliding windows with four horizontal panes remain, as do most original three panel entry doors. The sliding windows sit on a concrete block base, and a 3-foot wide concrete lanai runs the length of the façade of all the buildings, at both the front and rear. Neighboring units are separated by 3 inches wide CMU walls, with similar wing walls at the ends of the buildings.

Buildings above Kalaunu Street

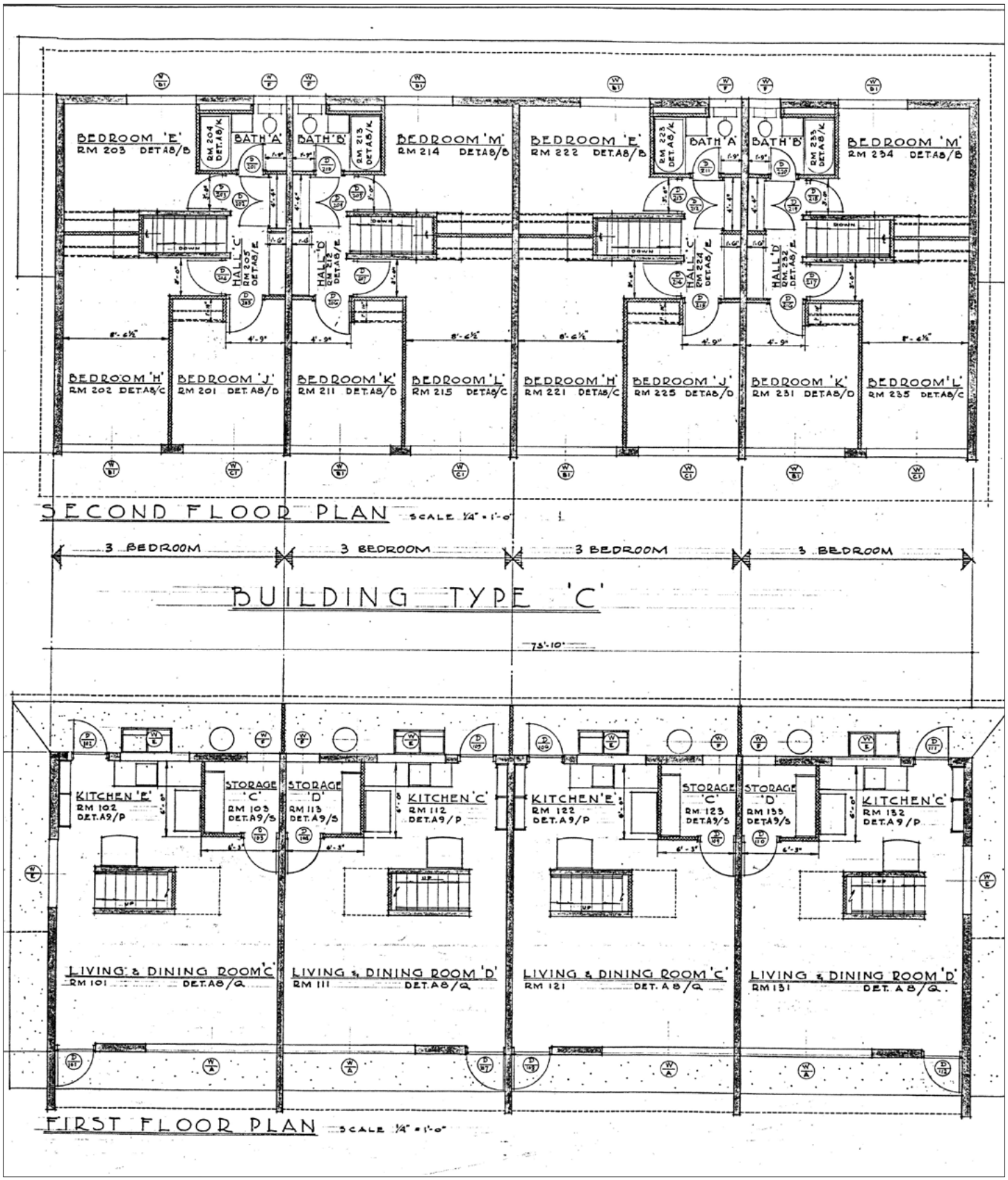
Lava Rock Wall



Building Type A Typical Floor Plan
Merrill Simms & Roehrig Architects, *Floor Plans - Building Type "A" (Kalihi Valley Homes)*, Sheet A-1, 1952, Hawaii Housing Authority.



Building Type B Typical Floor Plan
Merrill Simms & Roehrig Architects, *Floor Plans - Building Type "B" (Kalihi Valley Homes)*, Sheet A-2, 1952, Hawaii Housing Authority.



Building Type C Floor Plan
Merrill Simms & Roehrig Architects, *Floor Plans - Building "C" (Kalihi Valley Homes)*, Sheet A-3, 1952, Hawaii Housing Authority.

KALIHI VALLEY HOMES

Two different remodelings have been completed at Kalihi Valley Homes, between 2001 and the present, and three buildings have been demolished. Twelve buildings have been altered by adding standing seam metal, hip-gablet roofs and porches, replacing the windows and doors, adding sliding glass doors at the rear of the kitchen, and renovating the kitchens. Another 13 buildings, received most of the same changes; however, pitched roofs and porches were not added, leaving the flat roof profile and façade of the original buildings intact.

Renovated Buildings with Flat Roof

Building 19 to 22

The remaining 15 residential buildings at Kalihi Valley Homes, comprised of eight Type A Buildings and seven Type B, are relatively unaltered, and remain next to each other, located above and below Kalaunu Street, with two terraced rows above and two below. A historic lava rock wall, approximately 8 feet high, retains the terrace immediately above the roadway in front of Buildings 28 and 33. Original wood-frame sliding windows with four horizontal panes remain, as do most original three panel entry doors. The sliding windows sit on a concrete block base, and a 3-foot wide concrete lanai runs the length of the façade of all the buildings, at both the front and rear. Neighboring units are separated by 3 inches wide CMU walls, with similar wing walls at the ends of the buildings.

Buildings above Kalaunu Street

Lava Rock Wall

Original Sliding Windows with Concrete Block Base

Original Three Panel Entry Door

On the interiors, many original doors also remain, as well as most bathroom fixtures. Kitchens have been renovated, and an original storage room on the first floor appears to have been removed, or not constructed according to plans. The kitchens and bathrooms retain their original 1 pane over 1 pane double hung sash windows, while the living room and bedrooms feature sliding windows, in sets of either three or four windows. Most units are two floors, with kitchen and shared living/dining area at the lower level, and bedrooms and bath on the upper floor, though there are some one and two-bedroom apartments that are on one level only. The rear of each apartment (except for the one-level apartments on the upper floor) includes a lanai laundry area, which is separated from neighboring units by 3 inches wide CMU walls. Metal, T-shaped poles with clothes lines are located in the back yards.

Original Interior Door

Original Tub

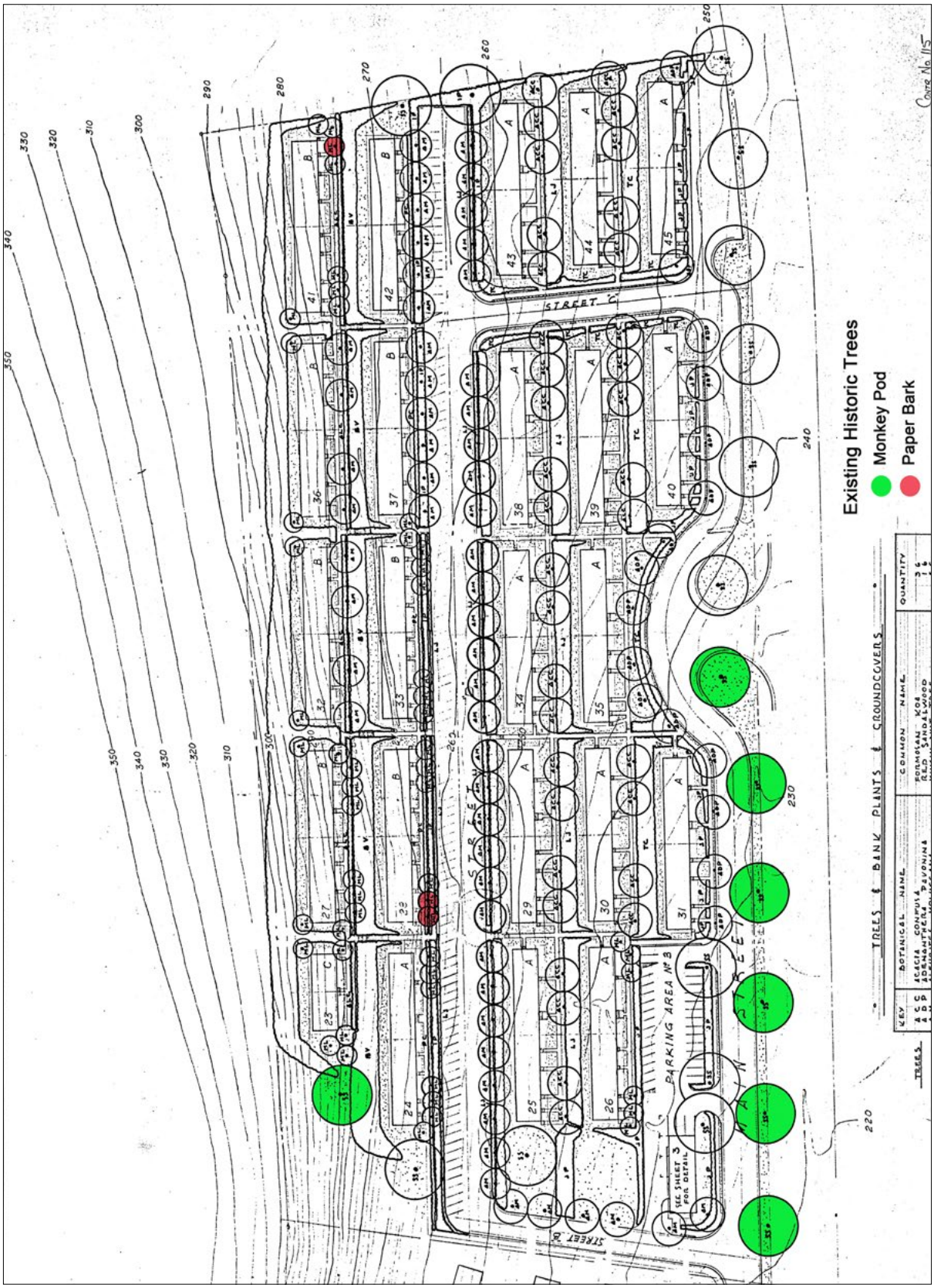
Renovated Kitchen

1 X 1 Double Hung Window at the Kitchen

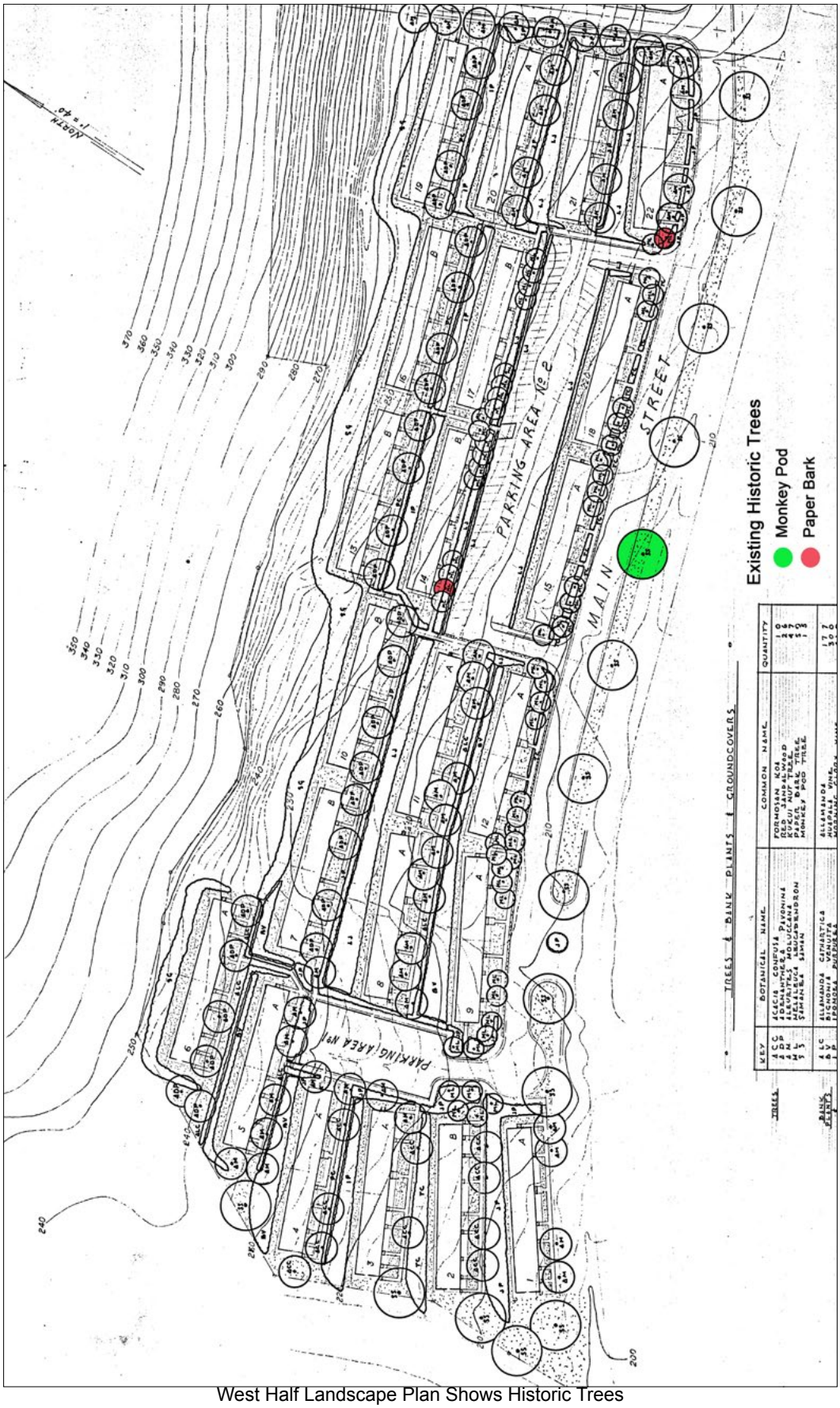
Original Building Numbers

Rear Elevation

Most of the historic landscaping in the housing area no longer exists; however, a few paperbark and monkey pod trees planted at the opening of the project still remain (see below and next page)



East Half Landscape Plan Shows Historic Trees
Merrill Simms & Roehrig Architects, Austin & Towill Civil Engineers, Lawns & Planting for East Half*(Kalihi Valley Homes)*, Sheet L-2, 1952, Hawaii Housing Authority.



West Half Landscape Plan Shows Historic Trees
Merrill Simms & Roehrig Architects, Austin & Towill Civil Engineers, Lawns & Planting for West Half*(Kalihi Valley Homes)*, Sheet L-1, 1952, Hawaii Housing Authority.

KALIHI VALLEY HOMES

History and Significance

Kalihi Valley Homes received federal approval for funding in 1951, however, due to a protracted land acquisition process, Hawaiian Dredging did not commence construction until 1952. Built on 28 acres, which included a former piggery and residential slum area, the project was designed by Merrill, Simms, & Roehrig and rendered in a modern style with flat roofs, and continued the already well established Zeilenbau layout, being terraced in parallel rows.

The project was completed in its entirety in November 1953 with an initial move-in date of August 25, 1953 for some units. The project consisted of 400 one- to five-bedroom units in 45 buildings. The structure of the buildings was referred to as "egg crate" by HHA, meaning, "reinforced concrete walls at the exterior and party walls act as beams and columns supporting the reinforced flat slabs that form the second floors and the roofs of the structure."[23] The formal dedication of the project took place on February 26, 1954.

Family Moves into Home
(HHA Annual Report for 1963/1964)

The project was designed by one of the major architectural firms in Honolulu during the post-war period, Merrill, Simms & Roehrig. William Dickey Merrill was born in Honolulu and received a BA from the University of California at Berkeley and MA in architecture from Harvard in 1932. He worked for his uncle, architect C. W. Dickey, and following Dickey's death continued the office as Merrill, Simms Roehrig. In 1959, the firm became Merrill, Roehrig, Onodera & Kinder. In 1964, Merrill retired from the firm and it became Roehrig, Onodera & Kinder with Ken Roehrig as president. The firm designed the Neal Blaisdell Center's Concert Hall, Goddard Hall at the Hawaii State Hospital, and several buildings at Kamehameha Schools. Other buildings by Merrill, Simms & Roehrig or their successors included Leahi Hospital, Puumaile Hospital, Star of the Sea School, Mid-Pacific Institute's administration building and auditorium, Hilo Library, Gateway Dorm at UH, and Hilton Hale at Kaanapali. The Kalihi Valley Homes project is a good example of the architect's use of the international style of architecture within a tropical context, and is comparable to their work at Kamehameha Schools, Mid-Pacific Institute, and Leahi Hospital.

23 HHA, Annual Report for 1953.

KALIHI VALLEY HOMES

Kalihi Valley Homes is significant at the state level for its associations with public housing and the general social history of Hawaii. The project represents the housing reform movement of the Territory and the State and is an intact, early example of concrete construction used for this purpose by the Territory, as well as being the Territory's largest housing project at its date of completion.

The major projects in Honolulu undertaken by HHA during the 1950s were Mayor Wright Housing, Kalihi Valley Homes, Kuhio Homes, Puahala Housing, and Palolo Valley Homes. Previous inventory studies concluded that neither Mayor Wright Housing nor Kuhio Homes appeared to meet the criteria for listing in the National Register.[24] The initial increments of Puahala Housing have also been remodeled and have lost their integrity. As such buildings 25, 28, 29, 30, 32, 33, 34, 36, 37, 38, 39, 41, 42, 43 and 44 in Kalihi Valley Homes, are among the best examples of low income housing constructed in Honolulu during the 1950s and have strong associations with the history of public housing in Hawaii during this period (Criterion A).

The housing area is also significant under Criterion C as its architecture is typical for its period in its design, use of materials, and craftsmanship. Following the Bauhaus inspired Zeilenbau site plan, the buildings are laid out in parallel rows with space in between to allow for ample light and ventilation. Also, the two-story, reinforced concrete buildings were constructed in a modern style typical of public housing of the period, as proclaimed by their flat roofs, horizontal lines accentuated by their flat roofed canopies, and minimal ornamentation. Their wood-frame sliding windows, and three-panel interior doors also bespeak the period in which they were constructed. Also, the bedroom closets were designed to not have doors, a common feature in public housing of the time.

Projects adhering to the Zeilenbau plan and the international style of architectural design included: Palolo Valley Homes and Kalihi Valley Homes. Certain buildings in Kalihi Valley Homes had been remodeled in a post-modern style and these were evaluated not significant for lack of design integrity. All the remaining buildings were considered to be good examples of their type and style. Remaining buildings at Kalihi Valley Homes still retain their original windows, original stainless steel sinks and counter tops. As a result, the non-remodeled buildings at Kalihi Valley Homes appear to best retain their historic integrity and were evaluated as meeting the criteria for listing in the National Register of Historic Places as excellent examples of public housing in Hawaii to follow the Zeilenbau plan.

Due to alterations, most buildings at Kalihi Valley Homes do not retain enough aspects of integrity to be considered eligible for the National Register; however buildings 25, 28, 29, 30, 32, 33, 34, 36, 37, 38, 39, 41, 42, 43 and 44 are very much intact and appears to meet the criteria for listing in the National Register of Historic Places as a historic district.

24 Mason, 2006, 2010.

PALOLO VALLEY HOMES

PALOLO VALLEY HOMES

Project	Palolo Valley Homes
Architect	Edwin Bauer
Built	1952-1957
National Register Eligibility	Eligible
Criteria	A and C
Significance	Association with the development of public housing in Hawaii and architecturally significant in typical design of the public housing in its period.
Character Defining Features	Flat roof, canopies over the windows and entry doors, concrete block wall adjoining entry doors, wood framed windows, wood framed interior and exterior doors, original building numbers, original vinyl tiles, and intact kitchen and bathrooms. Some has original building numbers. Buildings are placed immediately next each other with projections.

Landscape Architect: Donald Wolbrink

This housing project was previously evaluated by Mason Architects in 2006, at which time it was considered to meet the criteria for listing in the National Register of Historic Places. Since that time three of the buildings, numbers 16, 17, and 20 have been remodeled and no longer retain their integrity of design or materials, and do not appear to meet the criteria for listing in the National Register of Historic Places. The other seventeen buildings all appear to meet the criteria for listing in the National Register of Historic Places as a historic district.

Description

Palolo Valley Homes sits on a sloping lot on the Diamond Head side of Palolo Avenue. It is a complex of 20, two- story, reinforced concrete buildings rendered in a modern style. An over-arching Zeilenbau configuration is employed, with approximately 55 feet between the buildings. Some of the buildings are paired, being connected, with one of the two projecting outward from the other. There are four building forms utilized, all in the same modern style with a rectangular footprint, differing only in the number of units which they contain. Type A houses five units, of which two are one-bedroom, two three-bedroom, and one five-bedroom. Type B houses six units with two-bedroom, two three-bedroom and two four-bedroom. Type C has eight units, four two-bedroom, two three-bedroom and two four-bedroom. For variety, the B type building's plan is also reversed. The one- and two-bedroom units occupy only one floor, and are stacked one above the other and are placed at the ends of the buildings. Exterior concrete steps, traversing the sides of the buildings in a straight run access the second story units.

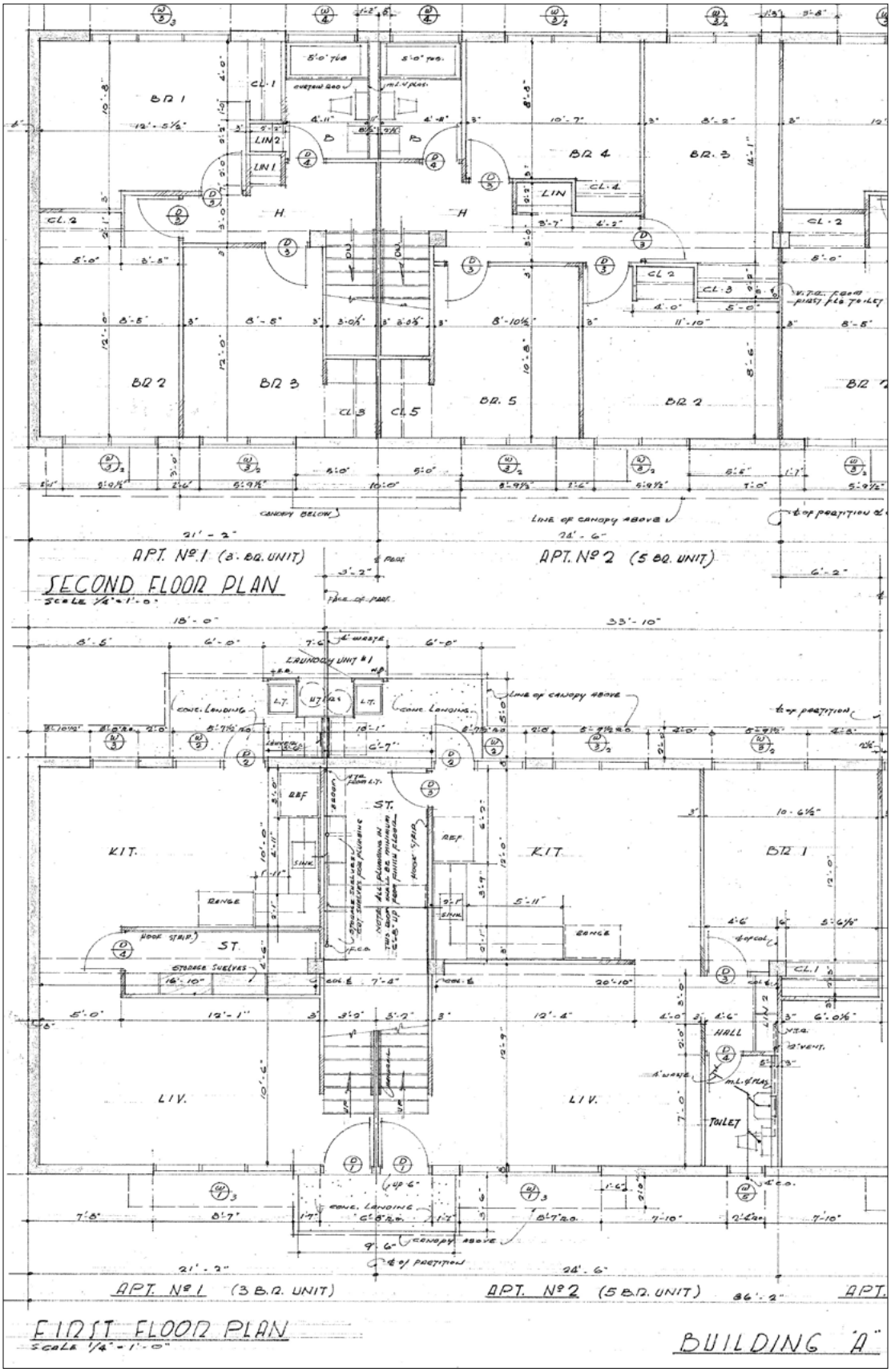
Site Plan Showing Eligible Buildings

These steps have a metal pipe railing and the landings at the top have been enclosed with concrete blocks sometime after the opening of the project. All the buildings have flat roofs with no eaves. A continuous, thin, flat roofed, reinforced concrete canopy runs continuously across the façade above the second story windows, and a similar style canopy is above the first story bands of windows and the entry doors, projecting outward above the portals. These canopies are also present on the rear elevations. The windows are 1 pane over 1 pane double hung sash, and many of the entries retain their original six-panel doors. The entries are paired, except in Type B, where the two-bedroom entry is solitary. To conform to the slope of the land, units on the uphill side of the property have lateral running, concrete steps leading to the entries. Some of these retain their original metal pipe railings, but many have been replaced by a wrought iron railing. All the first story entries are adorned with fluting incised in the concrete along the outside edge of their frames. Concrete block walls, 5.5-inche wide have been placed between adjoining doorways since the completion of the project. Some of the original building numbers, incised in the concrete walls are still evident, but others have been covered with newer metal building number signs.

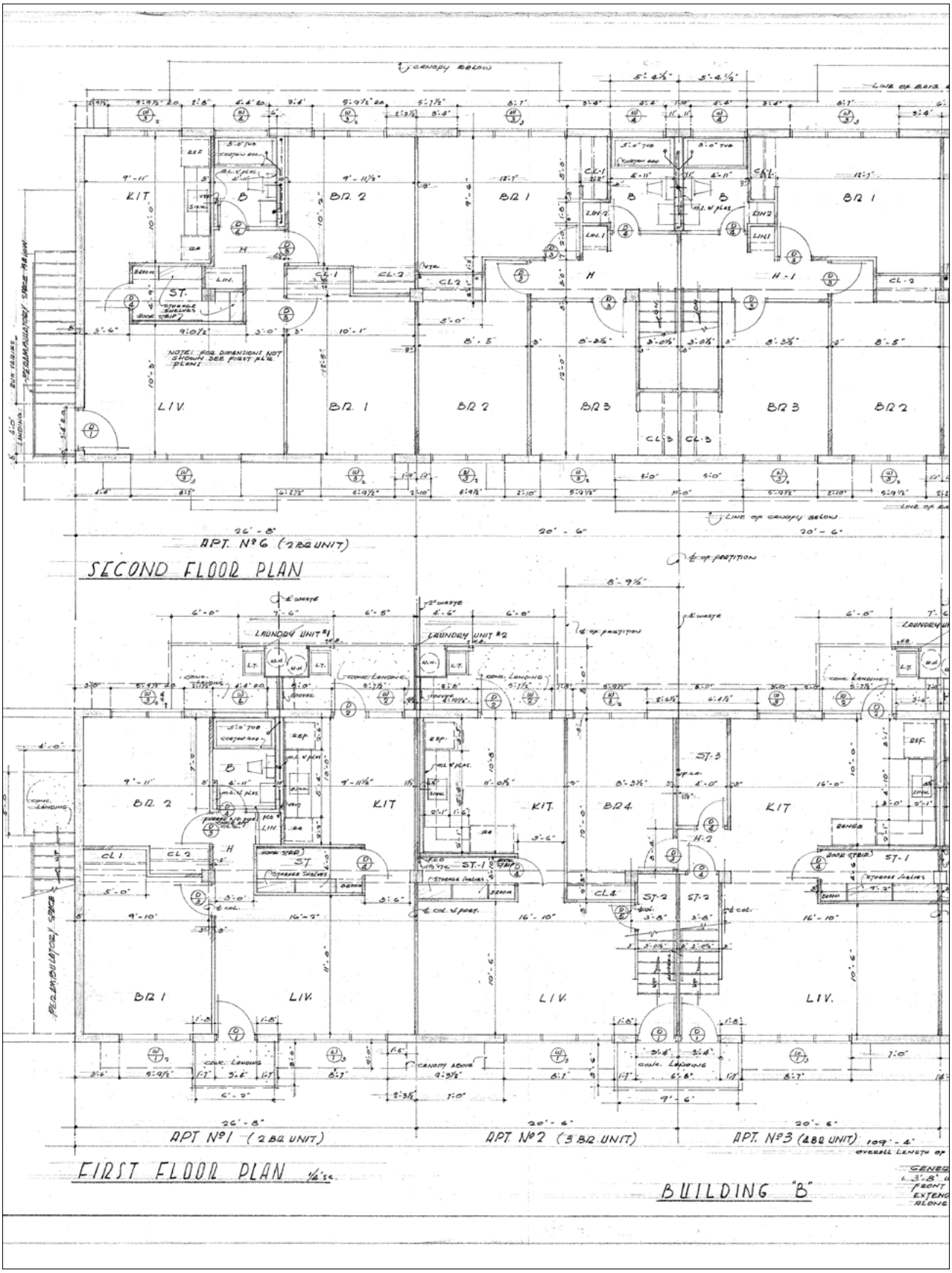
Building Type A

Building Type B

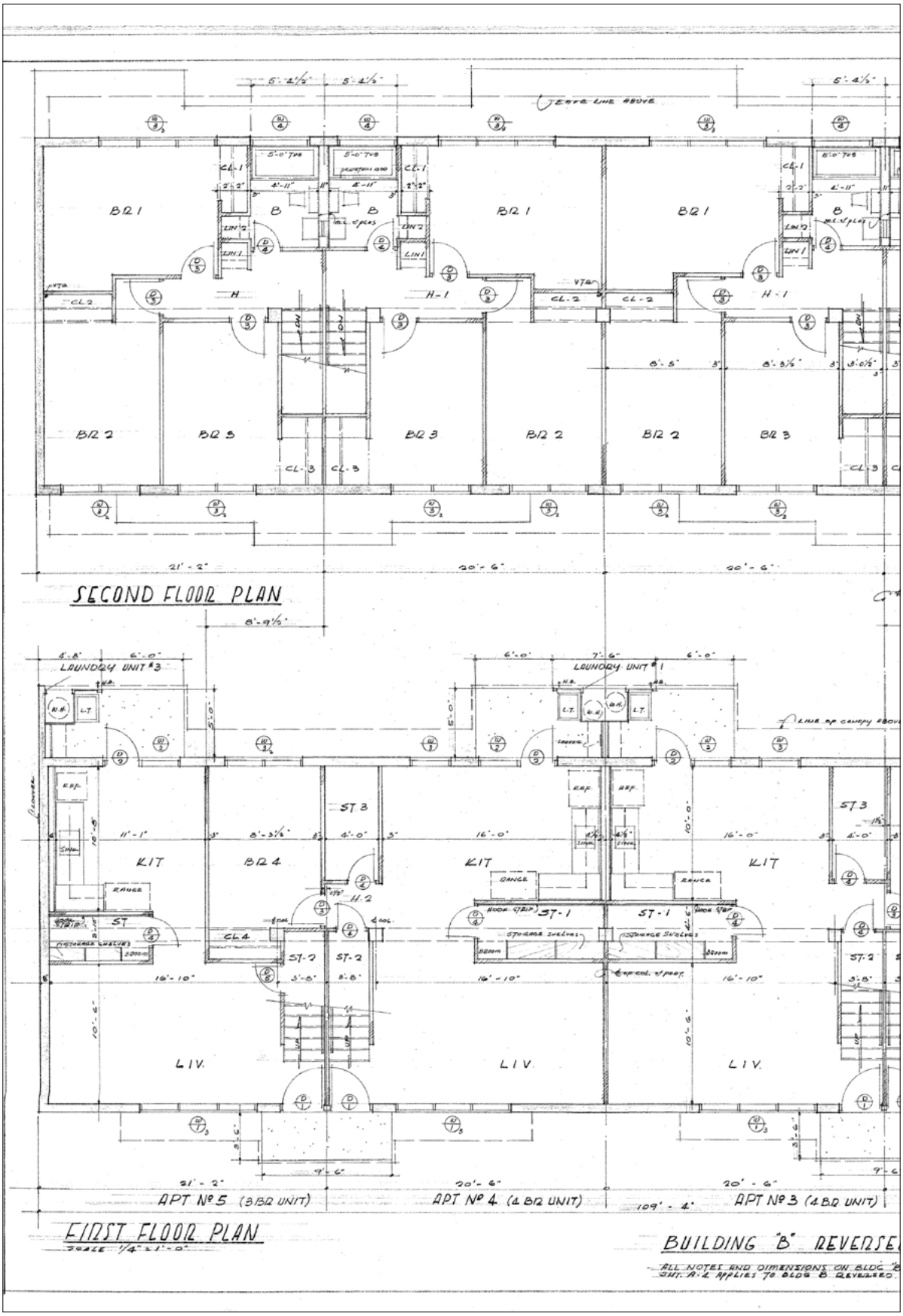
Building Type C



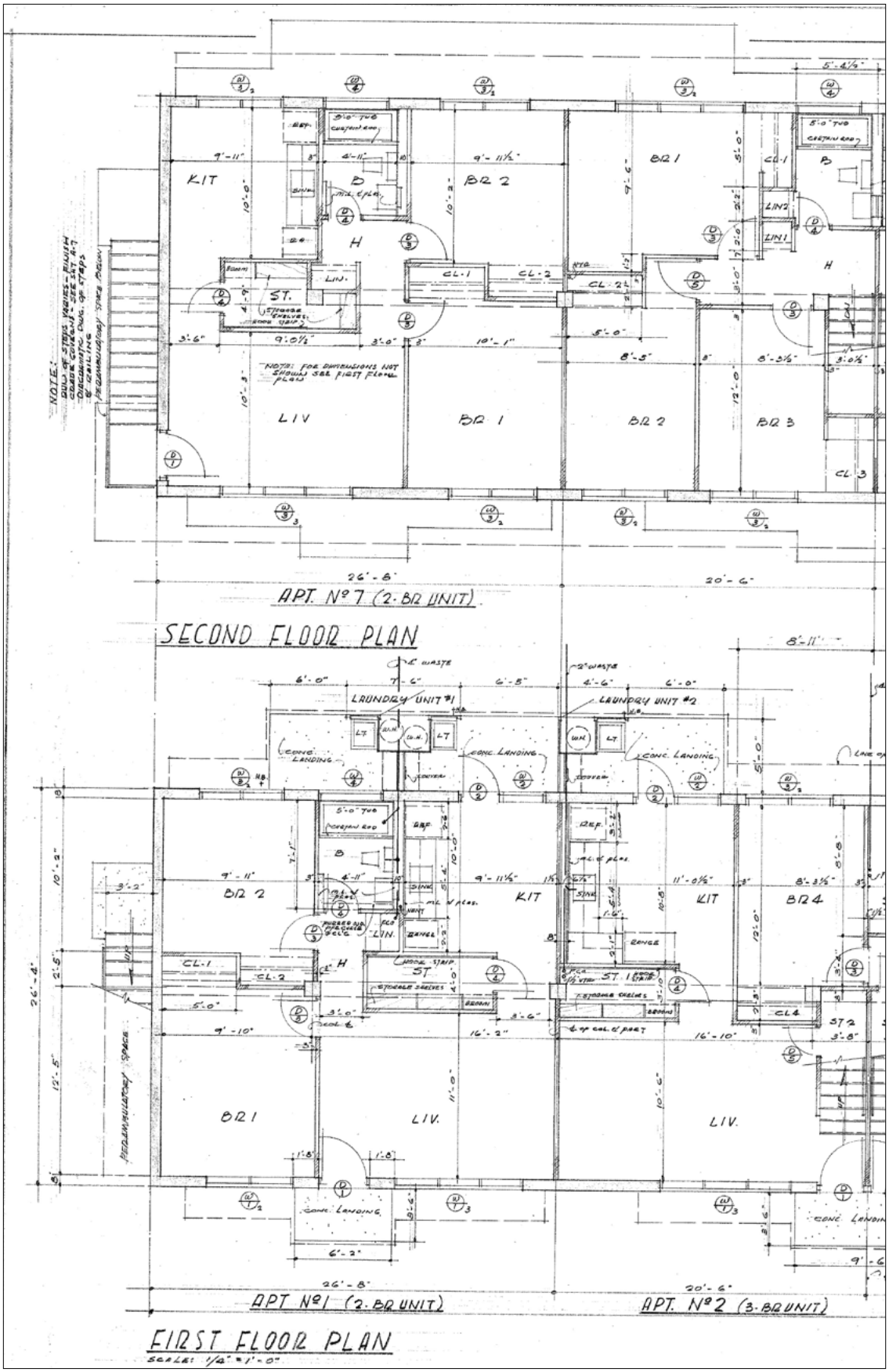
Building Type A Typical Floor Plan
Harland Bartholomew & Associates, Edwin L. Bauer, *First & Second Floor Plans, Building A (Palolo Valley Homes)*, Sheet A-03, 1956, Hawaii Housing Authority.



Building Type B Typical Floor Plan
Harland Bartholomew & Associates, Edwin L. Bauer, *First & Second Floor Plans, Building B (Palolo Valley Homes)*, Sheet A-04, 1956, Hawaii Housing Authority.



Building Type B Typical Reversed Floor Plan
Harland Bartholomew & Associates, Edwin L. Bauer, *First & Second Floor Plans, Building B Reversed (Palolo Valley Homes)*, Sheet A-05, 1956, Hawaii Housing Authority.



Building Type C Typical Floor Plan
Harland Bartholomew & Associates, Edwin L. Bauer, *First & Second Floor Plans, Building C (Palolo Valley Homes)*, Sheet A-06, 1956, Hawaii Housing Authority.

PALOLO VALLEY HOMES

The interiors of the units remain very intact. The three-, four- and five-bedroom units have two floors with living room and kitchen on the first floor and bedrooms on the second. With the larger units, one bedroom is included on the first floor. Many of the units retain their 9 inches square, brown, vinyl tile floors, although many of the floors have been patched with 12-inch square, white tiles. The ceilings are of concrete. The kitchens retain their stainless steel sinks and counter tops and their original cabinets. The bathrooms retain their tub-shower with their tile walls. Some units still have their original metal medicine cabinets and the original light above. The original sliding windows in the bathrooms have been replaced with a pair of jalousie windows. A number of single panel doors remain although new knobs are evident. The only possible original knobs were observed on the kitchen's pantry door. Interior partition walls are of 3-inch wide concrete block. Bedroom and hall closets have no doors, but rather fixtures to support curtain rods and curtains. A rear lanai off the kitchen is used as a laundry area and to house the water heater; these originally open areas have been enclosed with extruded metal mesh. The second floor units' flat roofed laundry areas are placed at the corner(s) of the buildings, and while originally of wood are now of concrete block.

Overview of the Site

Original and New Metal Pipe Railings

Original Building Numbers

Concrete Block Walls by the Entrance with Original Entry Doors

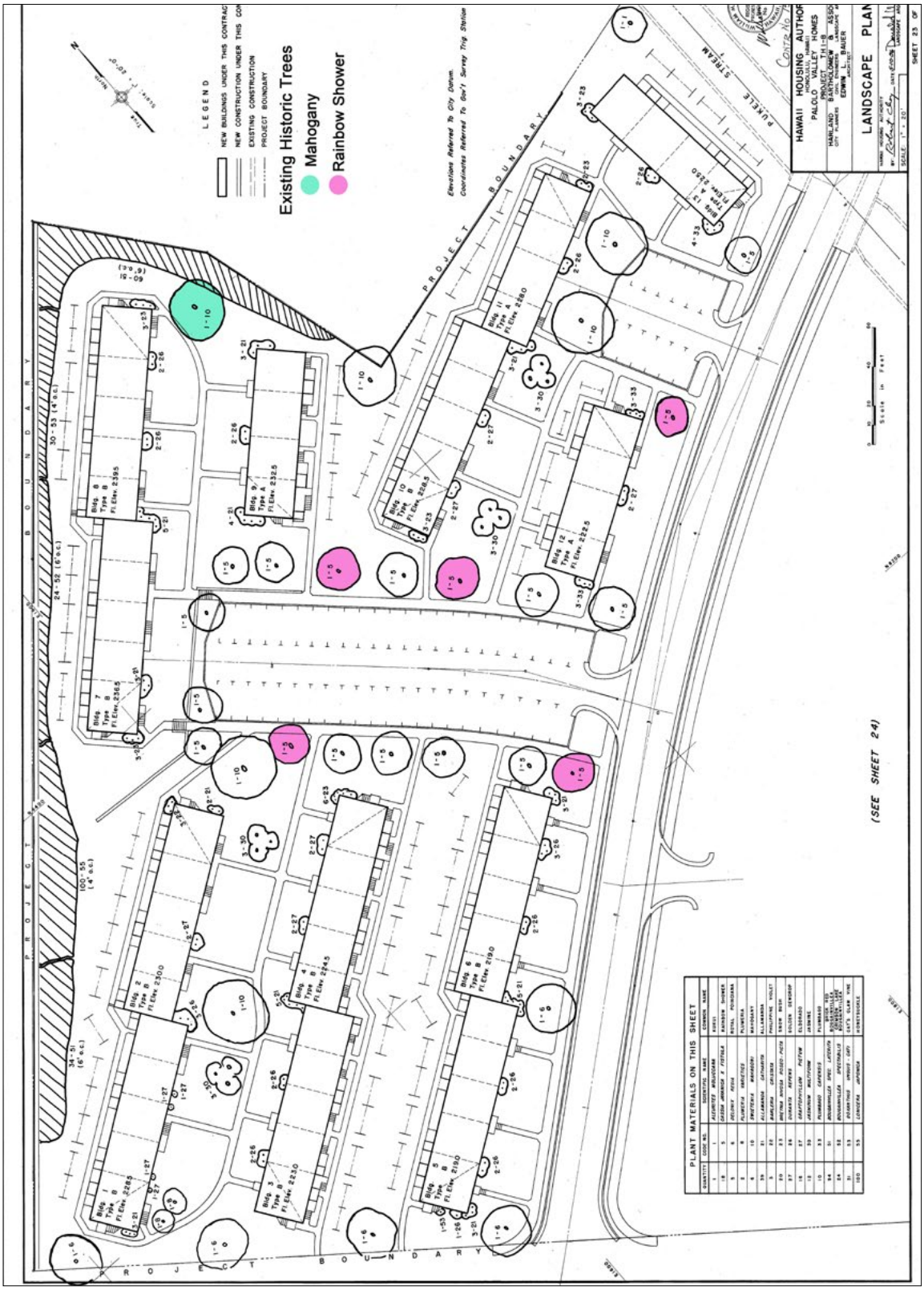
Original and New Floor Tiles

Building Type B Two Bedroom Kitchen

Original Medicine Cabinet and Light Fixture

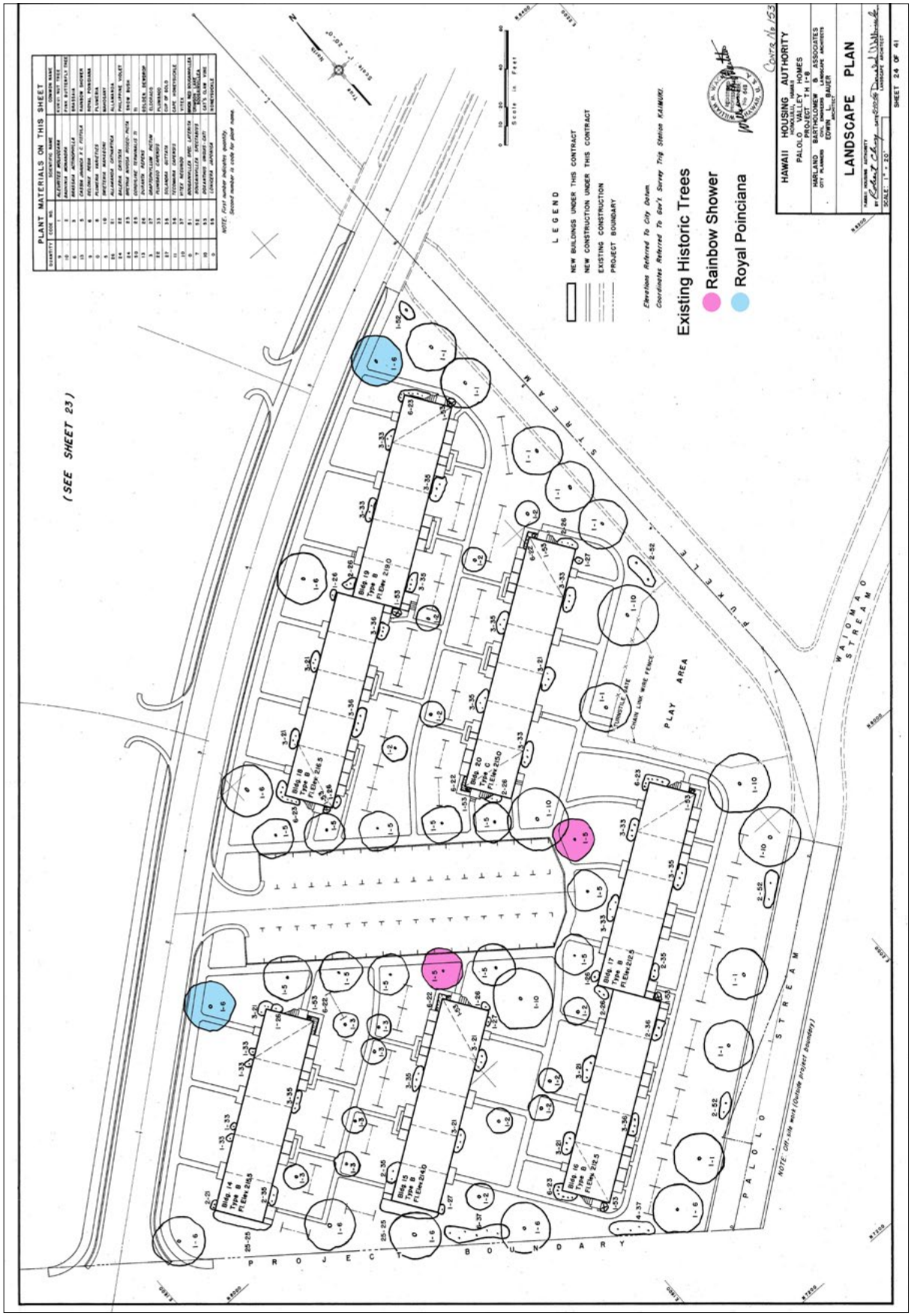
Original Door Knobs

Most all of the historic landscaping has disappeared with the passage of time from the present 6.58 acre site. However several major trees, including Mahogany and Royal Poinciana, still stand (See below and next page).



Landscape Plan Shows Historic Trees

Harland Bartholomew & Associates, Edwin L. Bauer, *Landscape Plan (Palolo Valley Homes)*, Sheet 23, 1956, Hawaii Housing Authority.



Landscape Plan Shows Historic Trees
Harland Bartholomew & Associates, Edwin L. Bauer, *Landscape Plan (Palolo Valley Homes)*, Sheet 24, 1956, Hawaii Housing Authority.

PALOLO VALLEY HOMES

The only significant alterations to the exterior of the Palolo Valley Homes have been the enclosing of the rear lanai, the replacement of the bathroom sliding windows, the enclosing of the second story unit's entries, and the replacement of the second story units' laundry areas. Some of these alterations appear to be over 50 years old and have acquired significance in their own right, and all occur on the rear of the buildings as shown in below pictures. On the interior, some of the flooring have been repaired with 12-inch square vinyl tiles and doors and door knobs have been replaced. These alterations are not sufficient to affect the historic character of the buildings in a significant manner. As such, the buildings retain their integrity of location, setting, design, materials, craftsmanship, feelings and association.

View of Front Side of Buildings

View of Rear Side of Buildings

History and Significance

Palolo Valley was the location of two of the four evacuation camps built in 1942 by the Office of Civilian Defense in anticipation of another Japanese attack on Oahu. When it became apparent a second invasion was unlikely, these buildings were turned over to the HHA and converted into wartime public housing. In addition, during 1945, the HHA developed an emergency public housing area on the Palolo Golf Course to help address the wartime housing shortage. 56, single-story, canec buildings comprised the emergency housing. Eight of the structures measured 20 feet x 108 feet with each containing four three-bedroom units. Eighteen of the structures measured 20 feet x 110 feet and housed five two-bedroom apartments, and the remaining thirty buildings were 20 feet x 118 feet and contained two one-bedroom and four two-bedroom apartments. The average apartment was 16 feet x 22 feet with a 4 feet wide lanai. Each apartment contained a kitchen sink and was wired for electricity. Sanitary facilities were at both ends of the buildings, one for men and another for women. Each had two toilets, two showers, and one sink, with laundry trays with running water located at the rear of each of the women's bathrooms. Both the walls and roofs were built of 1.5-inch canec, with the roofs further protected by rolled asphalt roofing. There were no windows, but rather screened openings. It was anticipated another 500 units would be constructed on the site, but the war ended before much of this expansion could be realized. Neither the evacuation camps nor the emergency housing remain standing, having given way to the present Palolo Valley Housing and Palolo Valley District Park.

Shaded buildings were demolished to make way for the bold oputlined buildings,
which comprised the final phase of the Palolo Valley Homes
Harland Bartholomew & Associates, Edwin L. Bauer, *Key Map (Palolo Valley Homes)*, Sheet 2, 1956, Hawaii Housing Authority.

PALOLO VALLEY HOMES

With the conclusion of the war, one of the evacuation camps, known as the Palolo School Camp, was closed as it was deemed unsatisfactory for occupancy. However, the Palolo Evacuation Camp and the adjacent, at the time 362 unit, emergency housing project remained in operation. In addition, in 1948, using Territorial funding, the HHA approved the construction of 82 one-, two- and three-bedroom units on the hillside Ewa of Palolo Avenue, with construction starting in January 1950. These reinforced concrete buildings were designed by Honolulu architect Louis Davis. These units have been remodeled and no longer retain their historic integrity and are not a part of this survey project.

In December 1951, the HHA authorized the incremental demolition and replacement of the World War II evacuation camp and the emergency housing, thus expanding the Palolo Valley Homes Project onto the lands Diamond Head of Palolo Avenue. Again, strictly utilizing Territorial moneys, the agency planned to build 111, 124 and 118 units in three phases. However, this was scaled back and the 124 unit development eliminated. The two realized phases were designed by Honolulu architect Edwin Bauer with Harland Bartholomew and Associates' Honolulu office, headed by Donald Wolbrink, handling the planning and landscape architecture. Bids for the first 111 units were opened on June 19, 1952, with Walker-Moody being the low bidder. By May 1953, ten buildings containing 55 units had been completed, with the remaining units ready for occupancy in June 1954. In June 1956, Pacific Construction Company commenced work on the third and final phase with its 118 units in twenty buildings. When completed in 1957 the entire Palolo Valley Homes project saw 532 temporary units supplanted by permanent, reinforced concrete units. As these units received no federal subsidy, rents were higher than at the federally supported housing projects, and were initially set in a range from $50/month for a one bedroom to $75/month for a five-bedroom. The phase of the project, located mauka of Pukele Stream, has been heavily altered and is no longer under the administration of the HPHA and not a part of this survey project.

One more phase was planned for the Palolo Valley Homes project, but was canceled in 1954 as this portion of the area then occupied by the Emergency Housing was designated park by the City and County Master Plan. The HHA attempted to obtain this area for low income housing in 1956 when 420 families were displaced by the expansion of the Honolulu Airport; however, the recreational needs of the area prevailed and the Palolo Valley District Park was developed.

In addition to Palolo Valley Housing, Edwin Bauer designed a number of housing projects for the HHA including the first three increments of Puahala Homes, and Kuhio Homes. He was a graduate of the University of Southern California, who came to Hawaii during World War II to work at Pearl Harbor, then stayed after the war. Bauer was a prominent Honolulu architect of the post-war period responsible for many well designed buildings, including Palolo Valley Homes. Other works include: St. Elizabeth's Episcopal Church and Our Redeemer Evangelical Lutheran Church, several Waikiki hotels, including the Breakers and Hawaiiana, the American Security Bank on Liliha Street and the First Hawaiian Bank in Lihue, the Lihue Plantation Headquarters Building, the Continental Building at King and Kalakaua, the Niu Shopping Center, the Waikiki Business Plaza, the Oahuan Apartments and 1001 Wilder, as well as several buildings at Kaiser's Hawaiian Village. He eventually concentrated his efforts on constructing and managing his own apartments.

The 17, minimally altered buildings constructed as part of the Palolo Valley Homes project appear to be significant at a statewide level under Criterion A, for their associations with the development of public housing in Hawaii and under Criterion

C for their architecture which is typical of the public housing design of the period.

The major projects in Honolulu undertaken by HHA during the 1950s were Mayor Wright Housing, Kalihi Valley Homes, Kuhio Homes, Puahala Housing, and Palolo Valley Homes. Previous inventory studies concluded that neither Mayor Wright Housing nor Kuhio Homes appeared to meet the criteria for listing in the National Register.[25] The initial increments of Puahala Housing have also been remodeled and have lost their integrity. A large segment of the 400 units constructed for Kalihi Homes have also been remodeled and no longer retain their historic character. As such this final phase of Palolo Valley Homes, and those remaining buildings at Kalihi Valley Homes are the best examples of low income housing constructed in Honolulu during the 1950s. The Palolo Valley Homes has strong associations with the development of public housing in Hawaii during the post-war period, and reflects the high social consciousness of the Territorial government, which funded this project without the aid of federal support, as by this time the Republican dominated federal government had shifted priorities from low income housing to urban renewal.

The Palolo Valley Homes is also significant under Criterion C as its architecture is typical for its period in its design, use of materials, and craftsmanship. Following the Bauhaus inspired Zeilenbau site plan, the buildings are laid out in parallel rows with space in between to allow for ample light and ventilation. Also, the reinforced concrete buildings were constructed in a modern style typical of public housing of the period, as proclaimed by their flat roofs, horizontal lines accentuated by their flat roofed canopies, and minimal ornamentation. Also, such interior finishes as the tile in the showers, stainless steel counter tops and sink in the kitchen, vinyl tile floors, double hung sash windows and single panel doors all bespeak the period.

Projects adhering to the Zeilenbau plan and the international style of architectural design included: Palolo Valley Homes and Kalihi Valley Homes, and they are considered as a good example of their type and style. Certain buildings in Palolo Valley Homes had been remodeled in a post-modern style, and these were evaluated not significant for lack of design integrity. All the remaining buildings were considered to be good examples of their type and style. Palolo Valley Homes still retain their original windows, original kitchen designs including the stainless steel sink and counter tops, and also retain much of the original flooring. The rear laundry areas have been enclosed. In addition, housing projects following the Zeilenbau plan examined in previous studies, most notably Mayor Wright Housing and Kuhio Homes, were considered to not meet the criteria for listing in the National Register of Historic Places. As a result, the non-remodeled buildings at Palolo Valley Homes appear to best retain their historic integrity and were evaluated as meeting the criteria for listing in the National Register of Historic Places as excellent examples of public housing in Hawaii to follow the Zeilenbau plan.

25 Mason Architects, Inc. 2006 and 2010 report.

DAVID MALO CIRCLE

DAVID MALO CIRCLE

Project	David Malo Circle
Architect	Takashi Anbe & Associates
Built	1966
National Register Eligibility	Not Eligible

Description

The David Malo Circle low cost housing project is comprised of nine duplexes, sited around a U-shaped roadway on a 1.56 acre site. It is bordered by Honoapiilani Highway and Mill Street, with access to the premises off Mill Street. The buildings are located on a flat parcel of land, and sit on poured-in-place, reinforced concrete slab foundations. Eight of the buildings are single-story, and one, housing two four-bedroom units is two stories. The eight single-story duplexes vary in length, with one holding a pair of one-bedroom units, two having two-bedroom units, and five having three-bedroom units. The central area formed by the U shaped roadway, is a park-like, open space with a lawn. The two-story duplex is at the mini-park's Mill Street end, and a mature monkey pod is at the other. The rear of two three-bedroom duplexes front on the "park" on either side. The buildings all feature composition shingled, double pitched hipped roofs with overhanging eaves and exposed rafter tails. The walls, originally tongue and groove, have been reinforced with T-111 on the exterior, but retain their girt. On the interior, the tongue and groove partition walls remain intact. The kitchens and bathrooms have been remodeled, and jalousies have replaced the original windows. All interior doors are non-historic, and the bedroom closets have no doors. A cmu common wall separates the two side by side units in each of the duplexes.

No historic landscaping remains on the grounds, other than a monkey pod at one end of the open green space. (See Landscape Plan)

Two-Stories Building

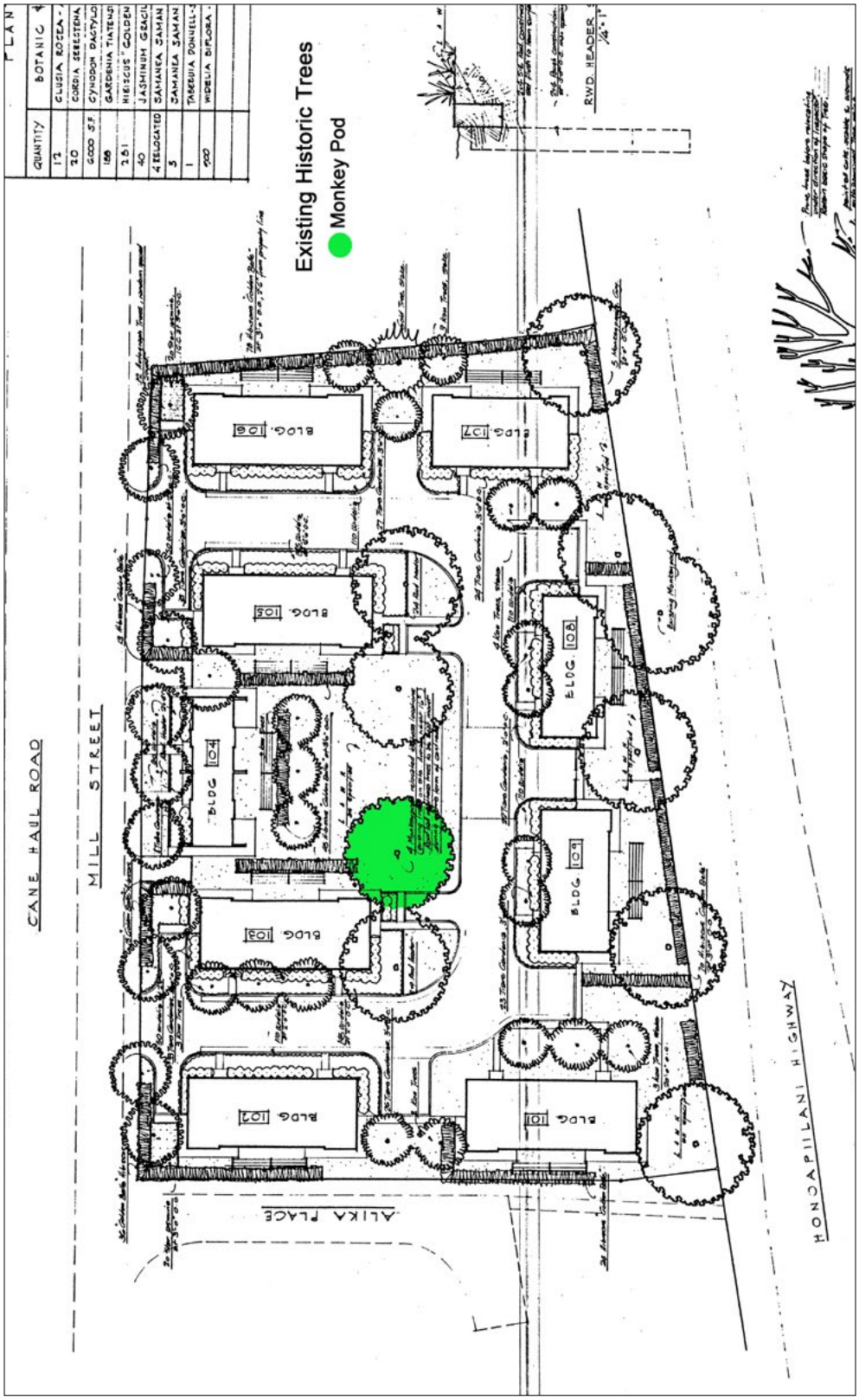
Typical Single-Story Building

Open Central Area with Original Monkey Pod

Original Tongue and Groove Interior Wall

Renovated Kitchen

Jalousie Windows



Landscape Plan Shows Historic Trees
Takashi Anbe & Assoc. Inc., *Landscape Plan Detail (David Malo Circle)*, Sheet 29, 1964, Hawaii Housing Authority.

DAVID MALO CIRCLE

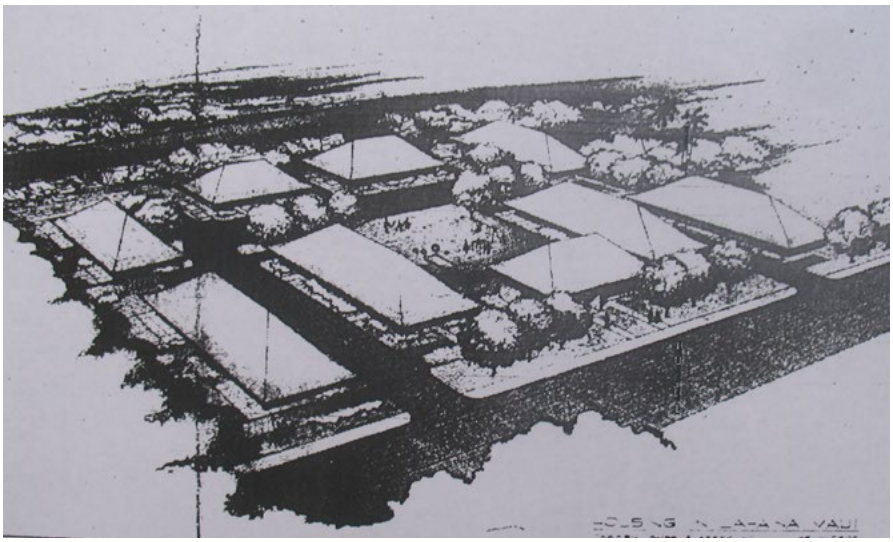
History and Significance

David Malo Circle and Kahekili Terrace are the earliest known federally supported low cost housing projects on Maui. A contract for construction of the project was let in mid- 1965 to Hicks Construction Company, and in April 1966 the housing was dedicated.

Historic Photo of the Circle

This housing project is typical of the mid-to-late-1960s impetus on the part of HHA to move away from a more institutional Zeilenbau property plan and the international style of architecture to a design that more closely follows a typical suburban neighborhood form. Although an enclave unto itself, this housing project strives to integrate its design into the Lahaina community, and to be more regionally appropriate. In response to a request from the Lahaina Restoration Foundation, the HHA placed double pitched hipped roofs, or Hawaiian style roofs, on all the buildings, despite a twenty five percent higher cost for the roof and the fact that federal approval, "had been obtained with some difficulty."[27] Donald H. Tokunaga, the Maui member on the HHA board, indicated to the press, "We want to keep in line with the restoration plans and will cooperate with the [Lahaina Restoration] Foundation's wishes provided it is within cost."[28] The newspapers noted the similarity of the David Malo Circle roofs with those of the Wailuku Public Library designed by C. W. Dickey.

The architect for the project, Takashi Anbe, was born and raised on Maui, and received a degree in architectural engineering from Washington State University. Following World War II, he joined Wimberly & Cook, and in 1956 opened his own office. The office later became Anbe Aruga and Ishizu, one of the more prominent firms working in Hawaii in the post-war period. Buildings by Anbe follow a clean line modern sensibility, as displayed by the King Center, the HGEA Building, and former City Bank on Queen Street, all in Honolulu, the Maui Prince Hotel, the Hilo State Office Building, and the Astronomy and Plant Science buildings at the University of Hawaii. In addition to David Malo Circle, Anbe also designed Kahekili Terrace for the HHA.



Rendering of David Malo Circle

27 Maui News, April 9, 1966.
28 Maui News, October 19, 1963.

DAVID MALO CIRCLE

Seven projects were identified as embracing the informal, garden city, suburban planning precepts. These included: David Malo Circle, Hui o Hanamaulu, Kapaa, Eleele Homes, Kalaheo Homes, Punahele Homes, and Koolau Village. David Malo Circle, although it can be considered the work of a master and possesses distinctive double pitched hipped roofs, has had a number of alterations in addition to the application of T-111 to its exterior walls, windows and doors replacement. On the interior, the kitchens and bathrooms have been remodeled, all interior doors are non-historic, and the bedroom closets have no doors.

Although a good example of the newly emerging policy directions of the HHA, with its residential-appearing duplexes, the buildings no longer retain their integrity of materials, design or workmanship. The twelve buildings, although retaining their massing and integrity of location, have been extensively remodeled.

David Malo Circle does not appear to meet the criteria for listing in the National Register of Historic Places.

ELEELE HOMES

ELEELE HOMES

Project	Eleele Homes
Architect	Aotani & Taniguchi Architects and Engineers
Built	1966, Rehabilitated in 1979, 1990, 1992, 1993
National Register Eligibility	Not Eligible

Description

The Eleele Homes public housing project is comprised of 12 duplexes located in a residential neighborhood, which was mainly constructed after the completion of the housing project. The project lies between Mehana Street and Kaumualii Highway, and is primarily clustered around Ahe Street, a loop off Mehana Street. There are four different building forms, with one building having two one-bedroom units, three having two-bedroom units, five having three-bedroom units, and three having four-bedroom units. All of the buildings are single-story, and sit on a level, 2.13 acre lot and have poured- in-place, reinforced concrete slab foundations. They feature lateral running, composition shingled gable roofs with overhanging eaves and exposed rafter tails. The walls, originally tongue and groove, were reinforced with T-111 on the exterior following Hurricane Iniki. Also, the original windows have been replaced with newer jalousie windows in 1990. On the interior, the kitchens and bathrooms have been remodeled as well, with the former first redone in 1979.

No historic landscaping remains on the grounds.

Eleele Homes Duplexes

Exterior of Building 9

Exposed Rafter Tails

Renovated Kitchen

New Jalousie Windows

Renovated Bathroom

ELEELE HOMES

History and Significance

This housing project is typical of the mid-to-late-1960s impetus on the part of HUD to integrate public housing communities into their surrounding neighborhoods, rather than build them as enclaves unto themselves. It also reflects the move away from a more institutional Zeilenbau plan to that of a suburban neighborhood, with the curving loop of Ahe Street serving as the backbone of the development.

Seven projects were identified as embracing the informal, garden city, suburban planning precepts. These included: David Malo Circle, Hui o Hanamaulu, Kapaa, Eleele Homes, Kalaheo Homes, Punahele Homes, and Koolau Village. In addition to the application of T-111 to their exterior walls, Eleele Homes has had the windows replaced with jalousies, and the kitchens and bathrooms remodeled, and roofs were substantially repaired/replaced after Hurricane Iniki, and their distinctive beam outrigger cut off.

Although a good example of this new policy direction, with its residential-appearing duplexes, the buildings no longer retain their integrity of materials, design or workmanship. The 12 buildings, although retaining their massing and integrity of location, have been extensively remodeled.

Eleele Homes does not appear to meet the criteria for listing in the National Register of Historic Places.

HUI O'HANAMAULU

HUI O'HANAMAULU

Project	Hui O'Hanamaulu
Architect	Hideo Murakami
Built	1965, Rehabilitated in 1994, 2013-15
National Register Eligibility	Not Eligible

Landscape Architect: Richard Tongg

Description

Bounded by Laukona, Opukea, and Pakaweli Streets, the Hui o Hanamaulu housing project is comprised of 23 duplexes laid out on a flat, 3.92 acre parcel. It is situated in the midst of a private residential subdivision, and is comprised of one- and two-story wood frame structures with composition shingle, lateral running gable roofs with closed overhanging eaves. New gutters grace the eave lines. The dwellings sit on reinforced concrete, poured-in-place slab foundations. The facades are characterized by a 4 feet 9 inches wide, projecting entry lanai with a concrete floor and protected by a shed roof extension of the main roof. The shed roof is supported by 4 inches x 4 inches posts. The buildings' original tongue and groove walls have been covered with T-111 siding. All the original windows have been replaced with more modern sliding windows and fixed plate windows flanked by jalousie windows. The interiors of all the units have been completely gutted and remodeled, including the kitchens and baths.

Single-Story House

Two-Story House

The housing project has four different building forms. Type A is a single-story duplex containing two one-bedroom units. The bedrooms are in 14 feet x 18 feet wings on the sides of the building. There are three such buildings on the site. Type B holds a pair of two-bedroom units, and is also single-story. The roofs over the main body of the Type A and Type B duplexes are elevated to provide a monitor effect. There are six Type B designs on the property. Type C buildings are single-story and have three-bedroom units. Eight of these buildings are part of the project. The Type D buildings are two- stories in the middle of the building with single-story ends. They have four-bedrooms in each of their units.

Newly Renovated House

The site plan is not quite symmetric, but approximates a double eight in configuration. The buildings are primarily sited in groups of three, facing a curving driveway/pullout off the public street. Three of these pullouts are off Laukona Street and an equal number are off Opukea Street. Such a configuration results in the rears of four buildings defining an open, lawned quadrangle, of which there are four on the property.

The historic landscaping no longer exists.

History and Significance

The earliest known HHA housing project on the island of Kauai, Hui o Hanamaulu was one of four low cost projects undertaken by HHA on the island in the last five years of the 1960s. This housing project is typical of the mid-to-late-1960s impetus on the part of HUD to integrate public housing communities into their surrounding neighborhoods, rather than build them as enclaves unto themselves. It also reflects the move away from a more institutional Zeilenbau plan to that of a suburban neighborhood.

Seven projects were identified as embracing the informal, garden city, suburban planning precepts. These included: David Malo Circle, Hui o Hanamaulu, Kapaa, Eleele Homes, Kalaheo Homes, Punahele Homes, and Koolau Village. In addition to the application of T-111 to their exterior walls, Hui o Hanamaulu has had its units completely gutted and remodeled, original windows were replaced, and the corrugated metal roofs were repaired and replaced with composition shingle roofs after Hurricane Iniki.

Although a good example of this new policy direction, with its residential-appearing duplexes, the buildings no longer retain their integrity of materials, design or workmanship. The 23 buildings, although retaining their massing and integrity of location, have been extensively remodeled.

Hui o Hanamaulu does not appear to meet the criteria for listing in the National Register of Historic Places.

KAHEKILI TERRACE (A & B)

KAHEKILI TERRACE (A & B)

Project	Kahekili Terrace (A & B)
Architect	Takashi Anbe & Associates
Built	1966, Renovated in 1992
National Register Eligibility	Eligible
Criteria	A and C
Significance	Association with history of the public housing in Hawaii. Architecturally significant in its high quality of design and being a work of master.
Character Defining Features	Three- or two-story buildings with type A, B, Ba, C and D floor plans. Flat concrete roof with overhung and original bedroom solid panel transoms. Located on two different sites.

Landscape Architect: George Walters

Description

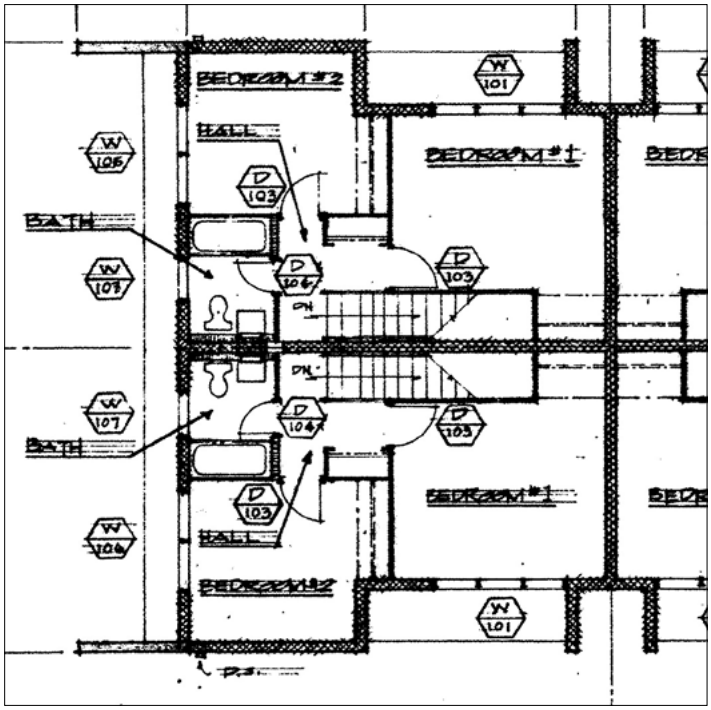
The Kahekili Terrace low income housing project is located on two separate parcels of land, both of which are situated off Market Street in Wailuku. In total, the entire project contains 82 units housed in 15 buildings. The larger parcel is located on Holowai Place, which runs parallel to Iao Stream on the mauka side of Market Street. It contains 56 units in ten buildings. The other parcel is on the makai side of Market Street, off Piihana Road and contains 26 units in five buildings. The larger parcel is situated in a primarily commercial retail area, while the latter sits at the edge of that area which is more residential in nature.

Kahekili Terrace at Larger Parcel

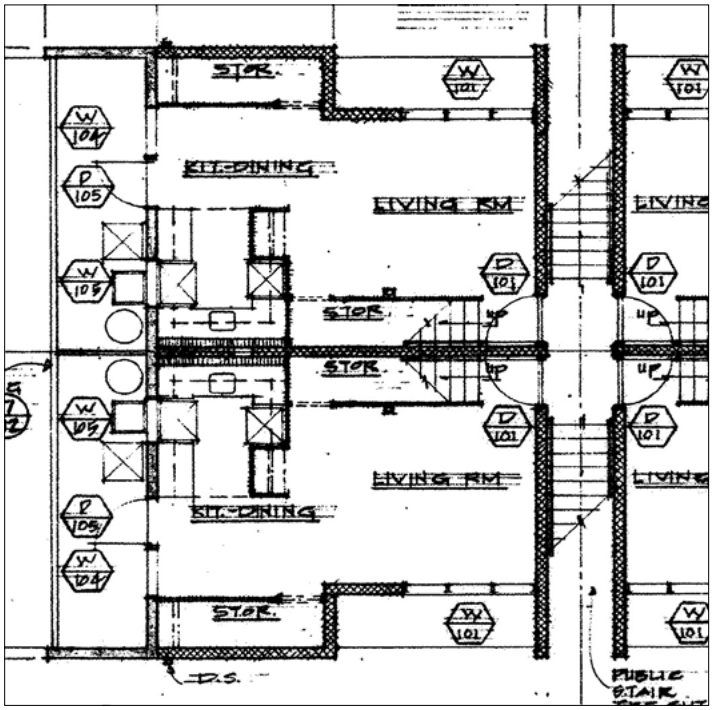
KAHEKILI TERRACE (A & B)

All the buildings are constructed of cmu, and are two- to three-stories in height. The cmu block is laid with a stacked bond. They have flat concrete roofs with thin, overhanging concrete eaves, and sit on poured-in-place, reinforced concrete slab foundations. The 15 buildings assume five forms, of which four are two-story and one three-story. The three-story buildings (Type A) contain four one-bedroom units on their first story and four two-bedroom units occupy the two upper floors. These buildings are five bays wide, with a narrow, framed, center bay which accommodates the straight run of 16 steps to the second story. The bays to either side of the steps are recessed and on the ground level serve as an entry lanai, with the doors entering the one-bedroom units from the lanai's side wall. Three jalousie windows dominate these bay's façade wall on each story, and they are sheltered by flat roofed canopies, which box these bays on each floor. The end bays are solid cmu block and extend out to the eave line. The sides of the building feature the "rear" lanai of the units on the first and second stories. These are defined by cmu wing walls at their ends and have wood closets to hold the water heaters. The second floor lanai has a pipe railing, which at the center extends to the wall to demarcate the boundary of the two units' lanai. There are three of these buildings, and they are all located at the larger property.

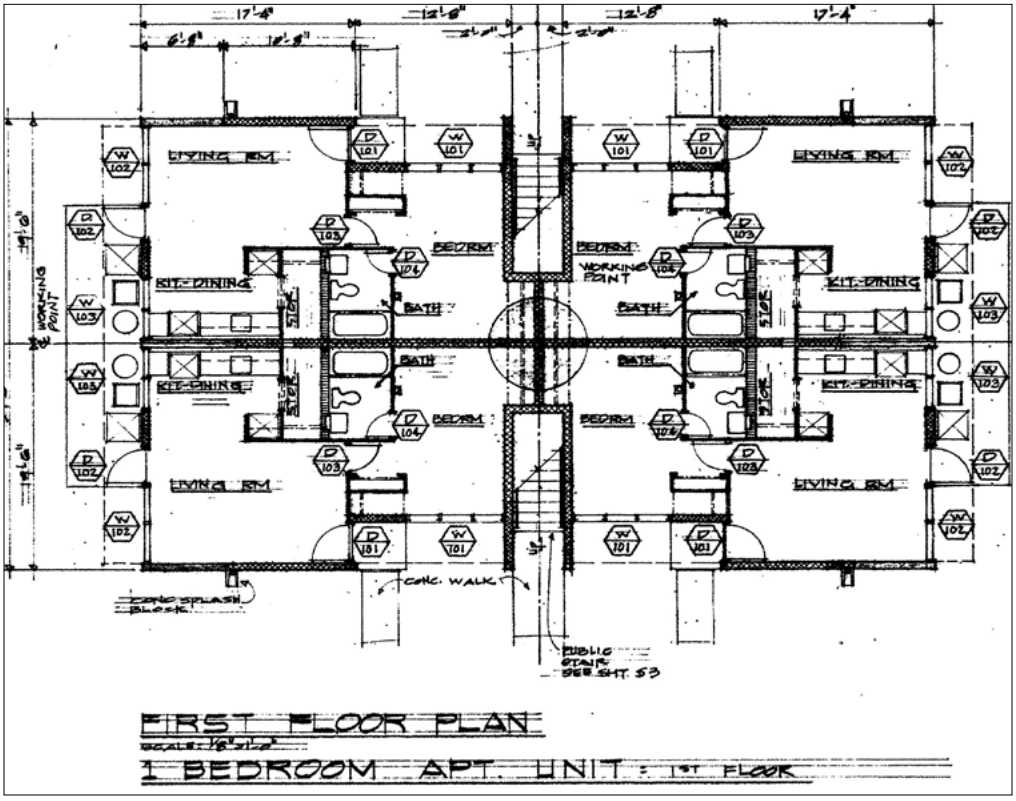
Type A Building



Third Floor Plan



Second Floor Plan



Building Type A Typical Floor Plan
Takashi Anbe & Assoc. Inc. Architects, *Floor Plan, Roof Plan, Schedules, Exterior Elevations, Type "A" Unit (Kahekili Terrace)*, Sheet A1, 1964, Hawaii Housing Authority.

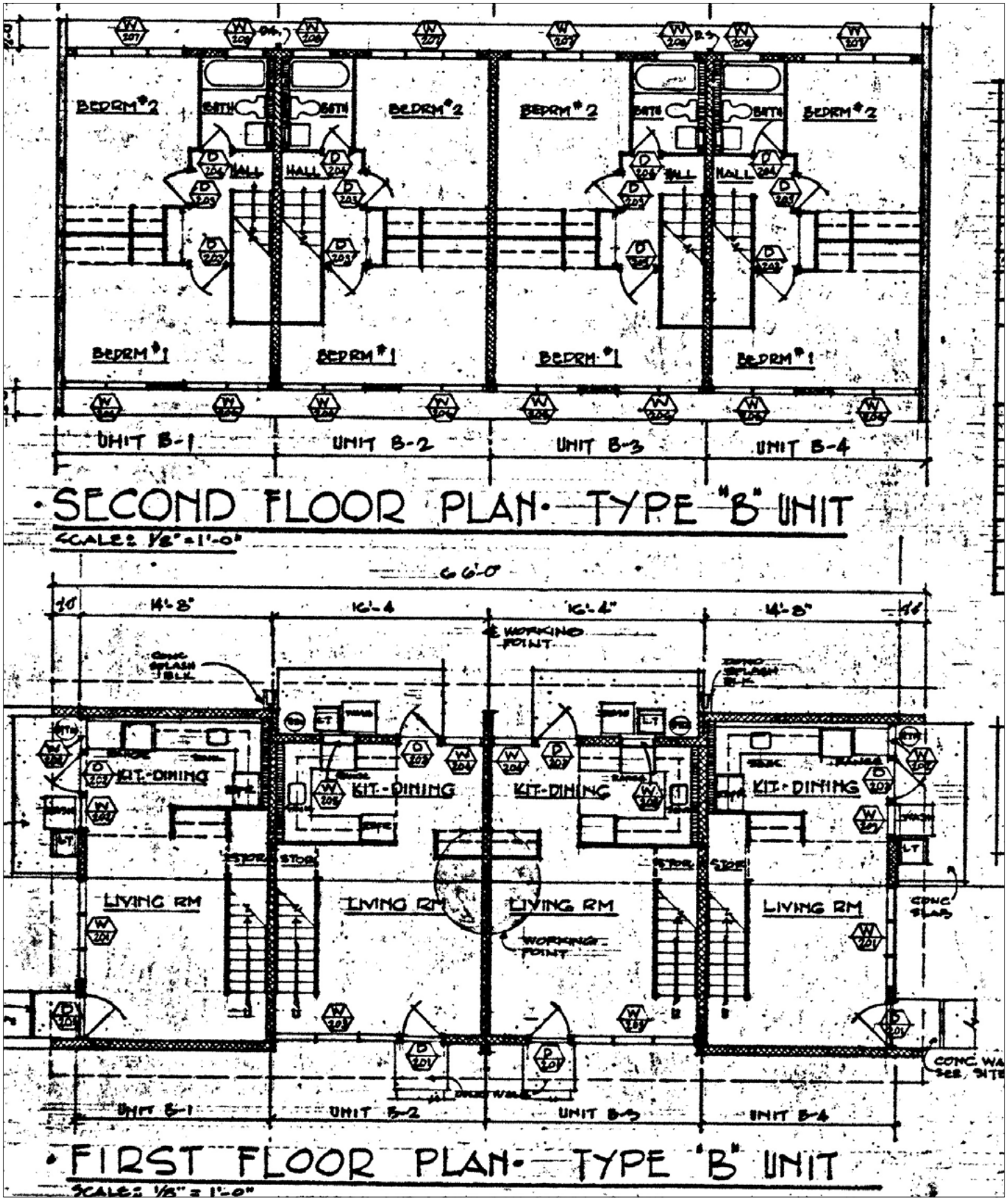
KAHEKILI TERRACE (A & B)

The two-story buildings comprise the majority of the structures, and are characterized by their long horizontal lines. These all follow a rectangular footprint and primarily differ from each other in their length. One building (Type B), located on the smaller parcel, contains four, two-bedroom units. Another (Type BA), also on the smaller parcel, has six, two-bedroom units. Six buildings (Type C), two on the smaller parcel, have six, three-bedroom units, and three buildings, one on the smaller parcel, contain four, four-bedroom units. All these buildings' ground hugging horizontality is reinforced by the buildings' overhanging eaves and the continuous canopy running between the first and second stories. These two elements are boxed by scored concrete end walls. At the ground level, each end wall is recessed to serve as an entry lanai for the end units, which further grounds the buildings' facades by allowing solid walls at the buildings' termini. The building with the four-bedroom units (Type D) differs from the others by having a living room picture window with flanking jalousie windows in each of its units. These buildings also differ from the others by having their two middle units recessed at the ground level to provide an entry lanai.

Type B Building

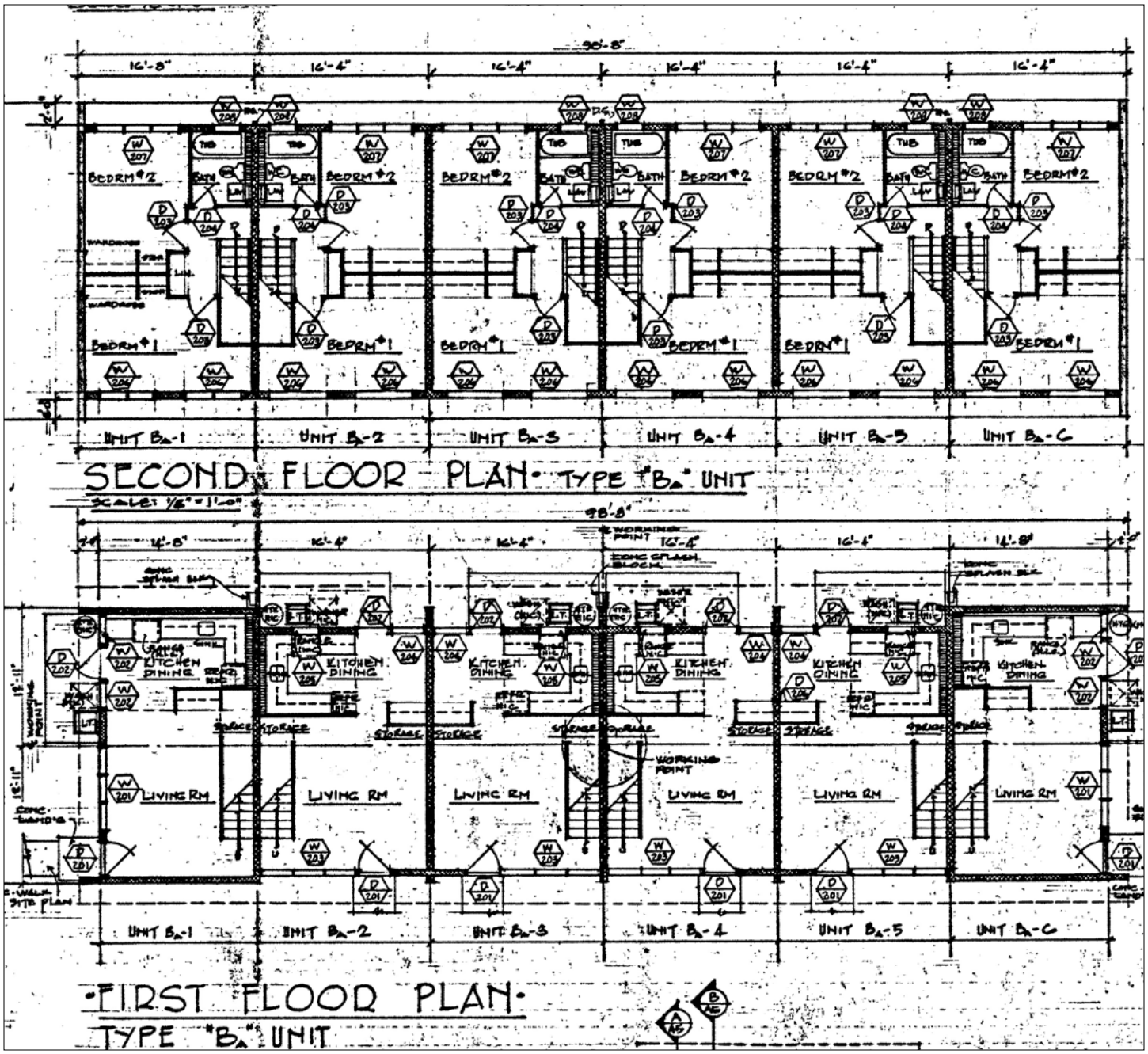
Type C Building

Type D Building

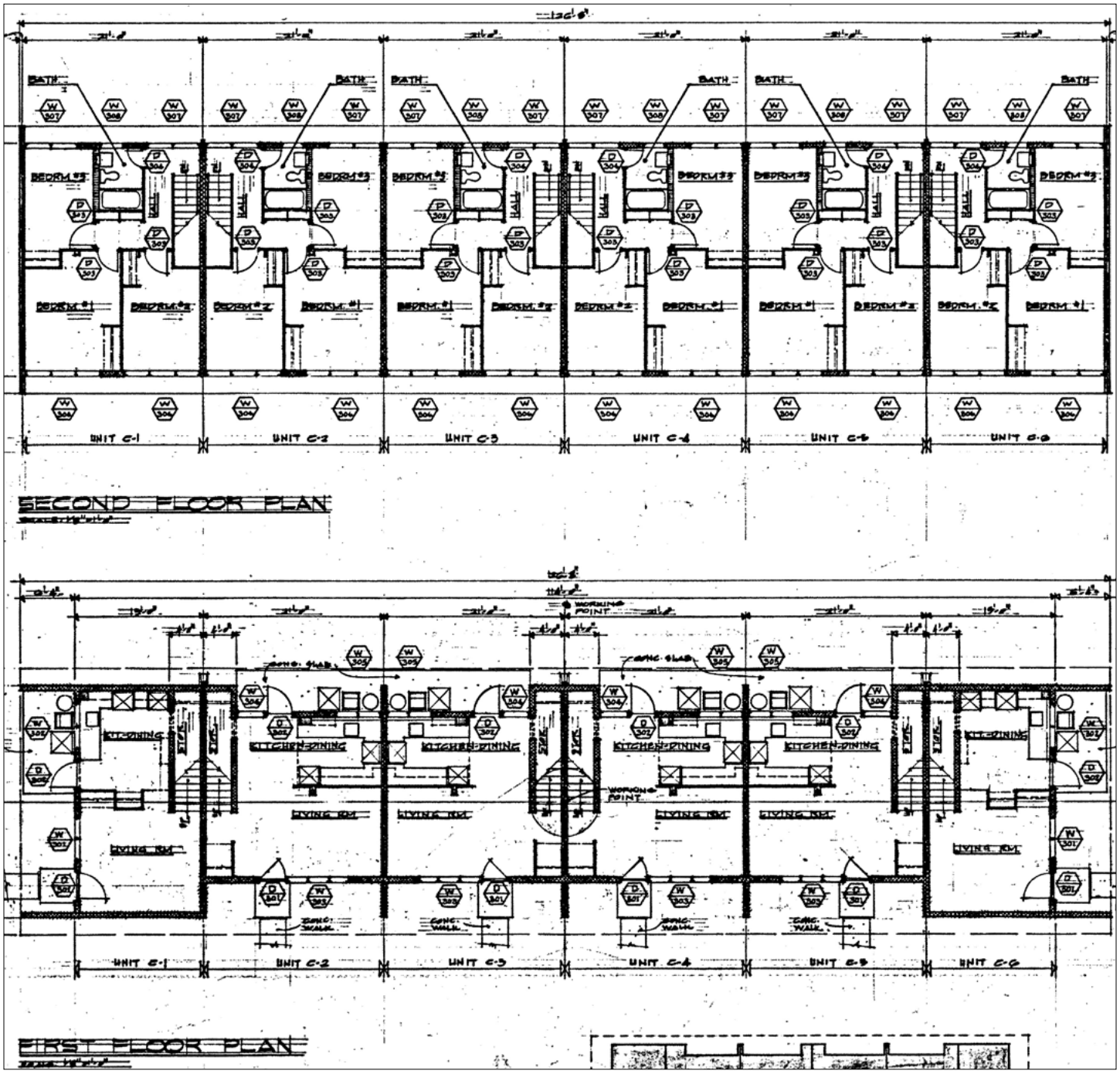


Building Type B Typical Floor Plan

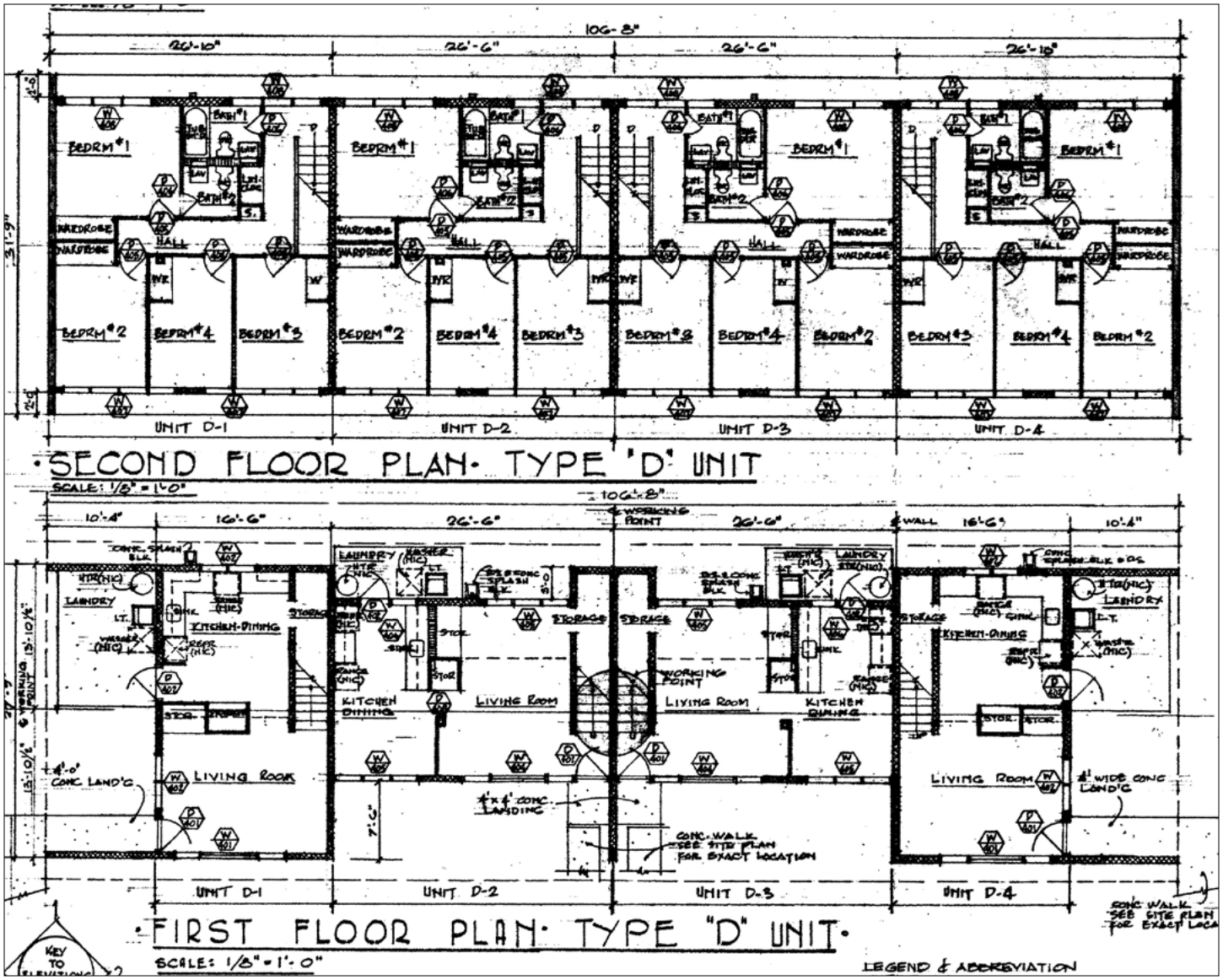
Takashi Anbe & Assoc. Inc. Architects, *Floor Plan, Roof Plan, Exterior Elevations, Building Sections, Schedules, Type "B" Unit (Kahekili Terrace)*, Sheet A4, 1964, Hawaii Housing Authority.



Building Type BA Typical Floor Plan
Takashi Anbe & Assoc. Inc. Architects, *Floor Plan, Roof Plan, Exterior Elevations, Building Sections ,Type "BA" Unit (Kahekili Terrace)*, Sheet A5, 1964, Hawaii Housing Authority.



Building Type C Typical Floor Plan
Takashi Anbe & Assoc. Inc. Architects, *Floor Plan, Roof Plan, Exterior Elevations, Schedules,Type "C" Unit (Kahekili Terrace)*, Sheet A7, 1964, Hawaii Housing Authority.



Building Type D Typical Floor Plan
Takashi Anbe & Assoc. Inc. Architects, *Floor Plan, Building Sections, Exterior Elevations, Room Finish Schedule,Type "D" Unit (Kahekili Terrace)*, Sheet A10, 1964, Hawaii Housing Authority

KAHEKILI TERRACE (A & B)

On the interior, all units are two-stories, except for the one-bedroom units on the ground level of the three-story buildings. They have poured in place concrete floors/ceilings, with the floors covered in vinyl tile. Wood stairs access the second floors of the units. All the buildings were rehabilitated in 1992, with all units having their kitchens and bathrooms remodeled, including the replacement of the cabinets, counters, and tile wainscots of the tub/showers. In addition, the original aluminum jalousie windows were replaced by new aluminum jalousie windows, and the interior and exterior doors and their hardware were replaced. The bedroom closets have no doors, but do feature built-in shelving, and retain the perforated hard board transoms which spanned the original closet doors. The bedroom door's original solid panel transoms also still remain.

Renovated Bathroom

Renovated Kitchen

The buildings at Kahekili Terrace have undergone some changes over the years, most notably the remodeling of the kitchens and bathrooms and the replacement of the original windows with new jalousie windows. The kitchens and bathrooms are not primary spaces in these dwelling units, so their modification does not detract from the historic character of the entire project. Similarly the replacement of the original jalousie windows by newer ones, was simply a replacement in kind, which is acceptable to the Secretary of the Interior's Standards for Rehabilitation. As such, the Kahekili Terrace retains its historic integrity of design, materials, location, workmanship, feeling and associations.

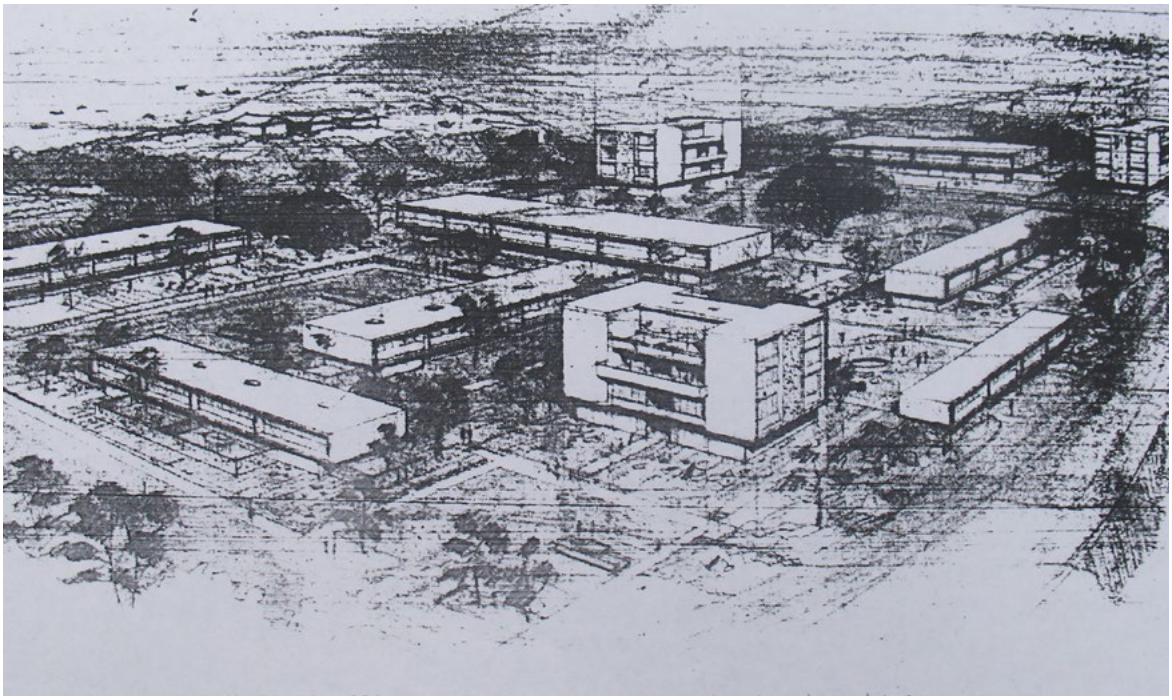
None of the historic landscaping remains on the two premises.

KAHEKILI TERRACE (A & B)

History and Significance

The Kahekili Terrace low income housing project, is the earliest known federally approved public housing project on Maui. Contractors Reed & Martin broke ground on the project in October 1964, and by April 1965 the construction was thirty percent completed. The HHA dedicated this housing project in April 1966.

Kahekili Terrace is significant at a local level under criterion A for its associations with the history of public housing in Hawaii. It is also architecturally significant at the local level under criterion C for its high quality of design and as a work of a master, Takashi Anbe. Anbe was born in Wailuku, Maui in 1925, which may have helped in his selection for the project by the HHA. He received a degree in architectural engineering from Washington State University, and following World War II, he joined Wimberly & Cook, eventually opening his own office in 1956. Buildings by Anbe follow a clean line modern sensibility, as displayed by the King Center, the HGEA Building, the former City Bank on Queen Street, the Hilo State Office Building, and later the Astronomy and Plant Science buildings at the University of Hawaii, as well as the Maui Prince Hotel. In addition to Kahekili Terrace, Anbe also designed David Malo Circle for the HHA.



Kahekili Terrace Rendering
(Maui News, March 6, 1963)

The housing complex follows a distinctive layout with the buildings essentially grouped around two parking lots on the larger parcel, and around one parking lot on the smaller. The lots are directly accessed off the streets bounding the two project areas, and as a result, the interior space on the larger parcel is relegated to pedestrian use and a playground area. In discussing the site layout, architect Anbe explained he strove to attain, "'space relations' between buildings and of 'scattering the buildings to formulate a court-yard effect' thus getting away from the 'cramping house styles' existing in Honolulu or on the Mainland."[29]

29 Maui News, March 13, 1963.

KAHEKILI TERRACE (A & B)

The employment of such a plan was not only in keeping with the HHA policy to try to separate vehicular and pedestrian traffic, but also reflected the HHA's move away from the Zeilenbau plan and its institutional associations. Other large scale HHA projects, notably Hui o Hanamaulu, and Puuwai Momi also utilize a plan in which buildings are clustered to provide open, landscaped courtyards, rather than be laid out in a linear pattern. However, the buildings in these two projects, while retaining their original locations, have been altered over the years and no longer retain their historic integrity.

The use of such a plan, coupled with a very cleanly articulated modern style design with its framed, or boxed, elements and primarily horizontal lines, makes for a distinctive and engaging composition of high quality. The interplay of receding and advancing elements results in a dynamic façade and engaging design. Furthermore, the imaginative placement of the end apartments' recessed entry lanai in the end walls illustrates the architect's creativity beyond the ordinary. The overall sensibility and high level of the design of the complex and its buildings is sufficiently strong that the replacement of the windows in kind and remodeling of the interiors has not compromised the historic integrity of this complex.

Three projects were identified as adhering to the precepts of the perimeter block plan: Wahiawa Terrace, Kahekili Terrace, and Puuwai Momi. Kahekili Terrace buildings reflect Takeshi Anbe's design ingenuity and the modernist design quality apparent in much of his work. The individual units retain a fairly high degree of integrity with only their bathrooms and kitchens having been remodeled. The original jalousie windows have been replaced in-kind with newer jalousie windows, which is an acceptable treatment under the Secretary of Interior's standards. As such, Kahekili Terrace is considered to meet the criteria for listing in the National Register of Historic Places as a historic district for the excellent example of a modified perimeter block plan public housing project built in Hawaii.

KAPAA

KAPAA

Project	Kapaa
Architect	Aotani & Taniguchi Architects and Engineers
Built	1966, Rehabilitated 1979, 1993
National Register Eligibility	Not Eligible

Landscape Architect: Richard Tongg

Description

The Kapaa public housing project is comprised of 18 duplexes and one administration building sited on a 4.4 acre parcel bounded by Opala Road and Moikeha Canal. The project is off Opala Road and the buildings primarily cluster around Alanai and Akoa Streets. The project features four different building forms, which are similar to those built at Eleele. Three buildings have two one-bedroom units, four have two-bedroom units, six have three-bedroom units, and five have four-bedroom units. All of the buildings are single-story, and have poured-in-place, reinforced concrete slab foundations. They feature lateral running, composition shingled gable roofs with overhanging eaves and exposed rafter tails. The walls, originally tongue and groove, were reinforced with T-111 on the exterior following Hurricane Iniki. On the interior the kitchens and bathrooms have been remodeled as well, with the former first redone in 1979.

No historic landscaping remains on the grounds.

Kapaa Homes Duplexes

Exterior of Building 3

Exterior of Building 14

New Kitchen

Living Room

KAPAA

History and Significance

This housing project is typical of the mid-to-late-1960s move away from a more institutional Zeilenbau plan to that of a suburban neighborhood, with single-story, single wall, wood duplexes sited along public roadways, although Eleele Homes is a better example of this policy direction.

Seven projects were identified as embracing the informal, garden city, suburban planning precepts. These included: David Malo Circle, Hui o Hanamaulu, Kapaa, Eleele Homes, Kalaheo Homes, Punahele Homes, and Koolau Village. In addition to the application of T-111 to their exterior walls, Kapaa replaced the original windows with bronzed anodized aluminum jalousies and sliding windows, and the remodeling of the kitchens and baths on the interior. In addition, the roofs were substantially repaired/replaced after Hurricane Iniki.

The buildings no longer retain their integrity of materials, design or workmanship. Setting has been compromised by mail boxes in the front of the complex. The 19 buildings, although retaining their massing and integrity of location, have been extensively remodeled.

The Kapaa public housing project does not appear to meet the criteria for listing in the National Register of Historic Places.

WAHIAWA TERRACE

WAHIAWA TERRACE

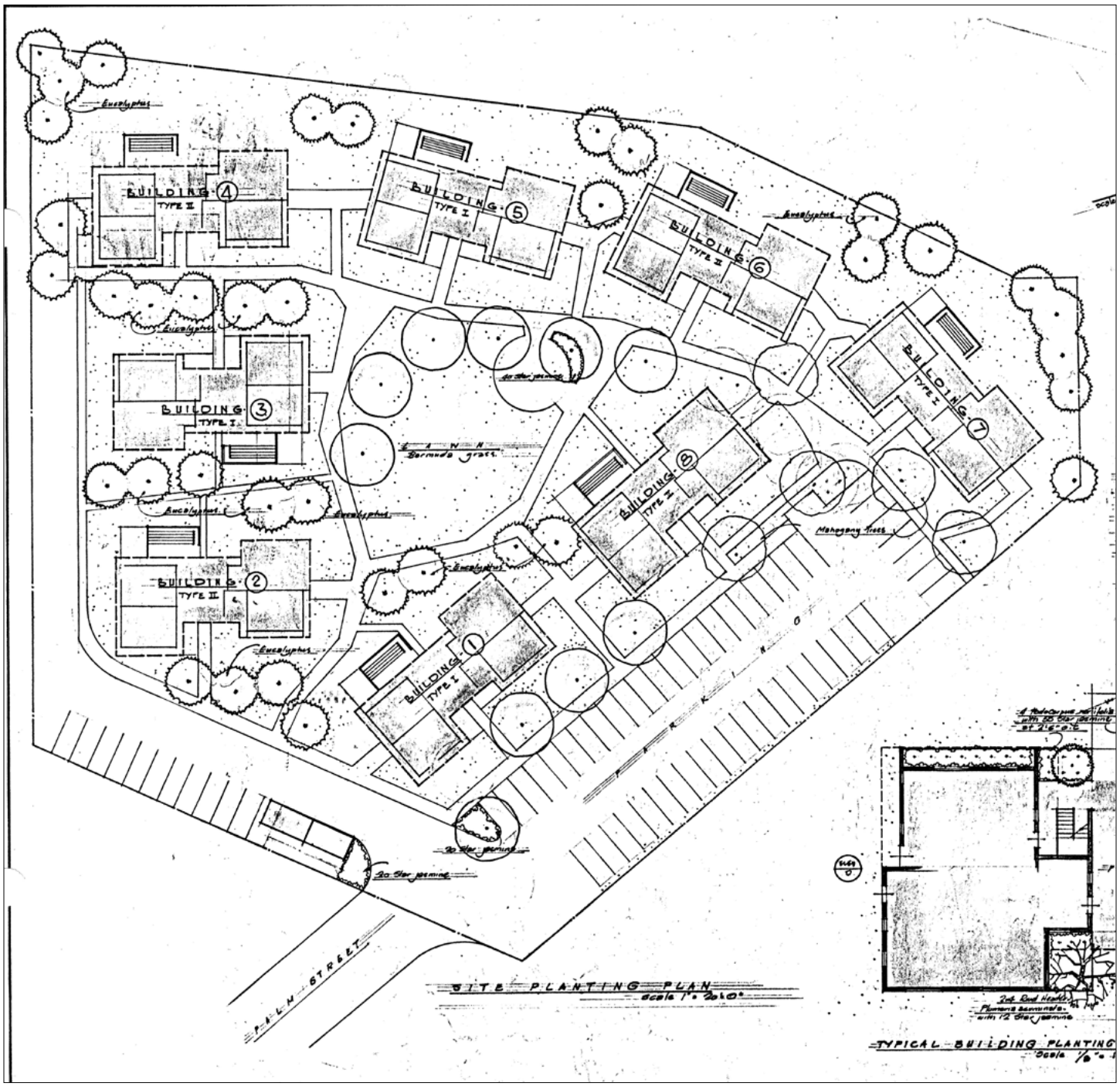
Project	Wahiawa Terrace
Architect	Wong & Wong
Built	1966, Rehabilitated in 1994, 2014-2015
National Register Eligibility	Eligible
Criteria	A and C
Significance	Association with history of the public housing in Hawaii. Architecturally significant in its high quality design and work of a master by the local architectural firm Wong & Wong.
Character Defining Features	"U" footprint buildings, two types of third floor designs, second and third floors are cantilevered from the first floor, canopies over the windows, and laundry drying areas in front of the buildings. Buildings are sited utilizing modified perimeter block plan.

Landscape Architect: George Walters

Description

Located at the north edge of Palm Street in Wahiawa, the Wahiawa Terrace public housing project is a little residential enclave unto itself, sitting on a 2.75 acre parcel acquired from the Galbraith Estate. Utilizing a modified perimeter block plan, eight, three-story, cmu buildings are sited around a grassy quadrangle, with openings between each building. Concrete sidewalks run between the buildings and access the central courtyard formed by the buildings, with automobile parking relegated to areas adjoining the outer perimeter formed by the buildings on two sides of the complex.

Overview of the Site

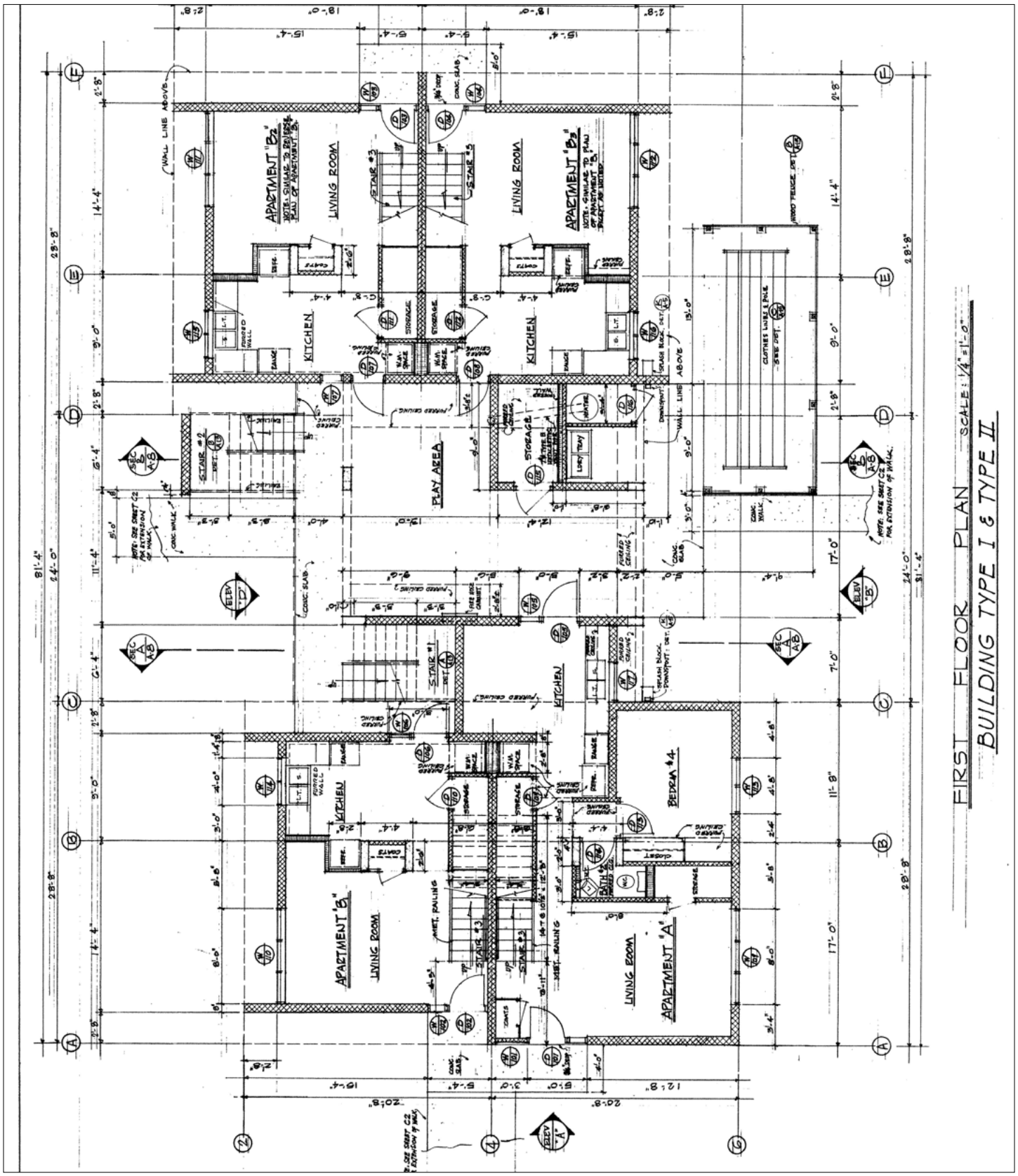


Site Plan
Howard M.Y. Wong, Robert T.W. Wong *(H.H.A. Low Rent Housing Project)*, Sheet C-7, 1965, Hawaii Housing Authority.

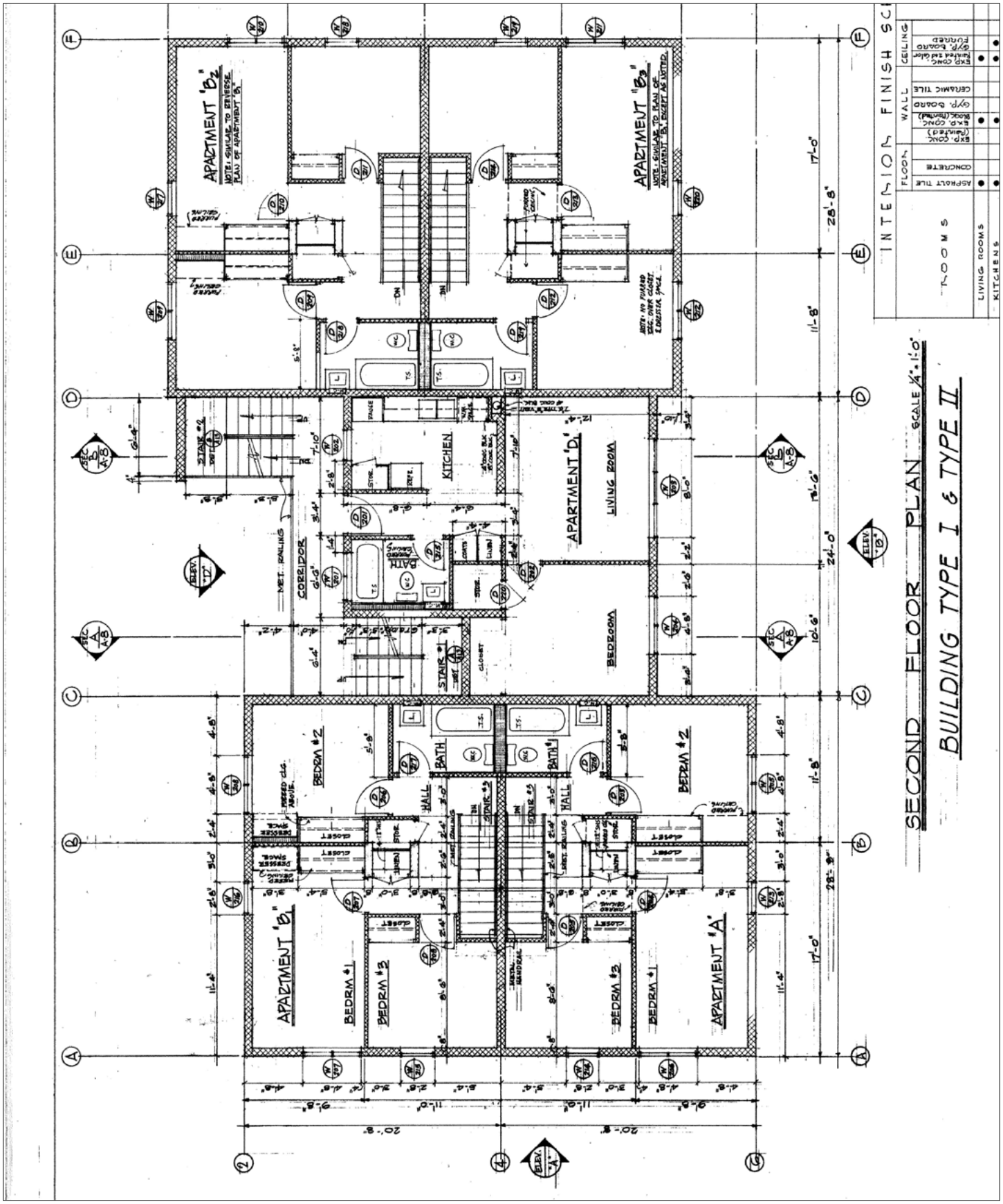
WAHIAWA TERRACE

The housing development is comprised of two building forms, both of which follow a shallow “U” footprint. All the buildings are similar in plan on the first two floors, but differ in the design on the third floors. Two sets of concrete dogleg steps with metal pipe railings are located in the center section of each building, and access the upper stories. The central part of the buildings is relatively open on the first story, allowing utilization as a covered, paved play area. In addition to the play area, there is a laundry room for the building as well as a storage room in this section at the ground level. At the right end of the building are two, two-bedroom apartments with entries on the right side of the building. The entries share a 5 feet x 10 feet 8 inches entry lanai, with a centered, single block wide cmu wall projecting 2 feet 8 inches out from the wall to provide privacy at the entry doors. These units both have second floors, with internal, straight run stairs with 15 concrete steps accessing the upper floor’s two-bedrooms and bath. On the left side are a three- and four-bedroom apartment. Again, these are entered from the side of the building and an internal stair leads to the second floor and its three-bedrooms and one bath for each unit. The stairs and entries are similar in design to those units on the right side of the building. In addition to the upper floor of the ground level units, there is also a one-bedroom unit in the center section of the building on the second story. It is accessed by a lateral running lanai/corridor which runs between the two sets of steps. Another two sets of dogleg steps lead from the second story to the third. On the third story in the Type I buildings, there is a centered one-bedroom unit, and at either end of the lateral running lanai/corridor is a two-bedroom unit. These units contain an enclosed laundry drying area in their rear corners. Originally a wood slat wall partially enclosed the drying area, but in 1994 the wood was replaced by decorative concrete blocks. On the third story of the Type II buildings there are two-bedroom units at either end of the building, but no central area apartment. Again, these units have corner drying areas. Five of the buildings utilize the Type I plan and three the Type II, with the Type II interspersed between the Type I. Overall the complex contains twelve one-bedroom units, sixteen two-bedroom, twenty four three-bedroom and eight four-bedroom units.

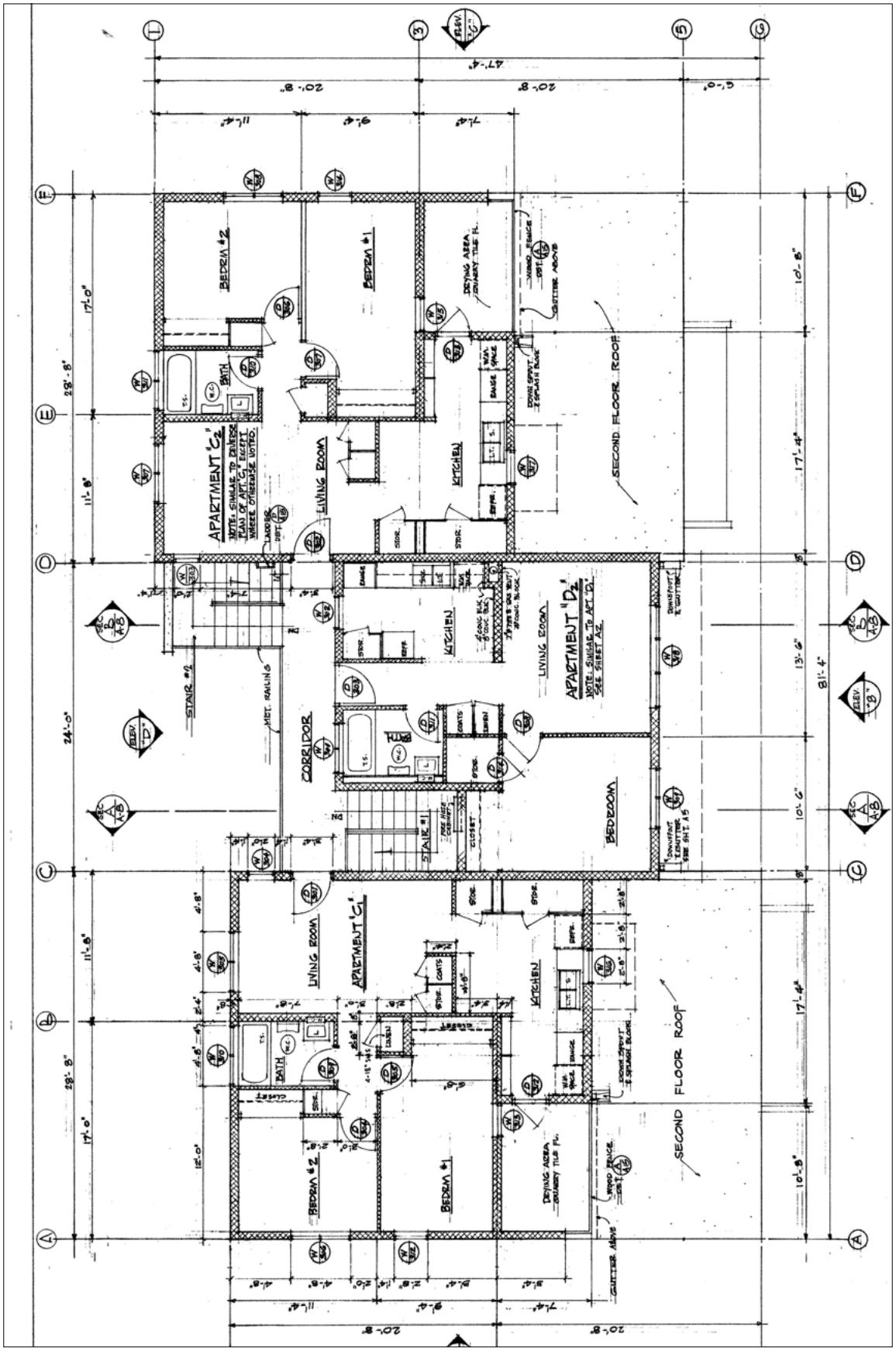
Type I and II Exterior Elevations, Third Floor Design Differ



Building Type I and II First Floor Plan
Howard M.Y. Wong, Robert T.W. Wong *First Floor Plan - Type I & II (H.H.A. Low Rent Housing Project)*, Sheet A-1, 1965, Hawaii Housing Authority.

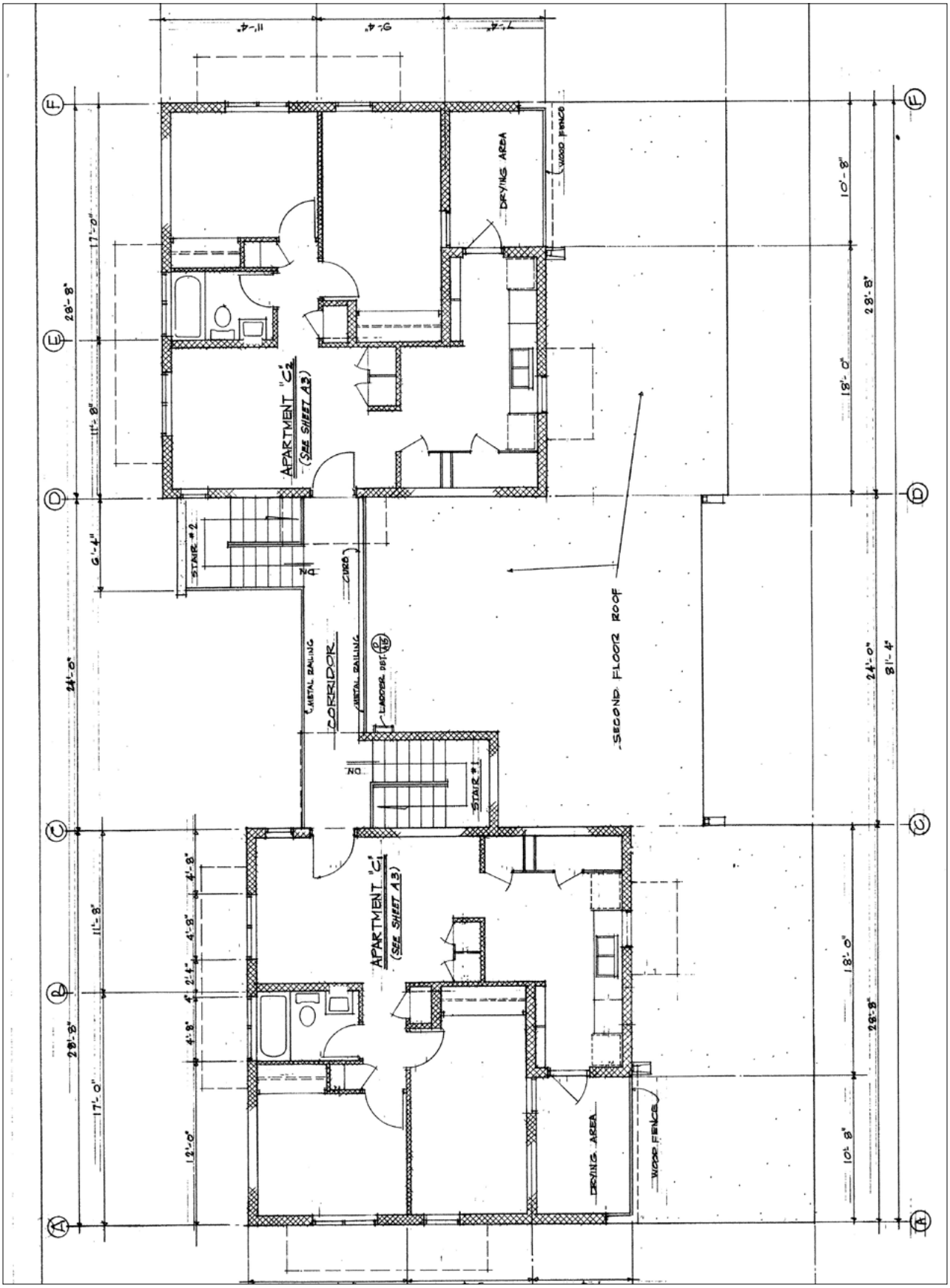


Building Type I and II Second Floor Plan
Howard M.Y. Wong, Robert T.W. Wong, *Second Floor Plan - Type I & II (H.H.A. Low Rent Housing Project)*, Sheet A-2, 1965, Hawaii Housing Authority.



Building Type I Third Floor Plan

Howard M.Y. Wong, Robert T.W. Wong, *Second Floor Plan - Type I & II (H.H.A. Low Rent Housing Project)*, Sheet A-2, 1965, Hawaii Housing Authority.



Building Type II Third Floor Plan
Howard M.Y. Wong, Robert T.W. Wong, *Second Floor Plan - Type I & II (H.H.A. Low Rent Housing Project)*, Sheet A-2, 1965, Hawaii Housing Authority.

Three- and Four-Bedroom Entrance

Interior Concrete Steps

The exterior design of the buildings is distinguished by its use of cantilevers. The second and third stories are cantilevered 2 feet 8 inches out from the first story, with wing walls helping to support the cantilever on the façade, as well as enframe each side of the first story. Also, cantilevered, reinforced concrete canopies are utilized over the windows and side entries. The window canopies have up-turned ends, while the entry canopies have down-turned ends.

On the interiors, all the units have been remodeled. In addition, the original floor-to-ceiling, wood slat windows have been replaced by aluminum awning windows in 1994 and the lower portions of the original window frames in-filled with cmu. Also, in that year all the interior and exterior doors were replaced.

None of the historic landscaping remains at the site.

Canopies above Windows

Renovated Kitchen

Laundry Drying Area

Each building has a pair of laundry drying areas in front of the building. These concrete pads with their T-shaped clothes line poles were originally enclosed by a wood slat fence, but in 1994 the wood fences were supplanted by decorative block walls.

History and Significance

Opening in October 1966, Wahiawa Terrace was the HHA's earliest known housing project in rural Oahu. Other projects planned at the time of the opening of this project were for Kaneohe and Waimanalo, which were built in the next few years.

Terrace Under Construction
(1965/66 HHA Annual Report)

Wahiawa Terrace is significant at a local level under criterion A for its associations with the history of public housing in Hawaii. It is also architecturally significant at the local level under criterion C for its high quality of design and as a work of a master, the architectural firm of Wong & Wong.

The housing complex follows a modified perimeter block plan, with the buildings sited on the periphery of the property and enclosing a central courtyard, which originally was beautifully landscaped and also contained a children's playground. The layout was not a true perimeter block plan, as there are spaces between the buildings, thus, the project does not reinforce the sense of a continuous streetscape, but this is hardly surprising given the project's suburban, rather than urban, context.

WAHIAWA TERRACE

The employment of the modified perimeter block plan and the design of the apartment buildings which gives each occupant a sense of privacy wall reflects the HHA's move away from the Zeilenbau plan and its institutional associations. Other HHA projects, notably Kahekili Terrace, Hui o Hanamaulu, and Puuwai Momi base their layout on a clustering of buildings to allow for open courtyards between them. However, these do so in a very limited fashion, which cannot be considered following in the perimeter block plan tradition, making Wahiawa Terrace the finest example of a HHA housing project of the 1960s to utilize this approach to apartment complex design which was so popular in Holland and Germany.
The use of the modified perimeter plan, coupled with an exceptional modern style design of the buildings with their bold, cantilevered canopies, cantilevered upper stories, and open central core, makes for a distinctive and engaging composition of high quality. The interplay of receding and advancing elements, as well as that of solid and void, results in a dynamic façade and highly engaging design. In addition, the imaginative placement of the apartments within the building moves the buildings' design beyond the realm of the ordinary. The overall sensibility and high level of the design of the complex and its buildings is sufficiently strong that the replacement of the windows and remodeling of the interiors has not compromised the historic integrity of this complex.

Wahiawa Terrace was designed by the well known Honolulu architectural firm of Wong & Wong. Howard and Robert Wong met while working in the shipyard at Pearl Harbor. After serving in the military during World War II, Howard M. Y. Wong studied architecture at Yale, while Robert T. W. Wong attended Cornell University's department of architecture. After graduation, both practiced in New York City, with Howard Wong working for Harrison & Abramovitz on the Opera House at Lincoln Center. After employment in William Wurster's office in San Francisco, Robert Wong returned to Hawaii in 1954 and joined the firm of Alfred E. Preis. Howard Wong returned to the islands in 1960, opened an office, and hired Robert. In 1963, they entered into partnership as Wong & Wong, which continued until 1989. They designed the former Chinese Consulate, as well as many houses and churches, including the Nuuanu Community Church and First Baptist Church at Pensacola and Kinau streets. Wahiawa Terrace is their only known commission from HHA.

Three projects were identified as adhering to the precepts of the perimeter block plan: Wahiawa Terrace, Kahekili Terrace, and Puuwai Momi. Wahiawa Terrace most closely adhered to this plan, modifying the plan only slightly by separating the apartment buildings to allow for the free flow of trade winds throughout the complex. In addition, the distinctive and high level of design of the individual apartment buildings was strongly considered. The distinctiveness and quality of design as shown in the breakup of massing and distinctive eyebrows and layout of the housing project became its primary character defining features, thus, although the interiors of the units had been remodeled and the original windows replaced with aluminum awning windows, Wahiawa Terrace is considered an excellent example of perimeter block plan public housing project adopted to Hawaii.

Wahiawa Terrace appears to meet the criteria for listing in the National Register of Historic Places as a historic district.

KALAHEO HOMES

KALAHEO HOMES

Project	Kalaheo Homes
Architect	Hideo Murakami
Built	1967, Rehabilitated in 1993, 2014
National Register Eligibility	Not Eligible

Landscape Architect: Richard Tongg

Description

The Kalaheo Homes public housing project is comprised of four duplexes located across from Kalaheo Elementary School at the corner of Puu and Maka Roads. Three of the buildings are single-story, while the fourth is two-stories and has two-four-bedroom units. Two of the single-story buildings contain a pair of three-bedroom units and one has two, two-bedroom units. The buildings sit on a level 1.08 acre lot and have poured in place, reinforced concrete slab foundations. They feature lateral running, composition shingled gable roofs with overhanging eaves and exposed rafter tails. The walls, originally tongue and groove, were reinforced with T-111 on the exterior following Hurricane Iniki. Also, the original sliding windows have been replaced with jalousie windows. On the interior, the kitchens and bathrooms have been remodeled as well.

No historic landscaping remains on the grounds.

Kalaheo Homes Duplexes

KALAHEO HOMES

Exterior of Single-Story Home

Exterior of Two-Story Home

History and Significance

Built on a State-owned remnant parcel across from Kalaheo Elementary School, this housing project is typical of the mid-to-late-1960s impetus on the part of HUD to integrate public housing communities into their surrounding neighborhoods, rather than build them as enclaves unto themselves.

Seven projects were identified as embracing the informal, garden city, suburban planning precepts. These included: David Malo Circle, Hui o Hanamaulu, Kapaa, Eleele Homes, Kalaheo Homes, Punahele Homes, and Koolau Village. In addition to the application of T-111 to their exterior walls, Kalaheo Homes also had its original sliding windows replaced with jalousie windows, and the remodeling of the kitchens and baths on the interior. In addition, the roofs were substantially repaired/ replaced with modern material after Hurricane Iniki.

Although a good example of this new policy direction, the buildings no longer retain their integrity of materials, design or workmanship. The four buildings, although retaining their massing and integrity of location, have been extensively remodeled.

Kalaheo Homes does not appear to meet the criteria for listing in the National Register of Historic Places.

MAKUA ALII

MAKUA ALII

Project	Makua Alii
Architect	Frank Slavsky
Built	1967, Renovated in 1972, 1984
National Register Eligibility	Eligible
Criteria	A and C
Significance	Association with history of the Hawaii Housing Authority. Architecturally significant in its high quality of design and being a work of master.
Character Defining Features	High-rise with two connected towers, lanai corridor with spandrel and some original planter boxes, original kitchen cabinets, original hopper windows with vent screen box, original bi-fold closet doors, original wood door with upper panel jalousie window, and screen cell cmu bloks at the utility room. Flat roof community center, arts and craft room wing, concrete paved courtyard, and front and side yard with original landscape.

Landscape Architect : Richard Tongg

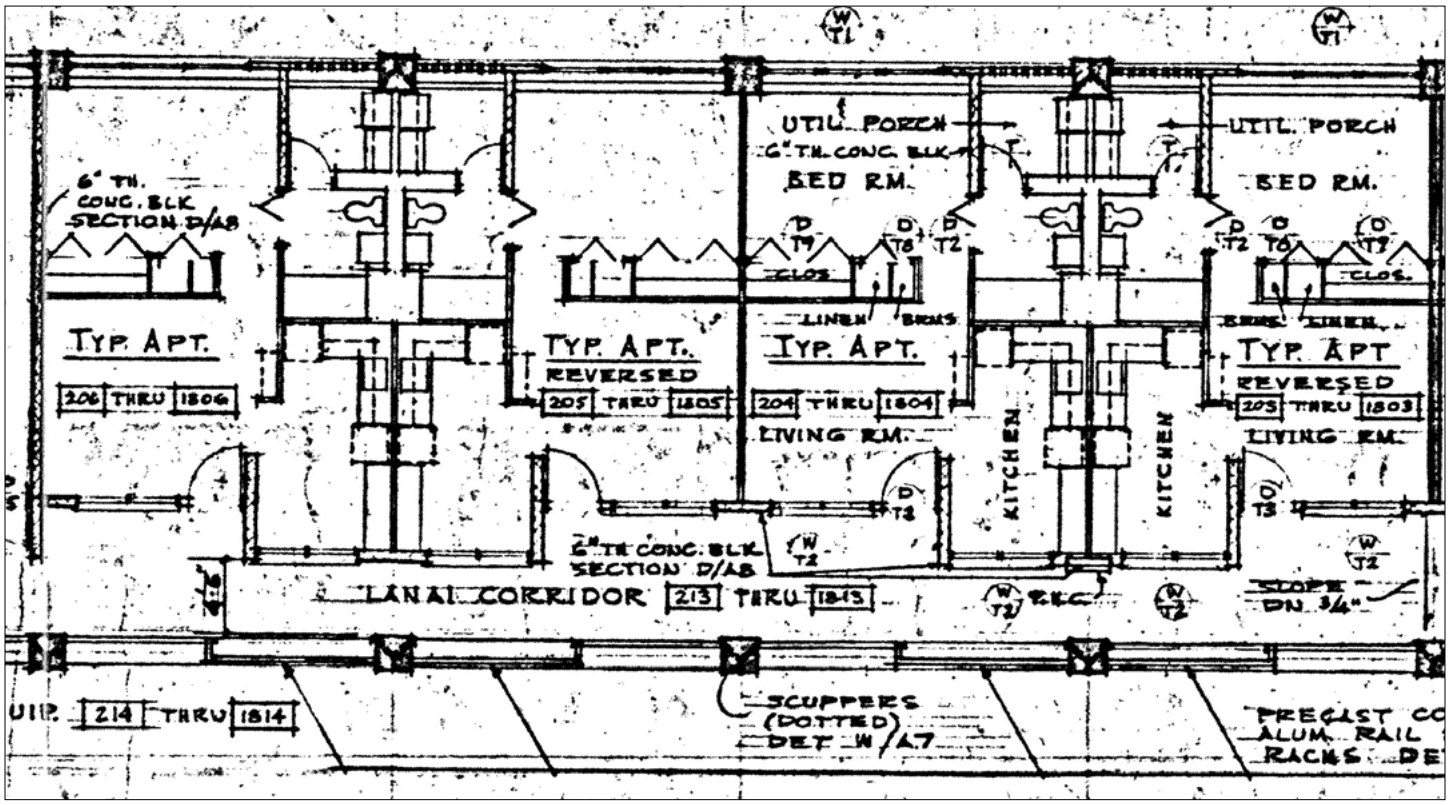
Description

Makua Alii is a 19-story building that sits on a flat lot which includes Kalakaua Homes, immediately off Kalakaua Avenue in a mixed use neighborhood. The building, its grounds and parking occupies 97,519 square feet of the HPHA owned property's total lot size of 9.15 acres. The 33 feet 6 inches x 280 feet building fronts on an asphalt paved entry drive, which runs off Kalakaua Avenue and curves past the building and to a parking lot on the Ewa-rear side of the high- rise apartment building. The building houses 210 one-bedroom units, and sits on a concrete pile foundation. There are typically 12 apartments per floor above the first floor, while the first floor is dedicated to maintenance, security and recreational functions.

The high-rise is comprised of two connected towers, one set back from the other, with the vertical circulation at the intersection. Its façade is characterized by the interplay of horizontal bands formed by the precast spandrels of the lanai-corridors which run across the face of the building and the vertical, reinforced concrete structural columns set 20 feet on center. Open, concrete stairways are at either end of the building. It has a built up, flat roof with a 3-foot high parapet.

Typical upper floors each have 12 one-bedroom units accessed from a lanai corridor which traverses the length of the façade. A precast, 25-inch high spandrel runs along the outer edge of the lanai corridor floor. It is surmounted by a new 20-inch metal railing, which supplanted an earlier metal railing which did not meet current code requirements. Planter boxes adorned the outer side of the spandrels being placed adjoining every other column. Because of poor drainage, spalling became problematic and most of the planter boxes were removed, although boxes still remain on each floor at the left end of the building in its two end bays.

Overview of the Makua Alii



Typical Floor Plan
Frank Slavsky & Associates Architects, *Typical Floor Plan 19th Floor Plan Schedule (Makua Alii)*, Sheet A-2, 1965, Hawaii Housing Authority.

Lanai Corridor with Spandrel

Planter Boxes

The apartments are all one-bedroom with the entry door opening on the living room. The rooms have vinyl tile floors with a 4-inch high vinyl baseboard, and popcorn ceilings. The kitchen is off the side of the living room, and the bedroom is behind the living room's rear wall. Jalousie windows, which retain their original crank handles, are in the living room and kitchen's front wall, and the kitchen retains its original cabinets. There is no door between the bedroom and living room. The bedroom has a set of three, in-swinging, hopper windows in its rear, mauka, wall. Immediately in front and below these windows is a canted vent screen box which allows fresh air to flow into the unit. Three trap doors in the top of the vent screen box allow tenants to regulate the amount of air flowing into their unit. The bedroom closet has original, bi-fold doors and built-in shelving, and a bi-fold door separates the bedroom from its adjoining bathroom. A tile wainscot protects the walls enclosing the tub-shower. Off the bathroom is a rear utility room with a laundry sink. A hinged door with an upper panel jalousie window accesses this space. The outer wall of the utility room is screen cell cmu blocks laid on their sides, allowing fresh air to flow through their holes into the room.

Vinyl Floor with Vinyl Baseboard

Kitchen

Hopper Windows with Vent Screen Box

Vent Box Screens

Bi-fold Closet Doors at Bedroom

Utility Room with Upper Panel Jalousie Window

Screen Cell CMU Blocks at Utility Room

Canted Vent Screens from Exterior

Flat Roof with Pre-stressed Concrete Beams

Aluminum Grilles

At ground level, a left of center, single-story wing projects from the front of the building. This wing houses offices, a former three-bedroom apartment for the building superintendent, and originally a health clinic, which is no longer in operation. The police use one of the offices, as does the building's security. The centered entry to the building is recessed at the right side of the front wing. It is defined by a cantilevered, flat roofed concrete porte cochere, which projects from the building to cover the sidewalk running between the building and entry drive. The flat roof is supported by a series of criss-crossed pre-stressed concrete beams. The entry has aluminum doors, added in 1972, which open on a lobby. The lobby has a tile floor of recent vintage, and a pair of elevators to the left side. Tenant mail boxes are along the rear wall, and along the right wall is an approximately 3-foot 6-inch high cmu wall with an aluminum grille above it, separating the lobby from a recreation room. The latter, as well as the mailboxes, was added in 1984.

Mail Boxes at Lobby

To the right of the elevators is a hallway which accesses the office wing and also a rear wing. The rear wing is a multi-purpose community center room with a stage at its mauka end, and a kitchen beyond the stage's rear wall. A folding partition wall can divide the multi-purpose room into two spaces. Four sets of aluminum sliding doors, added in 1972, are located on the Diamond Head side of the multi-purpose room and provide access and views of the paved courtyard adjoining it.

Original Folding Partitions

The concrete paved courtyard runs along the Diamond Head side of the rear, centered wing. It is separated from the remainder of the property by a 6-foot high cmu wall. A gate in the Ewa side wall, as well as a rear door from the lobby, provide further access into the space, which on the Diamond Head side flows out into the side yard with its lawn, meandering walks and perimeter plantings. The rear courtyard features a demi-eliptical

Circular Lathe House

Concrete Paved Courtyard

Flat Roof with Pre-stressed Concrete Beams

and two circular planter boxes, as well as a circular lathe house, 20 feet in diameter with a shake shingle roof. An original, large monkey pod shades much of the courtyard.

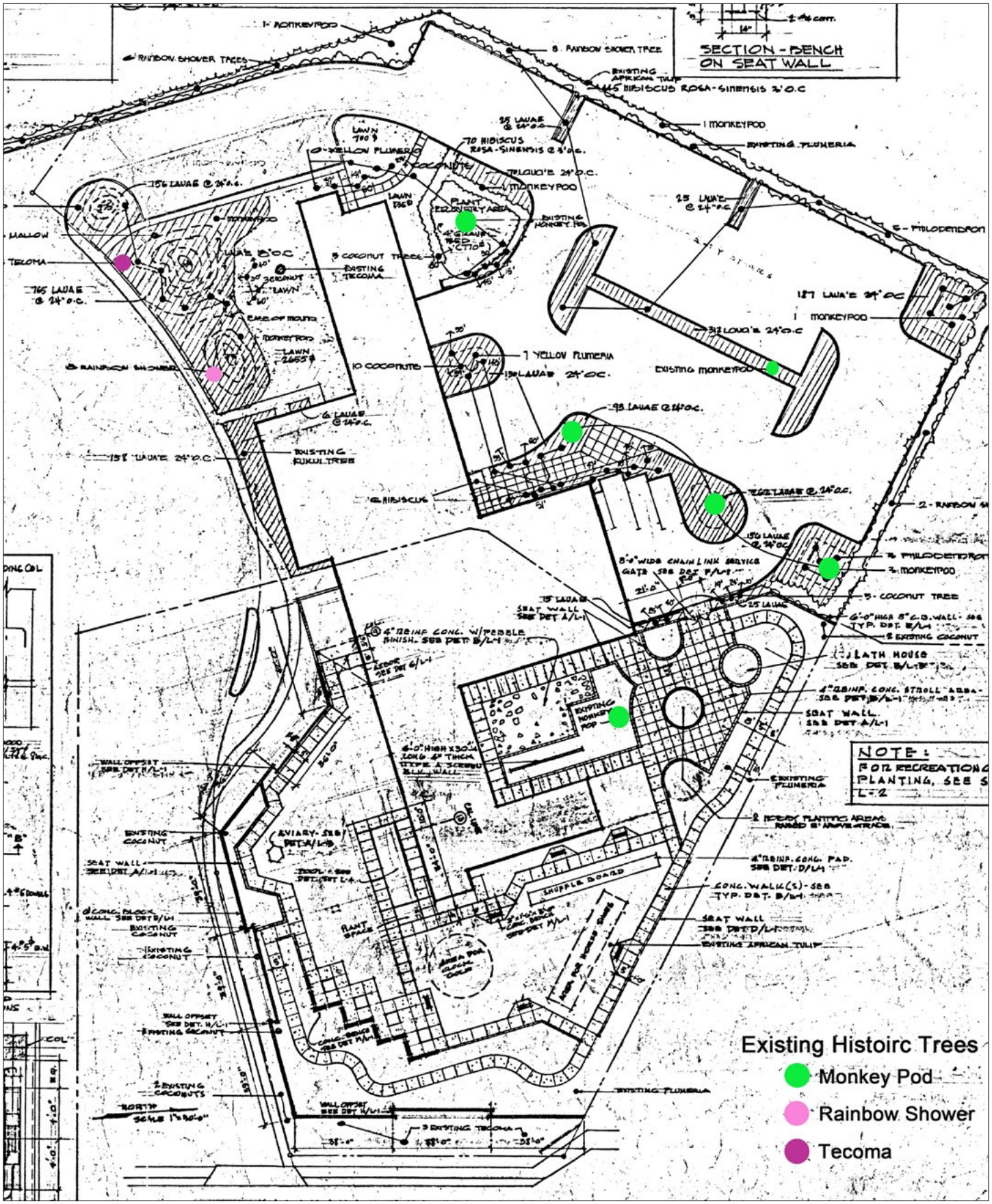
The Diamond Head side of the courtyard is defined by another single-story wing which projects from the right corner of the building. This wing houses an arts and crafts room, which maintains its historic use. At the intersection of the arts and crafts room wing and the main building, a breezeway penetrates the building, providing direct circulation between the front and rear of the high rise. At the front, right corner of the building is a ground floor room which originally housed a library, but now is used as an art room. Both the arts and crafts room and the former library are accessed by aluminum sliding doors which were added in 1972. A non-historic, paved patio, covered by a pergola, is in front of the art room. Originally, a koi pool was located here. The building's front and side yard flow out and around the patio. These landscaped grounds are enclosed by a cmu wall, approximately 6 feet high. The original circulation configuration and seating remain intact, as do many of the original plantings (see next pages landscape plans). In addition to these plantings, several mature trees from the original landscape design are also present in the parking area.

As noted in the above description, Makua Alii has had several alterations made to it over the years. However, none of these are so major as to detract from the historic integrity of the property.

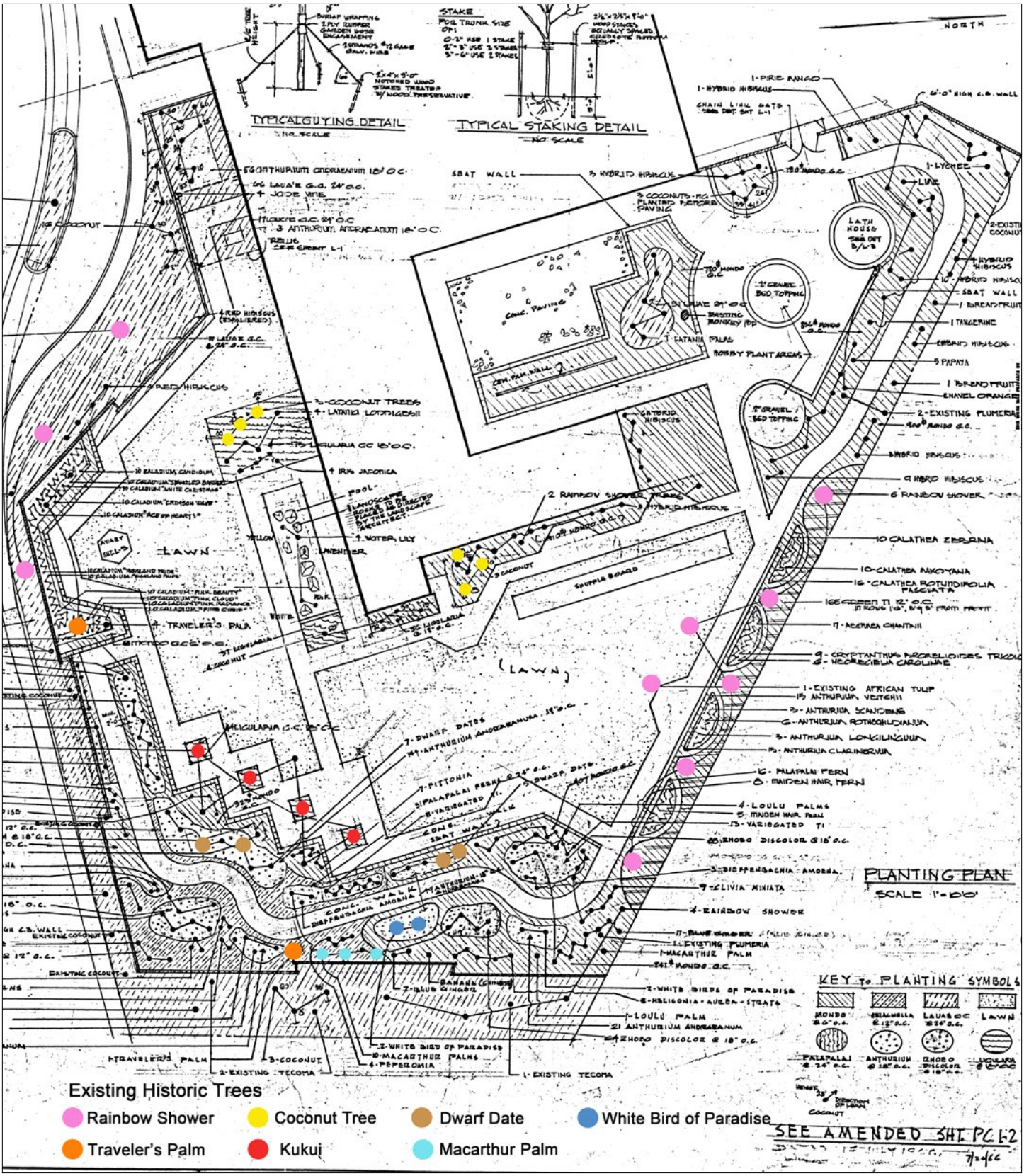
Non-Historic Paved Patio

Side Yard of the Building

Left: Backyard of the Building



Landscape Plan Shows Historic Trees
Frank Slavsky & Associates Architects, *Landscape Planting Plan & Construction Details (Makua Alii)*, Sheet L-1, 1965, Hawaii Housing Authority.



Landscape Plan Shows Historic Trees
Frank Slavsky & Associates Architects, *Landscape Panting Plan Recreation Garden (Makua Alii)*, Sheet L-2, 1965, Hawaii Housing Authority.

MAKUA ALII

History and Significance

Makua Alii was the second Senior Citizen Housing project to be undertaken by the HHA. It was built on a portion of land occupied by Kalakaua Homes. The HHA had built this 122 unit low income housing project in 1941, and later expanded it to 146 units. In order to have sufficient open space to build the proposed elderly housing high rise project, 46 of Kalakaua Homes' units were demolished. In late 1965, the tenants of these demolished apartments were relocated to the recently completed Kuhio Park Terrace housing project. In March 1966 HHA was granted a variance from County parking requirements, and was authorized to provide only one space for every four units. This cleared the way for the awarding of a construction contract in May 1966 to Hawaiian Dredging, who also built the high-rise Kuhio Park Terrace project for the HHA.

Makua Alii was completed and tenants started to move in during December 1967, and the Governor and Mayor dedicated the complex in January 1968. At the time of its opening, the HHA received 427 applications for the 210 units, with 75% of

Building Rendering

the applicants being women. In order to qualify for residency in Makua Alii, applicants had to be over the age of 62, and could have a maximum income of $4,200. The initial tenants averaged 69 years old with an average income of $3,000/year. Rents averaged $32/month.

The HHA worked with the City and County of Honolulu (City) in the planning and design of the project, and the City provided $100,000 toward the construction of the 7,800 square foot ground level senior citizen center with a multi-purpose room, as well as a library, music room, and an arts and crafts room. The County Department of Parks and Recreation continues to administer and operate this senior community center. Initially the State Department of Health maintained a clinic in the building, but this is no longer in operation and their space is now utilized for storage and offices.

At the time it was constructed, the Makua Alii project was, in terms of dollars, the most valuable development administered by the HHA, in large part due to the value of the land on which the high rise sat.

Makua Alii is significant at the State level for its associations with the history of the HHA, and is also significant at the State level for its high quality of design, being the work of a master, Honolulu architect Frank Slavsky.

Makua Alii is associated with both the federal government and HHA's turning their attention to the senior citizen segment of the low income population. Engendered in part by a recognition that the elderly population with low fixed incomes was increasing as a result of improved health care, and a desire of many of the elderly to retain their independence and not be a burden on their children, the U.S. Housing Act of 1956 added special provisions allowing public housing programs, for the first time, to rent dwelling units to one person households, so long as the applicant was 65 years or older in age. In 1961, recognizing that rental prices for units occupied by the elderly might be so low as to make such rentals economically infeasible, the federal Housing Act of that year authorized higher federal subsidies for units occupied by the elderly, allowing local housing authorities to spend relatively more on such units. In the following year, the Senior Citizens Housing Act (Public Law 87-723) lowered the age qualification to 62.

Although Hawaii experienced a 20 percent increase in its population over the age of 65 between 1950 and 1956, the need for low-cost elderly housing did not at first appear to be high. With the Islands' strong tradition of multi-generational households, a survey undertaken in 1956, indicated 95% of the elderly reported satisfaction with their housing situation. As a result, the initial project built to specifically address senior citizen housing in Honolulu, Punchbowl Homes, when it opened in 1960, could not be filled by senior citizens as there were insufficient applicants. Over the next few years, the attitude towards independent living, as well as residing in a high rise apartment, began to change, and the response to Makua Alii encouraged the HHA to proceed with other high-rise buildings for senior citizens, including Kalanihuia.

In 2010, Mason Architects evaluated Punchbowl Homes as being eligible for listing in the National Register of Historic Places for its associations with the history of public housing in Hawaii. Makua Alii, as the first immediately successful, large scale, low-cost senior citizen housing in Hawaii, also appears to met the criteria for listing in the National Register of Historic Places due to its associations with Hawaii's public housing history.

MAKUA ALII

In addition, Makua Alii also appears to meet the criteria for listing in the National Register of Historic Places at the State level as it embodies the distinctive characteristics of its type, period, and method of construction, and possesses high artistic values, that represent the work of a master, Frank Slavsky.

The 19-story building is typical of its period with its pile driven foundation and use of reinforced concrete in its construction. In gains distinction in its application of screen vents to a high-rise building. The use of such a ventilation device had previously only been undertaken in single-story residences in Hawaii, with the Agee residence in Manoa (no longer extant), built in 1919 being an early example of this element. During the 1950s, Slavsky and others, most notably Vladmimir Ossipoff, continued the use of this means of ventilation in their residential design. In addition to this climatically appropriate means of ventilation, the building also incorporates ventilated utility rooms into its design and employs a single stacked lanai corridor to access the individual units. Similarly, the recreation oriented rooms on the ground floor all open to the outside via sliding aluminum doors, reinforcing the indoor-outdoor relationship of the building. The high quality of Richard Tongg's landscaped grounds further contributes to the character of Makua Alii, and although Tongg provided landscape designs for many HHA projects, this is a rare one to have survived so intact. The building won a national award from HUD for excellence in architecture, and also won an award for outstanding design from the Hawaii chapter of the American Institute of Architects (AIA).

Frank Slavsky was born in Denver in 1919 and attended the University of California at Berkeley. He arrived in Hawaii in mid-1941, and then served in the Army Corps of Engineers. In 1952, he opened his own office, and in 1957 went into partnership with Richard Dennis. They designed a number of high quality residences, and such apartments as the Waikiki Palms, 3003 Kalakaua and Makiki Hale. Slavsky also designed the Liliuokalani Trust Building on Vineyard Avenue, and won a Hawaii chapter of the AIA design award for the Ethel Hill residence.

One of the two high-rises surveyed, Makua Alii retains a high degree of historic integrity and appears to meet the criteria for listing in the National Register as excellent examples of high rise public housing and also as excellent examples of public housing provided for the elderly.

POMAIKAI

POMAIKAI

Project	Pomaikai
Architect	Michael T. Suzuki
Built	1967, Modified in 2014 - 2015
National Register Eligibility	Not Eligible

Description

Pomaikai is a senior citizen housing project in Hilo, located off Kinoole Street, in a mixed-use area containing government offices, a pre-school, residences and various commercial enterprises. Situated on the corner of Hualalai and Ululani Streets, on a flat, 0.964 acre lot, it is comprised of three single-story cmu buildings, with a community center building flanked on either side by an apartment building. The buildings sit on reinforce concrete, poured-in-place, slab foundations, and have corrugated metal roofs with overhanging eaves and exposed rafter tails. The two apartment buildings each have front facing gable roofs, while the community hall features a lateral running hipped-gablet roof. An extended ridge beam and two roof beams adorn the gable ends of the apartment buildings. The one apartment building houses ten studio units, while the other has ten one-bedroom units.

Overview of the Site

Community Hall

Left: Extended Gable Ends

POMAIKAI

The property is accessed from Ululani Street, with parking in front of the community hall. The right side, one-bedroom apartment building projects out closer to the street than the other two structures. An inset lanai/corridor runs down the sides of the two apartments on the side facing into the property and provides access to the units. The community center building houses a meeting room, offices, and a laundry facility for the complex. The area behind the community center, between the two apartment buildings is a green open space with a lawn and periphery plantings. However, none of the original landscaping remains. On the Hualalai Street side of the property, a cmu wall is located to buffer the complex from the road and its noise and traffic.

Open Space Behind the Community Center

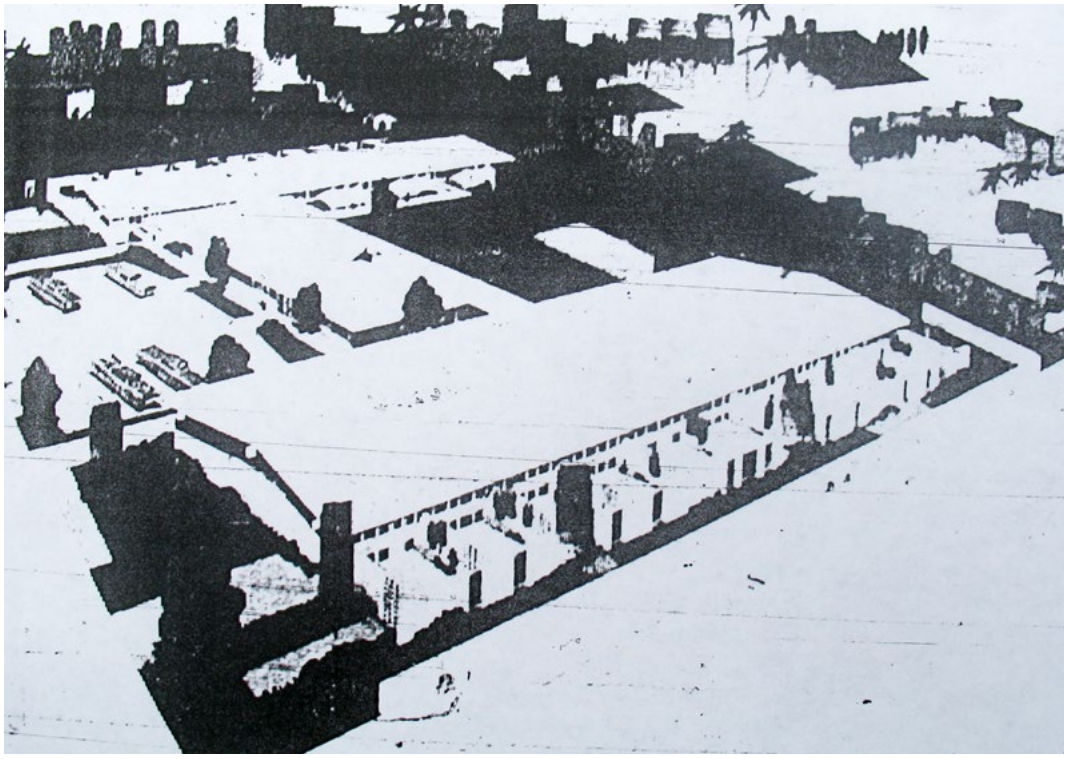
Hualalai Street Side Elevation

The property is in the process of being rehabilitated. The corrugated metal roofs are being replaced with standing seam metal roofs, the units are being completely gutted and reconstructed, and new windows and doors are being installed.

POMAIKAI

History and Significance

Pomaikai is the earliest known example of federally funded elderly housing constructed by HHA on the island of Hawaii. Ground was broken for the project in July 1966, and contractor M. Sonomura constructed the ten one-bedroom and ten studio units, as well as the community center. To qualify to be considered for occupancy, a person had to be over 62 years of age and have a maximum income of $3,500/year. Rent was based on 20% of a person's income. The complex opened in June 1967, with all the studios occupied and HHA had a waiting list for these units. However, only half of the one-bedroom units, which were reserved for couples, were occupied immediately.



Rendering of Pomaikai
(Hilo Tribune, July 23, 1966, page 1)

Although an early example of a HHA elderly housing project on a neighbor island, the complex no longer retains its integrity of design, materials or workmanship. It had its entire interiors gutted, original windows replaced, and the original corrugated metal roofs replaced with standing seam roofs. It did not appear to retain its integrity of materials, and as such was considered to not meet the criteria for listing in the National Register of Historic Places.

PUNAHELE HOMES

PUNAHELE HOMES

Project	Punahele Homes
Architect	Unknown
Built	1967, Rehabilitated 1998
National Register Eligibility	Eligible
Criteria	A and C
Significance	Association with history of the public housing in Hawaii. Architecturally significant as an early example of Hawaii Housing Authority's clustering its housing around a cul-de-sac, and for use of distinctive material utilized in Hawaii during the 1960s.
Character Defining Features	The front wall shadow blocks and housing sited around the cul-de-sac.

Description

Punahele Homes is comprised of 15, two-bedroom duplexes clustered on large lots around Lokahi Place, a cul-de-sac. Planned as an extension of Lokahi Homes, it adjoins that earlier development. The neighborhood is surrounded by open space, backing on Waiakea High School, and with undeveloped land and Lokahi Park adjoining it. The single-story dwellings sit on poured-in-place, reinforced concrete foundations, and have lateral running, corrugated metal, gable roofs with open, overhanging eaves and exposed rafter tails. The front walls of the buildings are shadow block to the sill line and tongue and groove above that. Shadow block wing walls extend the façade approximately 7 feet at either end. The side and rear walls are T-111 with a girt below the sill line.

Overview of the Site

Shadow Block Front Wall

The symmetrical buildings are six bays wide, with each half mirroring the other. A centered concrete sidewalk leads to each building and then branches off and leads to each unit's front entry. The center two bays of the building feature three jalousie windows each, with paneled walls, rather than shadow block, below. The bays immediately joining the center bays contain the entries to each unit. This has a non-historic single door. The end bays each have a single jalousie window. The side walls have two normal size jalousie windows for the two-bedrooms, and in the gable are two smaller, jalousie windows to ventilate the bathroom. The current jalousie windows replaced the original windows throughout the buildings, and the bathroom windows are even of newer vintage.

The interiors have had their kitchen and bathroom remodeled. No original landscaping remains.

PUNAHELE HOMES

Typical Home Elevations

History and Significance

In July 1966, ground was broken for a 30, two-bedroom expansion to the Lokahi Homes project, which would eventually be named Punahele Homes. H. Sonomura was the contractor for this new development. The period 1965-1967 was one of expanded activity for HHA on the island of Hawaii. In addition to this project, another increment of Lanakila Homes was under construction and Pomaikai senior housing was started. These mid to late 1960s projects all reflect the HHA's move away from the Zeilenbau planning approach to public housing and to a more suburban, residential approach.

Punahele Homes is significant at a local level under criterion A for its associations with the history of public housing in Hawaii. It is also architecturally significant at the local level under criterion C as an early example of HHA's clustering its housing around a cul-de-sac, and for its use of shadow block, a distinctive material utilized in Hawaii during the 1960s.

Punahele Homes is very much in keeping with the HHA's shift away from the Zeilanbau plan to a more suburban appearance. The project's cul-de-sac layout came to the fore in subdivision design layouts during the 1960s in Hawaii as well as the mainland and Australia. Dead-end streets have existed as deliberately planned entities since ancient times, with archaeologists discovering evidence of them in the layout of the worker's village at El Lahun in Egypt as early as 1885 B.C, as well as in Rome. These streets were thought to be used for defensive purposes, to confuse any enemies that may have invaded a city. In the United States, the use of such streets were not common, as the grid plan was the dominant urban pattern. The use of cul-de-sacs reentered planning thought in the early twentieth century, with the Hampstead Garden Suburb Act of 1906 authorizing their use in this London suburb. The concept slowly gained favor and the United States' Federal Housing Authority recommended and promoted their use through their 1936 guidelines. During the 1950s, the FHA used its lending requirements to encourage the inclusion of cul-de-sacs in suburban development plans, and by the 1960s, this street plan attained systematic application in subdivisions across the United States, including Hawaii. The use of this form was encouraged as it reduced traffic in residential areas, and provided less hazardous play areas for children. The rapid popularity of this street pattern can in large part be attributed to developers' desires to have their homes conform with FHA loan requirements. Developers also found that this arrangement allowed them to maximize the number of parcels in their developments, especially around the edges of irregularly shaped land holdings. Punahele Homes is an early example of the HHA adopting this roadway configuration for its housing projects. Maili I, Nanakuli Homes and Koolau Village are also characterized by their employment of cul-de-sacs in their designs. Seven projects were identified as embracing the informal, garden city, suburban planning precepts. These included: David Malo Circle, Hui o Hanamaulu, Kapaa, Eleele Homes, Kalaheo Homes, Punahele Homes, and Koolau Village.

Shadow Block

Punahele Homes' use of shadow block is also noteworthy. A specialty designed concrete block, shadow block had a lip at one edge which allowed a wall to take on the appearance of clapboard construction. It seems to have been utilized in Hawaii from the late 1950s through the mid-1960s. A handful of examples of this material have been found on Oahu, including: the Recreation Center and Rest Room at Swanzy Beach Park (1960) designed by Hogan & Chapman, the apartment complex at 1422 Heulu Street (1959) designed by Ed Aotani, the Honolulu Myohoji Temple (1967) designed by Robert Katsuyoshi, and also in the garden walls encircling Law & Wilson's Harris Memorial Methodist Church (1962) and St. Pius X Catholic Church (1958). Punahele Homes is a rare example of this material being used in Hilo, or for that matter on the neighbor islands, and should be retained whenever remodeling of the units are considered. Other examples of this material on the neighbor islands have not yet been found. As a result it was considered to meet the criteria for listing in the National Register of Historic Places as a rare example of the use of shadow block.

Thus, although several alterations have occurred to the buildings at Punahele Homes, most notably the application of T-111 to the building's side and rear walls, the replacement in-kind of its original jalousie windows with new ones, and the in-kind re-roofing of the buildings using corrugated metal, do not detract from the overall historic character of the development, which retains its original cul-de-sac layout with the buildings sited on large lots surrounded by green lawns, and the immediately noticeable use of shadow blocks in the duplexes' facades.

Punahele Homes appears to meet the criteria for listing in the National Register of historic Places as a historic district.

KALANIHUIA

KALANIHUIA

Project	Kalanihuia
Architect	James Tsugawa
Built	1969
National Register Eligibility	Eligible
Criteria	A and C
Significance	Association with the development of public housing in Hawaii and architecturally significant in typical design of the public housing in its period in Honolulu
Character Defining Features	Modern style high-rise with central courtyard, use of decorative concrete blocks, intact bathrooms and kitchen, aluminum jalousie windows with original locking lever handles, and stainless steel curtain rod at studio unit.

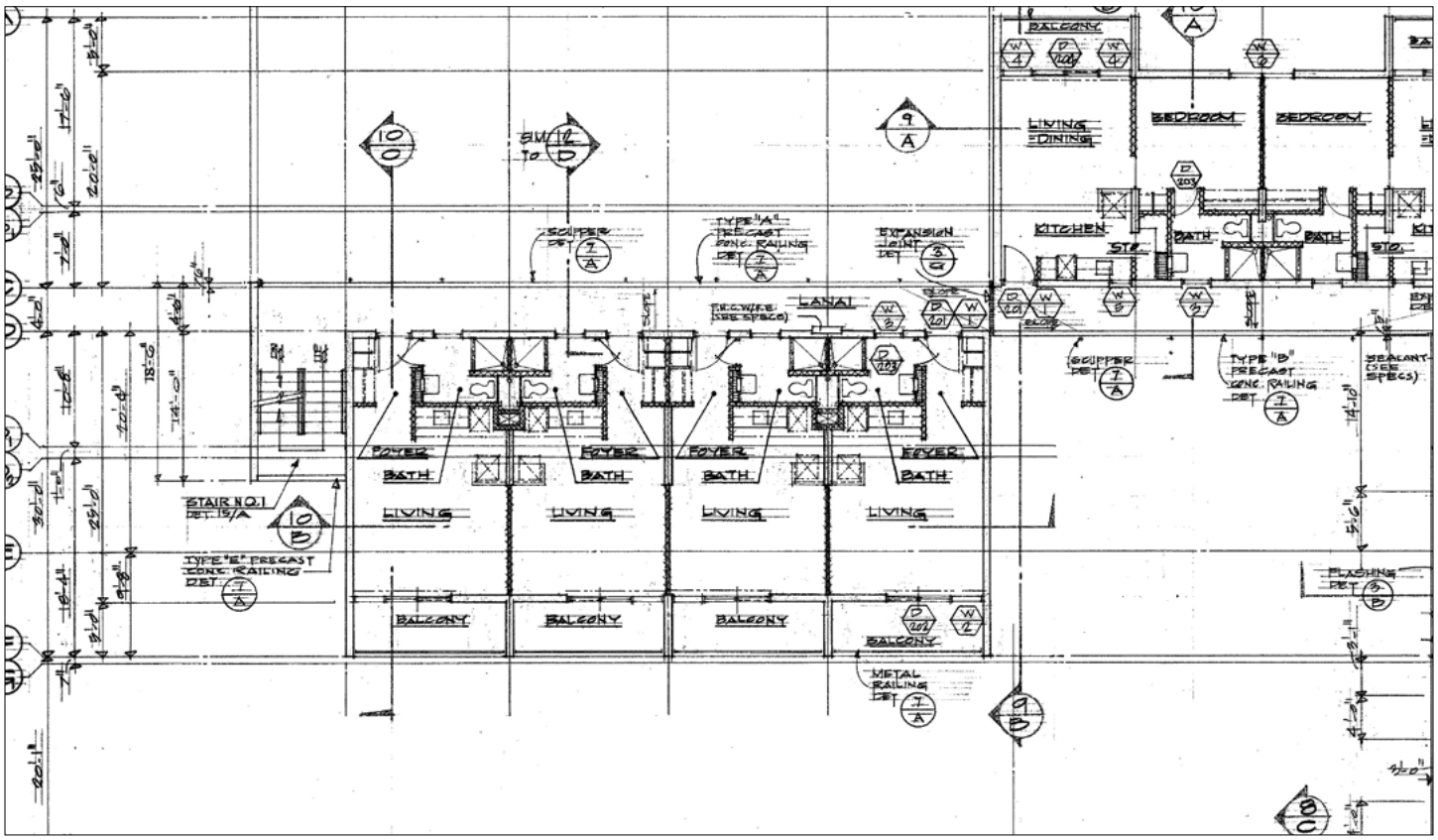
Structural Engineer: Donald Lo

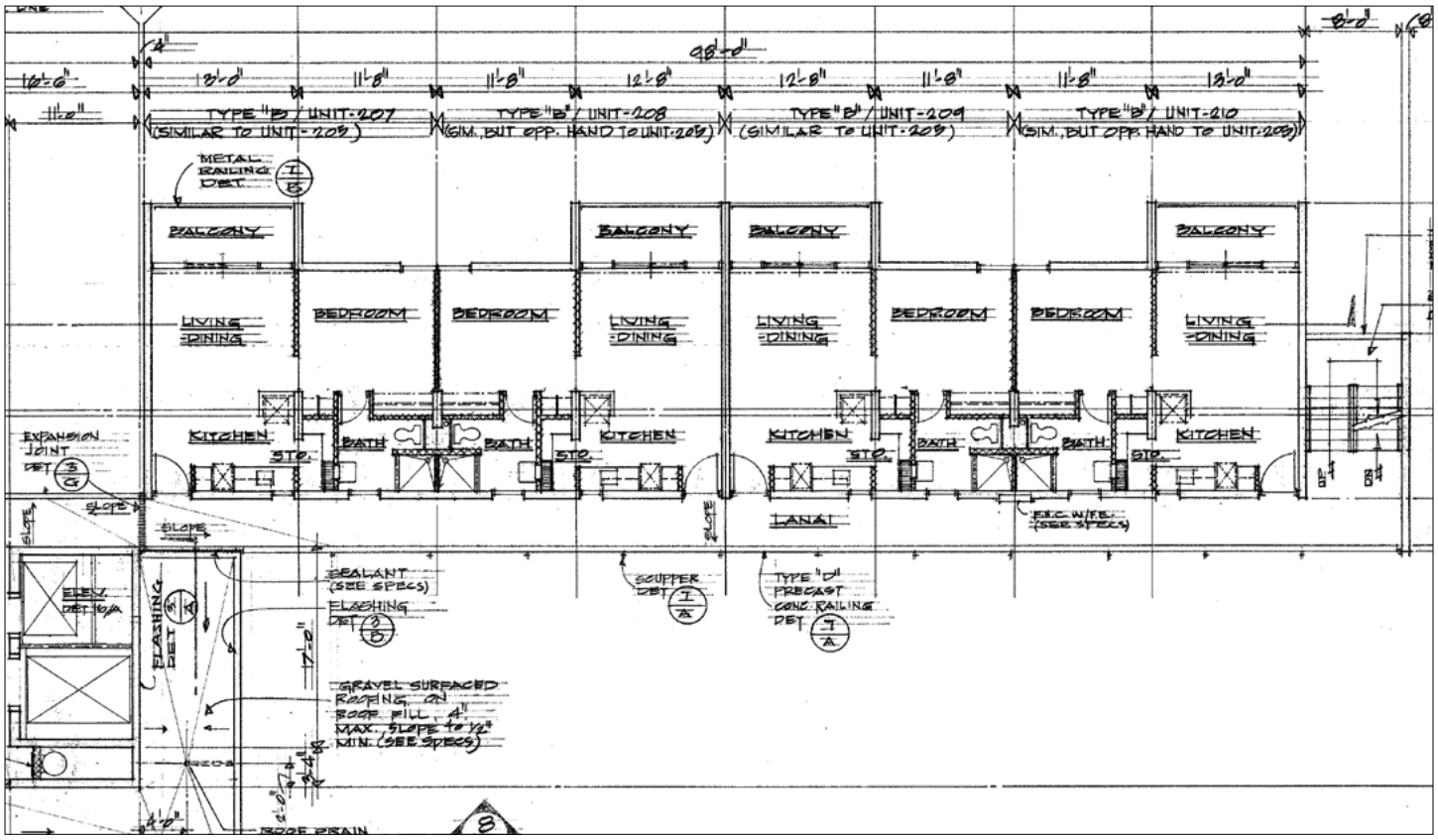
Landscape Architect: Richard Tongg

Description

Kalanihuia is located at the corner of Beretania Street and the recently completed extension of Aala Street, across from Aala Park. Sited on a 1.9 parcel, this 15-story, modern style high-rise building houses 91 bedroom and 60 studio units, as well as a community hall and management offices. The reinforced concrete building sits on pre-stressed concrete piles and utilizes pre-stressed concrete joists, and basically runs mauka-makai. All floors above the ground floor are similar. The high-rise's foot print presents a variation on the standard rectangular box by having a right-of-center, 32-foot long, vertical circulation wing project 30 feet from the face of the building, and the makai end of the building jogs outward a similar 30 feet for the final 59 feet 4inches. To the right (mauka) side of the vertical circulation wing, the building runs for 98 feet, while to the left, it runs for 49 feet 4 inches before making the jog. A single, 239-foot 8-inch lanai/corridor runs the length of the building on each floor and services all the single stacked units. The lanai/corridor features a 3-foot 9-inch high, pre-cast panel railing, with the panels spaced 4 inches apart. At each end of the building is an open, 8-foot wide set of stairs which runs from the ground to the top story.

Exterior of Kalanihuia





Typical Floor Plan, Studio (above) and One Bedroom (below)
James K. Tsugawa, A.I.A. & Associates, *Typ. Floor Plan : Second Floor, Interior Finish & Dr. Schedules, Roof Plan: Low Roof* , Sheet 2, 1967, Hawaii Housing Authority.

The 60 studio units, four per floor, are housed in the jog at the makai end of the building, and add further texture to the facade by having a band of inset lanai run across their portion of the Diamond Head elevation. The lanai have wrought iron railings and are accessed from sliding aluminum doors. The interiors of the studios have 3-inch wide cmu partition walls, concrete ceilings, and 9-inch square, white vinyl tile floors, some of which have been patched with 12-inch square vinyl tiles. The bathroom and kitchen remain intact and the latter features a stainless steel curtain rod, which runs the length of the wall with the appliances and sink on it. In this manner, the presence of the kitchen can be hidden by a curtain from the rest of the studio's room. A floor to ceiling jalousie window is adjacent to the aluminum sliding doors that access the lanai. The bathroom retains its original tiled shower. As is typical of many public housing units in Hawaii, the clothes closets have no doors, only a curtain rod.

Lanai

Curtain Rod at Studio Kitchen

Original Shower Tile

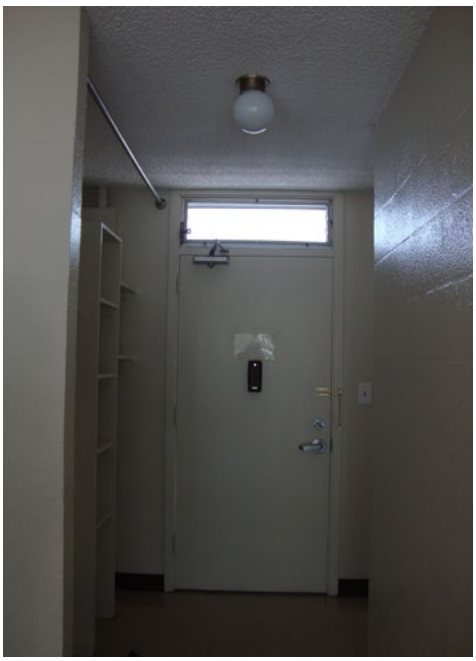
Open Closet

The vertical circulation wing holds two elevators and a trash chute on one side and a concrete, dogleg stairway on the other. The elevator lobby is in the center of the wing, and its front side is enclosed by perforated, decorative concrete block with a quatrefoil pattern. A set of aluminum sliding doors is on the opposite, lanai/corridor, and helps regulate the wind going through the lobby.

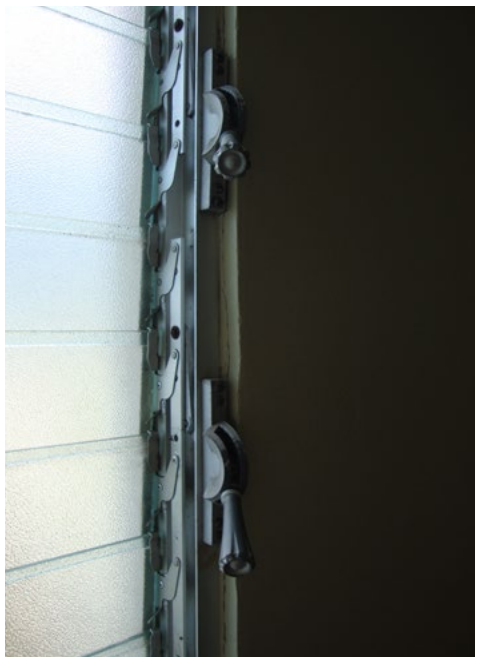
The remainder of the main building houses the one-bedroom units, six to a floor. As with the studio units, the bathrooms and kitchens retain much of their integrity. The living room has an aluminum sliding door in its rear wall which accesses an outset lanai. The bedroom flows off the living room, unimpeded by a doorway or door. Similarly the kitchen flows around a partition wall into the living room. The flooring, walls, and ceilings are similar to those of the studio apartments.

All the units have jalousie transoms above their front doors. All windows in the units are jalousie and many retain their distinctive and original locking lever handles.

Left: One Bedroom Kitchen



Transom above the Entry Door



Original Lever Handles

Projecting out from the building, in front of the vertical circulation wing is a flat roofed, single-story, 80 feet 4 inches x 120 feet wing, which features a 32-foot wide central courtyard that runs the depth of the wing. The courtyard is entered through a pair of wrought iron gates, and has a central planter which contains Manila Palms and other smaller plants. None of the plantings are original. The front and rear walls of the courtyard are of the same decorative block as in the elevator wing, while along the sides of the courtyard are doors to offices and a community center. The flat roofs sheltering these rooms have overhanging eaves supported by pre-stressed concrete rafters. Upon first entering the courtyard, on its right side is a garden area niche screened off by a decorative concrete block wall. It has square openings in the roof to allow Manila palms to grow up towards the sky. Originally, the courtyard flowed into a covered passageway that flowed into the mail and elevator lobbies; however, now an aluminum door flanked by fixed windows secures the entry to the building at the end of the courtyard.

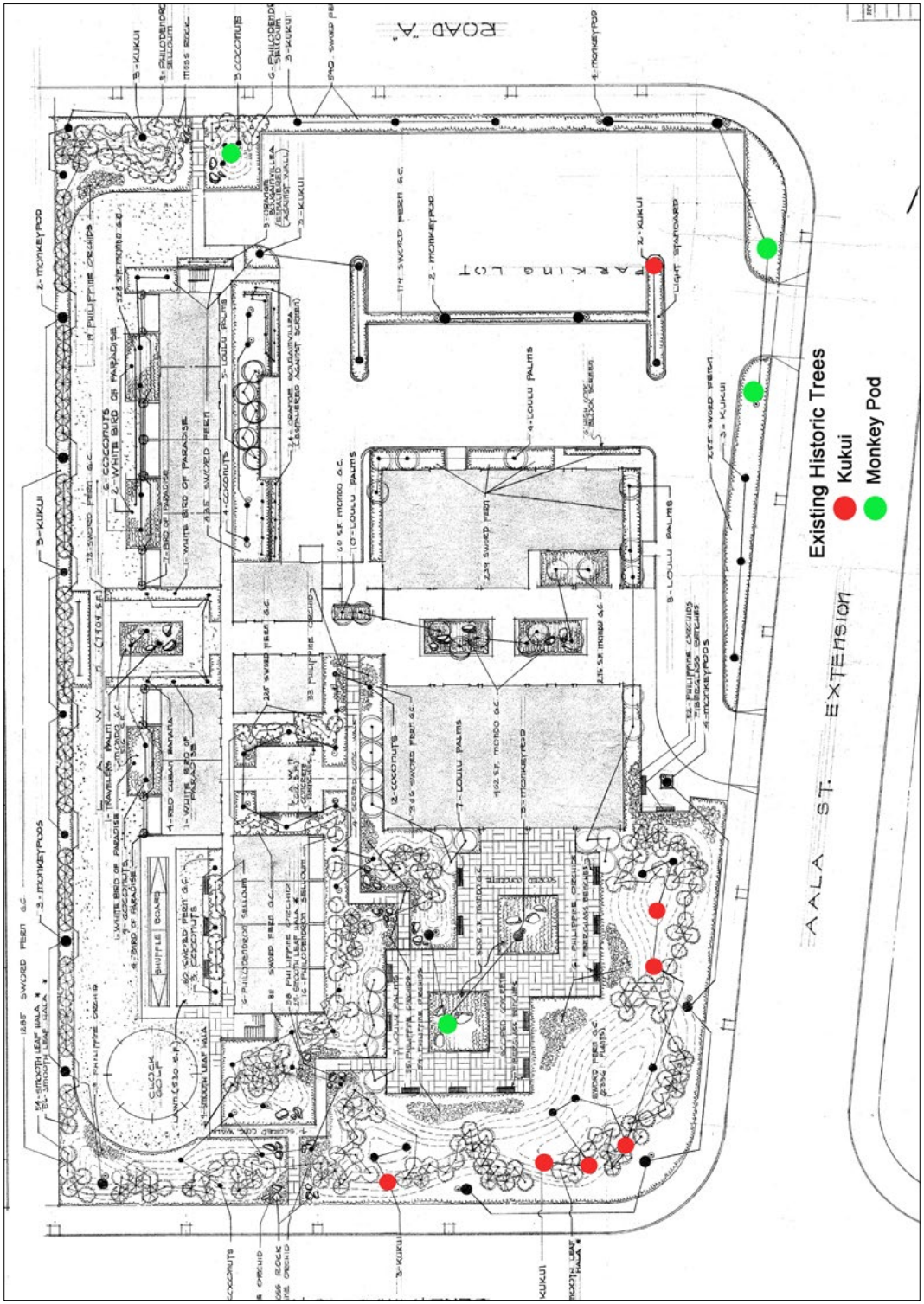
Courtyard from Above

Court side

Left: Palms at the Courtyard

KALANIHUIA

Most all of the historic landscaping has disappeared with the passage of time. However, several major trees, including four monkey pod, as well as a number of kukui, still stand (see below). The paved patio off the community center on the makai side of the property has been reconfigured, and a former golf area is no longer extant.



Original Landscape Plan Showing Existing Tress
James K. Tsugawa, A.I.A. & Associates, *Landscape Plan,* Sheet 60, 1967, Hawaii Housing Authority.

KALANIHUIA

Kalanihuia's building remains very much intact. There have been only minor alterations to the building, such as the enclosing of the once open entry with aluminum doors, and some of the flooring has been repaired with 12-inch square vinyl tiles and doors and door knobs have been replaced. These alterations are not sufficient to affect the historic character of the building in a significant manner. As such, the building retains its integrity of location, setting, design, materials, craftsmanship, feelings and association.

History and Significance

Kalanihuia was the third elderly housing project to be undertaken by the HHA on Oahu, having been preceded by Punchbowl Homes and Makua Alii. Constructed within the Kukui Redevelopment Project area, it was built on lands which had been cleared by the HRA.

Kalanihuia appears to be significant at a statewide level under Criterion A, for its associations with the development of public housing for senior citizens in Hawaii and under Criterion C for its architecture which is typical of high-rise buildings of the period in Honolulu.

Original Rendering

KALANIHUIA

The three elderly housing projects opened by HHA on Oahu during the 1960s are Punchbowl Homes, Makau Alii and Kalanihuia. Mason Architects in 2010 considered the earliest project, Punchbowl Homes, to meet the criteria for listing in the National Register of Historic Places. It is a mid-rise, seven-story, building and opened in 1960, allocating 96 units for senior citizens and another 60 to low income families. Such action was justified on the grounds that the HHA did not believe it could obtain sufficient rent from the elderly to make the project economically feasible. A secondary reason may have been the Authority's uncertainty as to the demand for elderly housing, for in 1967, in anticipation of the opening of Makua Alii, and its 300-person waiting list, HHA director Yoshio Yanagawa found such demand "a pleasant surprise," as "When the federal people first approved the Punchbowl project for senior citizens, they were skeptical about the demand. But now, we are finding that even among the Oriental families, who traditionally have stronger filial ties, these apartments for senior citizens are becoming more popular. Maybe in our changing culture, the older parents are finding it less attractive to be built-in baby sitters."[30] Both the 19-story Makua Alii and the 15-story Kalanihuia projects were devoted exclusively to the elderly, reflecting the change which had transpired during the 1960s, as well as the increase in the elderly population. As such, Kalanihuia is significant for its associations with public housing's growing concern for the housing of senior citizens.

Kalanihui is also architecturally significant as a good example of a high-rise building constructed in Hawaii during the late 1960s. Its use of reinforced concrete as well as pre-stressed concrete and cmu blocks in its construction was typical of its period, as was the single stacking of units along a lanai corridor. The latter design element was borrowed from walk-up apartments of the 1950s and early 1960s, and was adapted to a number of high-rise apartments in Hawaii such as the Oahuan (1957), the Consulate (1965), and Ala Wai Plaza (1970). As was typical of high-rise apartments of the period, the units relied on natural ventilation rather than air conditioning. The siting of the building was also in keeping with the best practices of the time, by having the long side of the building run mauka-makai, resulting in less obstructed ocean and mountain views and providing larger avenues for the trade winds to flow through. The building's design is also distinctive with its breaking up the rectangularity of the typical box with its outset vertical circulation wing and the studio units' jog. The use of decorative concrete block screens to enhance ventilation also contributes further visual variety.

Kalanihuia was designed by Honolulu architect James Tsugawa (1930-2006), who graduated from Hilo High School and received his degree in architecture from the University of Oregon. After working in California for five years, he returned to Hawaii and opened his own office in 1965. In addition to this tasteful high-rise, he designed many residences as well as Kawaiahao Plaza.

The only two high-rise buildings studied in the survey were Makua Alii and Kalanihuia. Both were built to address the needs of elderly housing and retain a high degree of historic integrity. As such, Kalanihuia appears to meet the criteria for listing in the National Register as excellent examples of high-rise public housing and also as excellent examples of public housing provided for the elderly.

30 Advertiser June 3, 1967.

KOOLAU VILLAGE

KOOLAU VILLAGE

Project	Koolau Village
Architect	Edwin Miyamasu
Built	1969, Major renovation in 1999
National Register Eligibility	Not Eligible

Description

Located in a quiet enclave off Keaahala Road in Kaneohe, Koolau Village is accessed by Kamau Place, which serves as a spine for the housing project, with buildings on both sides of the road and also bordering a long parking lot off the street. The property is comprised of 18 buildings situated on a 13.99 acre lot. It features two-story buildings with lateral running, composition shingled gable roofs with open, overhanging eaves and exposed rafter tails. The townhouses sit on poured-in-place concrete slab foundations, and have tongue-and-groove walls on the front and rear elevations, and cmu block end walls and partition walls between each unit. The smooth, scored, cmu blocks impart the impression of brick laid in soldier courses. The garbage enclosures also utilize this same block.

The buildings vary in size and house one-, two-, three-, and four-bedroom units, with a total of 80 apartments. Those buildings with four-bedroom units, also contain one-bedroom units at the second story at the ends of the building. These are accessed by exterior concrete stairs with wrought iron railings. The buildings were renovated in 1999, and as a result now have a more elaborate façade with a non-historic coping between the first and second stories, and a new gabled entry for each unit. In addition, the once open utility areas to the rear have been enclosed with decorative concrete block featuring a curved V pattern, and the one-bedroom units had utility rooms with tongue-and-groove walls constructed above the lower floor's four-bedroom unit's utility room. Metal clothes line poles are located in the grassy yards behind the buildings.

Typical Building Exterior

CMU Blocks

Exterior Concrete Stairs

Building Rear

Interior Wood Stairs

Left: Renovated Kitchen

Other than the one-bedroom units, all other units have two floors, with wood stairs running between the first and second floors. The stairs have three steps running between the ground floor and a landing, and then take a quarter turn to the right before continuing another eleven steps to the second floor. The original jalousie windows for each unit appear to have been replaced by more recent jalousie windows, and the bathrooms and kitchens have been remodeled. Bedroom closets have no doors, a common feature in most HHA housing.

No original landscaping appears to remain.

History and Significance

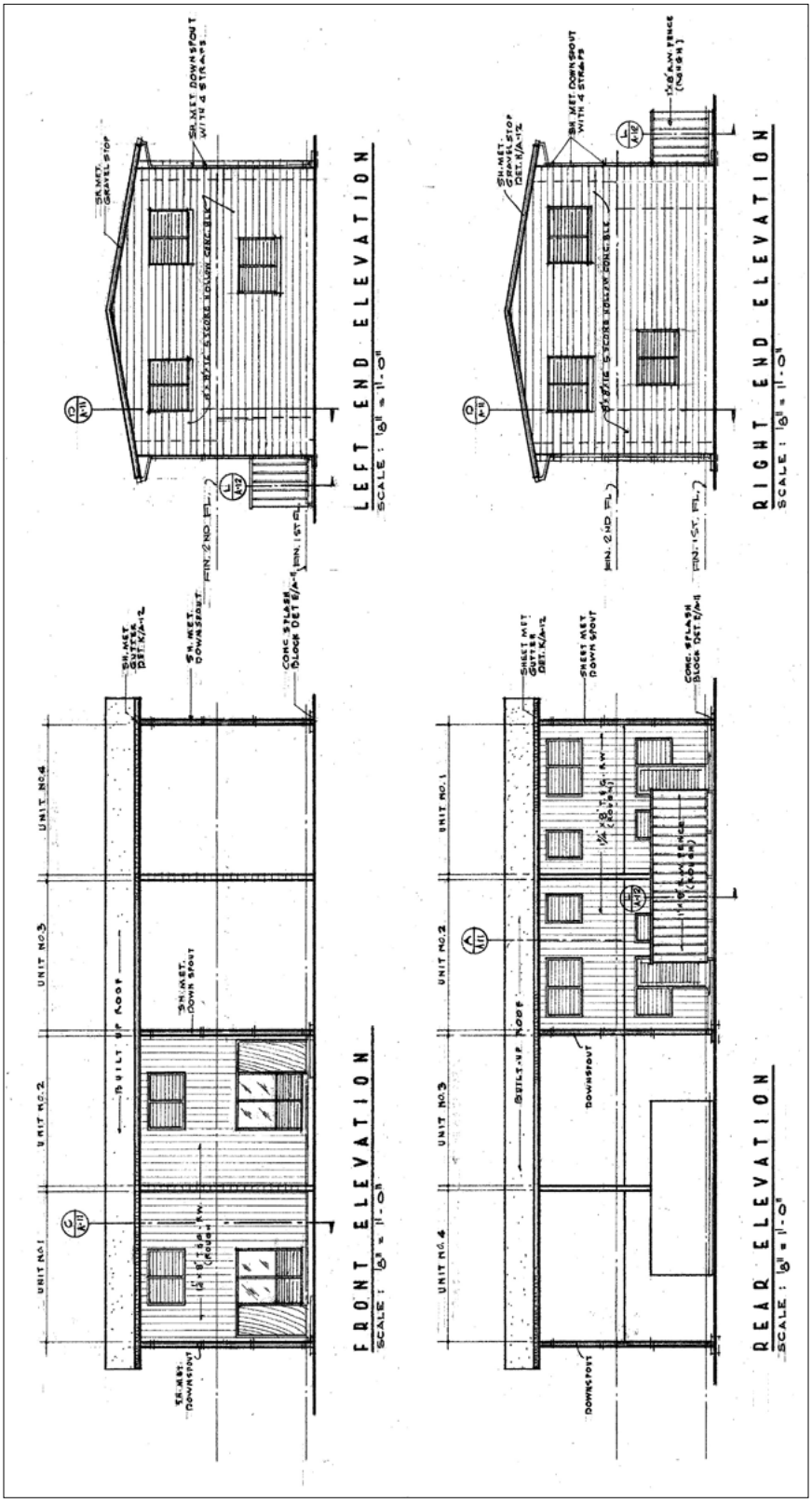
A federally supported project, planning for the Koolau Village Housing project commenced in 1964. However, difficulty in finding an appropriate site with proper zoning delayed the project for several years. Various objections were raised to the project by members of the Kaneohe community, including the project's possible negative impact on its neighborhood, and the placing of more children in already crowded schools. The HHA responded that the latter should not be a concern, as most all the families which would eventually occupy the new project most likely already resided in Kaneohe, and as for project impacts, the agency asserted the project was too small to result in any negative affects.

The HHA was finally able to procure a remnant parcel of the Hawaii State Hospital's grounds which was cut off from the rest of the hospital by the construction of Kahekili Highway. They broke ground on the project at this site in July 1968, the earliest known HHA project on the windward side of Oahu. Designed to be "in keeping with the character of the neighborhood"[31], the project design strove to avoid the "institutional appearance" of previous projects following Bauhaus precepts. David Malo Circle, Hui o Hanamaulu, Kapaa, Eleele Homes, Kalaheo Homes, Punahele Homes, and Koolau Village represent a new design direction for HHA projects which incorporated a more romantic approach typical of suburban developments of the late nineteenth and early twentieth century, with buildings sited along curving roadways, and set back from the street by green lawns.

Although the layout of Koolau Village remains intact, the buildings comprising the project no longer retain their historic integrity, as a result of the 1999 renovation of the property. The historic, plain, unadorned facades of the buildings have been supplanted by a post-modern appearance with the addition of an asphalt shingle, shed roof coping between the first and second stories, and the construction of a single-story, gable roofed portico at the front entries. In addition, on the interiors the kitchens and bathrooms were remodeled and a new utility room was added to the one-bedroom units, while the other units' utility rooms were enclosed. The windows also appear to have been replaced. The individual buildings in both Lokahi and Hauiki retain much more of their design integrity than Koolau Village, and should be viewed as better examples of the HHA's move away from the German Bauhaus inspired, Zeilenbau plan and its associations with institutional architecture.

This property does not appear to meet the criteria for listing in the National Register of Historic Places due to its lack of integrity.

31 Star Bulletin, December 13, 1967.



Original Two-Bedroom Unit Exterior Plan
Ed Miyamasu and Assoc., *Two Bedroom Unit Exterior Elevation, Section & Stair Detail* Sheet A-5, 1968, Hawaii Housing Authority.

MAILI I

MAILI I

Project	Maili I
Architect	Richard Matsunaga
Built	1969
National Register Eligibility	Not Eligible

Description

Maili I is comprised of 20 units built on a level, 2.3181 parcel in a quiet residential neighborhood one block mauka of Farrington Highway in Maile. The development is primarily clustered around three cul-de-sacs, two of which are accessed from Maliona Street, and the third from Hila Street. In addition, two three-bedroom houses are located at the head of Maipela Street. The project includes seven two-bedroom and 13 three-bedroom houses, with a mixture of the different sized houses on each cul-de-sac.

View from the Miliona Street

Typical Houses

Original Tongue and Groove Walls with Bedroom Closet Door

The single-story houses sit on poured-in-place, reinforced concrete slab foundations. They have front facing gable roofs, which originally were built up with pitch and gravel, but now are sheathed in standing seam metal. The walls, originally of redwood tongue-and-groove, now are covered with T-111 without any girt. The windows have also been replaced and now are anodized bronze aluminum sliding and jalousie windows. A non-original shed roof now shelters the centered main entry from the elements.

The interiors are more intact, with their original redwood tongue and groove walls. The bathroom and kitchen have been remodeled, but the bedroom closets still retain their doors, in some of the units.

No historic landscaping remains intact.

MAILI I

History and Significance

HUD started a turnkey program in 1967, and Maili I was the first use of this program in Hawaii. With this program a developer would approach HHA with a proposed site and a building designs which met HHA standards. Prior to the start of construction, HHA would provide the developer a letter of intent to purchase the development once it was constructed, and the federal government would provide the developer interim financing until the developer could obtain a private source of funding. Thus, dwellings were built by private developers just as any other subdivision, but with the guarantee that the HHA will purchase the entire subdivision upon its completion. This new vehicle for the construction of low cost housing was designed to aid in distributing low-income families throughout the community. Through this approach, lower income families would live in the same environment with families of higher income levels.

Maili I was developed by Francis Y. Wong and opened in January 1969. Upon obtaining the completed houses, the HHA selected families from the Waianae area to reside in the new houses. Rent was set between $55 and $65 a month, which included an allowance of $12 to $15 for utilities, with the tenants paying any overage. Tenants were responsible for all yard work and repairs. For the three-bedroom houses, the maximum income was $5,300, plus $100 for every child. HAA applied to federal authorities for a rent-to-own program for these residences, but this “equity accumulation” program never materialized. If it had, families would have paid 20% of their income into an equity plan. Once $365 had accumulated in their account, the tenants could use these moneys as a down payment to purchase their unit.

At the time Maili opened, other turnkey projects being processed by the HHA included two in Wahiawa, one in Nanakuli, and second in Maili. In addition, the Authority was considering turnkey projects at Waimea, Kauai (14 units), and for the elderly at Pahala on the island of Hawaii.

Although Maili I is an early example of low cost housing obtained by HHA via the turnkey program, it no longer retains its integrity of materials or design, having been completely renovated on the exterior in the past several years. The exterior walls have been clad in T-111, new windows and doors have replaced the originals, and the historic pitch and gravel roofs have been replaced by standing seam metal roofs. Also, the entry has been modified by the addition of a roof over the front doorway.

Maili I does not appear to meet the criteria for listing in the National Register of Historic Places.

NANAKULI HOMES

NANAKULI HOMES

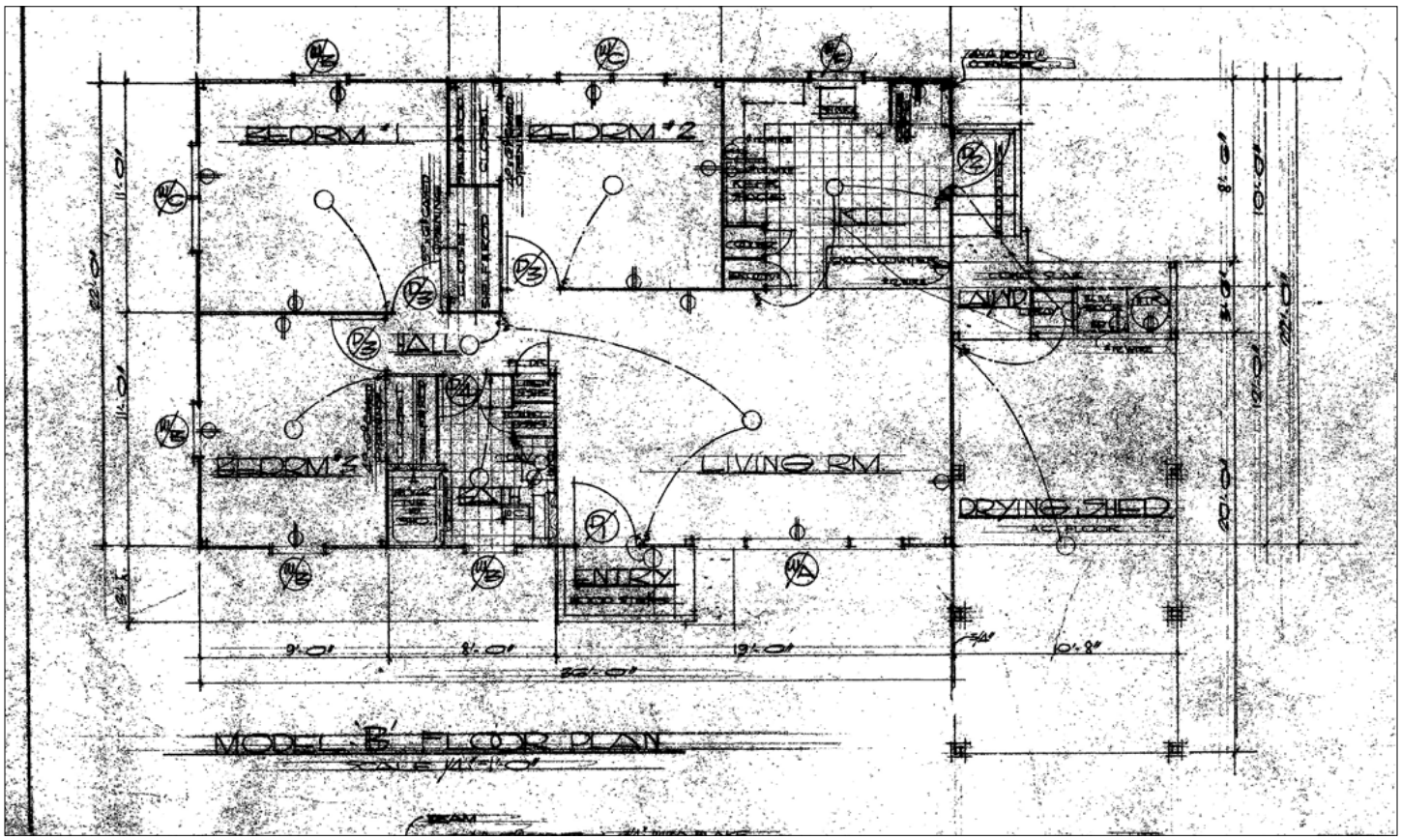
Project	Nanakuli Homes
Architect	Maitland C. Dease
Built	1969, Renovated in 1998
National Register Eligibility	Eligible
Criteria	A and C
Significance	Association with history of the public housing in Hawaii. Architecturally significant in typical design of the public housing in its period.
Character Defining Features	Lateral running gable roof/ front facing gable roof, tongue and groove exterior walls, picture window franked by jalousie windows, jalousie windows, and tongue and groove interior walls.

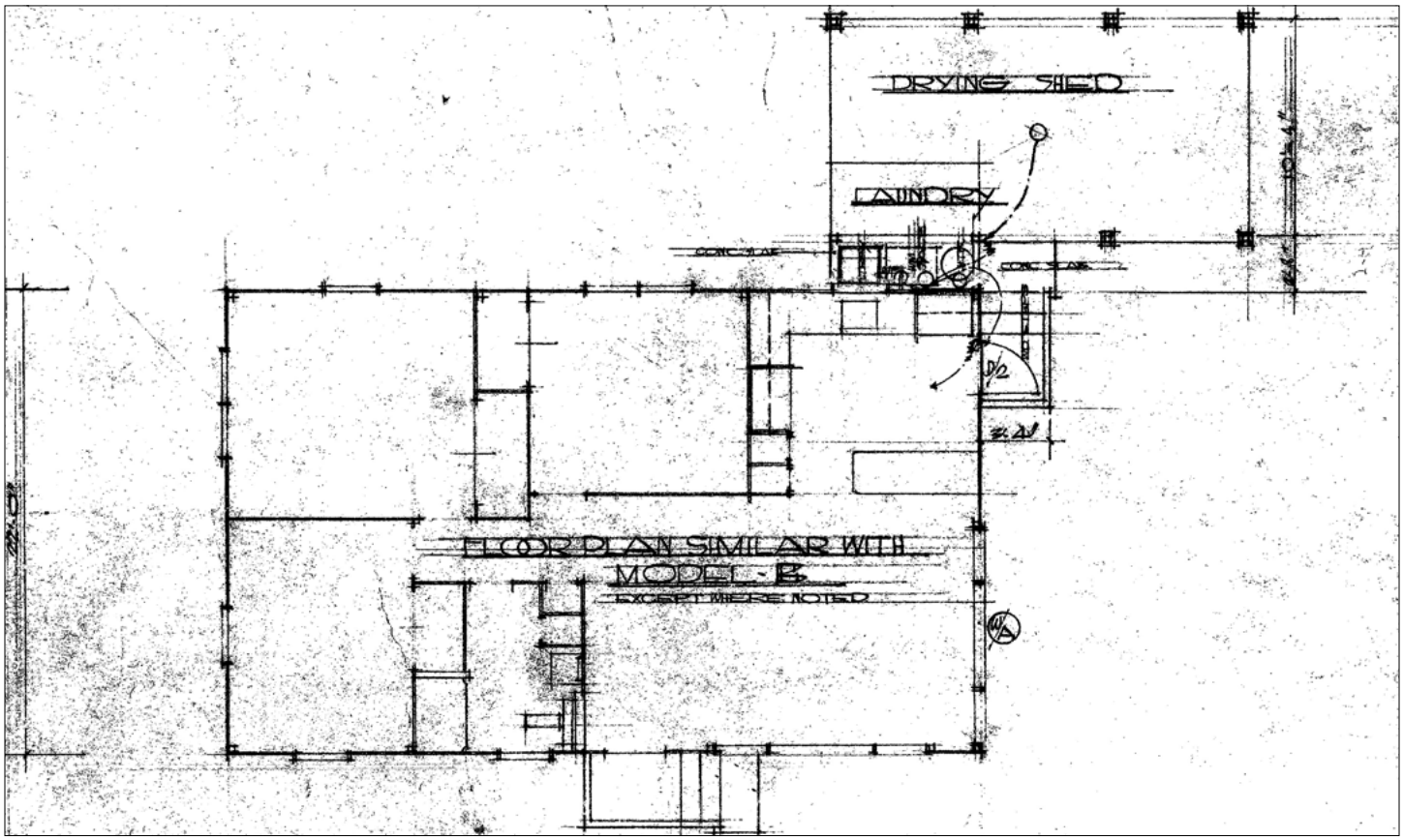
Description

Nanakuli Homes is comprised of 36 single family residences which are laid out around two cul-de-sacs on 4.25 acres. They are part of a larger residential neighborhood, and are off Farrington Highway in Nanakuli. All the houses are three-bedroom, and assume two forms, one with a lateral running gable roof and the other a front facing gable roof. The floor plans of the two types of houses are the same, but their orientation to the street and the location of their carport distinguishes the one from the other. The dwellings sit on post and pier foundations and have a slat apron. The walls are of tongue and groove, and the roof is of corrugated metal. The façade features a picture window flanked by jalousie windows, and the remainder of the windows throughout the house are jalousie, except for the model with the front facing gable, which has a second living room picture window on its side elevation.

Over view of the Homes

Typical Front Elevation of the House





Model A (above) and B (below) Floor Plans
Maitland C. Dease & Associates, Inc., *Floor Plans*, (*Nanakuli Turnkey Plan)*, Sheet A-2, 1968, Hawaii Housing Authority.

The interiors of the houses retain their tongue and groove walls, although the kitchens and baths were remodeled in 1998. The bedroom closets have no doors.

The houses were renovated in 1998. At this time new tile floors replaced the old, and the masonite ceilings were replaced with new masonite ceilings. Similarly, the roofs received a new corrugated metal sheathing and the wood steps leading to the front and side entries were replaced with new wood steps. A number of the jalousie windows were replaced at this time by newer jalousies. Also, the wood posts which supported the carport roofs were replaced with cmu columns.

Tongue and Groove Interior Wall

Renovated Kitchen

Left: Bedroom Closet

NANAKULI HOMES

History and Significance

Nanakuli Homes was one of HHA's early "turnkey" projects. This program originated with HUD where a developer would approach HHA with a proposed site and a building proposal which met HHA standards. Prior to the start of construction, HHA would provide the developer a letter of intent to purchase the development once it was constructed, and the federal government would provide the developer interim financing until the developer could obtain a private source of funding. Thus, dwellings were built by private developers just as any other subdivision, but with the guarantee that the HHA would purchase the entire subdivision upon its completion. This new vehicle for the construction of low-cost housing was designed to aid in distributing low-income families throughout the community. Through this approach lower income families would live in the same environment with families of higher income levels.

Nanakuli Homes was developed by H & T Company, Ltd., and was in the final approval process in January 1969.
Nanakuli Homes is significant at a local level under criterion A for its associations with the history of public housing in Hawaii. It is also architecturally significant at the local level under criterion C as its design was typical of Hawaii public housing during its period of construction.

Nanakuli Homes utilizing cul-de-sacs was typical of its time, as were the designs of the residences with their single wall construction, post and pier foundations and corrugated metal roofs. The HHA development integrates into the other housing developments happening around it, thus, fulfilling a primary objective of the turnkey program to blend low cost housing projects into their surrounding neighborhoods. Nanakuli Homes remains much more intact, although it has undergone certain modifications. However, other than the kitchen and bath remodeling, most of the alterations have replaced original materials with in-kind materials. New tile floors replaced the old tile, old masonite ceilings were replaced with new masonite ceilings, the original corrugated metal roofs were repaired with new corrugated metal, and a number of the original jalousies have been replaced by new jalousie windows. Similarly, the wooden steps leading to the entries have been replaced by new wooden steps. The only conspicuous new modification is the replacement of the carport's original wood posts with cmu posts. Several other turnkey projects were constructed for HHA, but these were not included in this survey and were not visited or evaluated. Thus, at this moment Nanakuli Homes appears to be the most historically intact turnkey project, and as such is a good example of the HHA's implementation of this federal program.

Nanakuli Homes appears to meet the criteria for listing in the National Register of Historic Places as a historic district.

PUUWAI MOMI

PUUWAI MOMI

Project	Puuwai Momi
Architect	Associated Architects Halawa: Ken Akiyama, Kekoolani & Associates, and Ed Aotani
Built	1969, Renovated in 1995
National Register Eligibility	Not Eligible

Landscape Architect: Robert Fujiwara

Description

Puuwai Momi is located on a low hillside above Kamehameha Highway off Kohomua Street. It is bounded by these two streets as well as Salt Lake Boulevard and Makalapa Park on the backside of the hill. It sits in its own enclave, along with another HHA project, Makalapa Manor, which is not included in this study. A private residential neighborhood is situated next to these public housing areas on their south and east sides. The complex is comprised of 260 units housed in 27 buildings on 11.54 acres. Across Kohomua Street from the housing project is an administrative office and maintenance shop building.

The buildings are sited in groups of two, three or four, in order to form green courtyards between them, although some are sited adjoining parking lots. Vehicular traffic is relegated to the periphery of the complex, in order to maintain an interior pedestrian zone.

Overview of the Site

PUUWAI MOMI

The buildings are two- and three- stories high, are made of cmu with wide concrete bands and hoods over the entry doors as accents. Recessed window bays add further relief to the facades resulting in an array of receding and advancing planes. They feature flat roofs and sit on poured-in-place, reinforced concrete slab foundations. Concrete steps lead up to the second story units, which in turn have internal stairs leading to their third floors. The steps have wrought iron railings. The buildings are composed of a number of one-, two-, three- and four-bedroom units combined in different arrangements resulting in a variety of building forms. Some buildings feature the fronts and rears of some units on the same elevation. Some of the larger units include rear service lanai, which are enclosed by approximately 5-foot high wood slat fences.

Three Stories Buildings

Two Stories Building

Wrought Iron Railings

Fronts and Rears on the Same Elevation

The entire housing complex underwent a major upgrade in 1995. At this time, all the original jalousie windows were replaced with anodized aluminum awning and casement windows. All exterior and interior doors were replaced, and the kitchens and baths were completely remodeled with new cabinets, counters and backsplashes. The shower/tubs were provided new tile wainscots at this time as well. The interior stairs were given new rubber treads Also at this time, the original trash enclosures were rebuilt in concrete rather than wood. Because of these all-encompassing alterations, Puuwai Momi no longer retains its historic integrity.

Much of the historic landscaping for this project no longer exists, although a few original coconut and monkey pod trees still remain on the property.

Renovated Kitchen

Renovated Bathroom

PUUWAI MOMI

History and Significance

Puuwai Momi was built on former Navy lands which adjoined Halawa Housing. Just prior to World War II, the Navy built barracks in Halawa in the area aound the sadium and the freeway interchanges. After the war, the Navy retained ownership of the land and buildings, but allowed the State's Hawaii Housing Authority to use the wood buildings and Quonset huts for temporary emergency housing for low- and moderate-income families.

There were about 1,000 families living in Halawa Housing in 1966 when the City's Honolulu Redevelopment Agency announced plans to build a stadium in Halawa. The State and City pledged they would erect replacement housing for the low income families displaced by their projects. HHA negotiated with the Navy to obtain about twelve acres next to Kamehameha Highway, only a few blocks away from Halawa Housing. The Navy declared the tract surplus, and HHA obtained the land from the General Services Administration. Approximately 130 substandard Navy housing units stood on the property, and were demolished by HHA. In an effort to relocate the persons displaced from Halawa Housing, the HHA constructed Puuwai Momi as well as the adjoining Makalapa Manor and Hale Ola in Pearl City. By the time Halawa Housing was demolished, only a quarter of the families qualified for low-income or State housing.

In April 1968, HHA obtained final zoning approval for these lands, and ground breaking took place in July 1968. Reed & Martin were selected as the contractors for the new housing project. The first increment of Puuwai Momi, with its 48 units, opened in July 1969. All the original tenants in phase I were relocated from the Halawa Housing. The entire complex was completed on schedule in December 1969.

Costing $23,000 per unit, Puuwai Momi was the most expensive public housing project in Hawaii on a per-unit basis for its time. The newspapers found, "The design is unusual for low-rent public housing. Each unit is different. The two- and three-story buildings are arranged in clusters around miniparks. And youngsters can go to a five acre park adjacent to the housing project without crossing any roads. . . . The project has a light, airy atmosphere with use of pastel colors on the interior and exterior of the buildings. Ten years ago these walls would have been all white, with black tile floors."[32]

As the newspapers noted, Puuwai Momi did try to reduce the institutional environment associated with earlier housing projects. The modern design of the buildings is distinctive, and the site plan attempted to foster an open green space atmosphere, with the buildings clustered around "miniparks." However, the density of the project, which was greater than the former Halawa Housing from which many of the new tenants came, in many ways counteracts the other aspects of the design. Regardless, the design of Puuwai Momi does reflect the HHA effort to develop less institutional appearing settings and its move away from the Zeilenbau plan by employing a highly modified form of the perimeter block plan as a means to mitigate the scale of this project.

Although Puuwai Momi is associated with the redevelopment of the Halawa area into a place dominated by highway interchanges and the Aloha Stadium, as well as the HHA's efforts to accommodate the low-income families displaced by this construction, the 1995 renovation which included historic windows replaced with bronzed anodized aluminum

32 Star Bulletin, July 14, 1969.

windows, original interior and exterior doors replaced, and kitchen and bathrooms completely renovated, of the housing project has compromised the historic character of the complex, and it does not appear to meet the criteria for listing in the National Register of Historic Places.

Sign of Puuwai Momi
Puuwai Momi translates as “Heart of Pearl”

SUMMARY OF FINDINGS AND RECOMMENDATIONS

SUMMARY OF FINDINGS AND RECOMMENDATIONS

Each of the housing projects covered in this report was visited, photographed, researched, and evaluated for historic significance. After evaluation of each resource, eight of the 17 projects were considered to meet National Register eligibility criteria. Their significance is based on their role in the social history of Hawaii, being representative of the efforts of a Territory-wide and State-wide housing reform movement, and also for their architecture, being reflective of a type, style, method of construction, and materials utilized during the period in which they were constructed. All of the properties which were considered to not meet the criteria for listing in the National Register of Historic Places were so evaluated because of their loss of integrity. In some projects, such as certain buildings in Palolo Valley Homes and Kalihi Valley Homes, as well as entire projects such as Koolau Village, the housing had lost its integrity of design and materials as a result of a major remodeling of the exteriors of the buildings. In most other instances, properties were deemed to not meet the criteria because they no longer retained their integrity of materials. Many of the projects constructed of wood on the neighbor islands had their exterior walls sheathed in T-111, windows replaced, and interiors upgraded. Similarly, certain projects featuring masonry construction, such as Pomaikai and Puuwai Momi, have had their windows replaced and interiors substantially remodeled.

The eight housing projects which appear to meet the National Register of Historic Places, represent the gamut of public housing forms built in Hawaii between 1953-1969. Sections of both Palolo Valley Homes and Kalihi Valley Homes have been remodeled in a post-modern manner; however, a section of each of these housing projects remains intact, with its international style buildings and Zeilenbau plan layout. Their buildings still retain their original double hung and sliding, wood windows and as well as such interior elements as the stainless steel kitchen counters and sinks, single panel interior doors, original floor tiles, and kitchen pantries. These both stand as very good examples of 1950s public housing design in Hawaii.

Similarly, a number of housing projects were considered eligible for listing in the National Register of Historic Places for their design's associations with new approaches to public housing design during the 1960s. The new approach reflect the move away from "institutional" design to a more garden village. Many examples of this new approach exist, but all of the projects have had the historic character of their buildings compromised with the application of T-111 to their walls, and the changing of their windows and interiors. The second phase of Lokahi Homes, named Punahele Homes was considered eligible for listing in the National Register of Historic Places. Although it has been modified with new jalousie windows and the application of T-111 siding to its side and rear elevations, it also employs shadow block on its façade. Shadow block was a building material which was used on various buildings during the 1960s. It has a very distinctive appearance, emulating horizontal lap siding, and its use at the public housing at Punahele Homes is the only known example of the material being used on the neighbor islands.

Wahiawa Terrace and Kahekili Terrace are two other housing complexes which have had their buildings substantially modified, with the former replacing its jalousie windows with awning windows, and the latter replacing their jalousie windows in-kind. Both have also been remodeled on their interiors. However, both were considered to meet the criteria for listing in the National Register based on the strength of their architectural designs. Both possess bold modern designs, and are innovative in their placement of untis, so that a number of the first story apartments are entered from the side, and both

break of the massing of some of their apartments by open central cores and the use of receding and advancing elements on their facades. Wahiawa Terrace is also the best example of a perimeter block design applied to public housing in Hawaii.

Puuwai Momi is a housing project which follows many of the same design rubrics as Wahiawa Terrace and Kahekili Terrace. It too utilizes a bold modern design with projecting and receding elements causing a play of light on shadow, and is very conscious to provide a high variety of building sizes and designs. However, its jalousie windows have been replaced with anodized aluminum awning windows, which appear to detract more from the historic character of the buildings when compared to the silver aluminum windows used at Wahiawa Terrace. Also, this project has much a denser population/acre than the other two similar projects, so it does not convey the same openness of space usually associated with the courtyards in the perimeter block plan.

The two high-rise elderly housing projects, Makua Alii and Kalanihuia, both remain very much intact, and are not only good examples of public housing placed in a high rise, but also of high rise design in Honolulu. As a result, both appear to meet the criteria for listing in the National Register of Historic Places. Another senior citizen housing project, Pomaikai in Hilo, has been completely gutted and its windows and roof replaced. It no longer appears to retain its historic integrity.

Finally Maili I and Nanakuli Homes were the earliest known projects to use the turnkey-program to building low cost housing in Hawaii. Maili I has been substantially altered with the addition of T-111 to its walls, and the replacement of its windows. As such, it appears to no longer retain its historic integrity. In comparison, Nanakuli Homes remains very much intact and is considered to meet the criteria for listing in the National Register of Historic Places.

It is recommended that following the submittal and acceptance of this survey, the HPHA enter into a Programmatic Agreement with the State Historic Preservation Office (SHPO), which will facilitate the on-going HPHA repair, maintenance, and rehabilitation programs, and reduce time expended on Section 106 review processes. Such an agreement would clearly elucidate the historic character defining elements of HPHA administered housing projects and articulate modifications which could be made to these projects without the need of consultation with SHPO and the Advisory Council on Historic Preservation.

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EXHIBIT C

Historic Property Evaluation Update for Kuhio Park Terrace - Honolulu; (Appendix A to 2006 Report)

Prepared By:

Mason Architects, Inc.

June 2015

Appendix A
Historic Property Evaluation Update
for
Kuhio Park Terrace – Honolulu

Prepared by
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for
HHF Planners
and the
Housing and Community Development Corporation of Hawaii

June 2015

Appendix A – Kuhio Park Terrace High-Rise Historic Evaluation Update and Low-rise Initial Historic Evaluation 2015.

Introduction

The following National Register of Historic Places (NRHP) evaluation of Kuhio Park Terrace (KPT) was undertaken by Mason Architects, Inc. (MAI) in 2015, at the request of HHF Planners on behalf of the Hawaii Public Housing Authority (HPHA), a Hawaii State agency. It serves as a follow-up to the report written by MAI in 2006. In the years since the previous report was written, Kuhio Park Terrace has reached the fifty-year historic threshold, and thus needs to be re-evaluated for NRHP significance. In keeping with the intent of the original 2006 report, the contents of this appendix provide historic eligibility evaluations of individual buildings. Recommendations are also included for potential historic districts, in accordance with the State Historic Preservation Division's (SHPD) guidelines for inventory surveys. National Register nomination-level research into possible historic districts is not within the scope of this document.

Kuhio Park Terrace Background

Kuhio Park Terrace was the State's first and last attempt to house low-income families in publicly-owned high-rise buildings. The project included both high-rise and low-rise buildings in a campus-like setting. The complex originally featured large grassy areas between buildings and numerous community amenities including a pool with bathhouse, park building, basketball and volleyball courts, a softball field, and a community building. An elementary school was also opened the same year the project was completed, adjacent to the low-rise buildings and across the street from high-rise building A.

The low-rise buildings that are a part of the Kuhio Park Terrace complex originally made up approximately 14% of the total unit count for the complex, containing 42 residential four-bedroom units. Currently, there are 41 low-rise buildings total, with 37 in use as residences, while two duplex buildings with four total units have been converted to office and storage space, and one of the two single-family buildings has been demolished. They were designed and built at the same time as the high rise buildings, and community buildings and features, as part of an overall campus. All of the complex's four bedroom units are located in these low-rise buildings. The high-rise was intended to house smaller families, with larger families located in the low-rise four-bedroom units, which have yards of their own. This compromise may have developed out of community input that questioned the ability of mothers to supervise children playing from high floors.[1]

Originally, the high-rise and low-rise buildings that make up the Kuhio Park Terrace complex were a part of a single property, owned and managed by HPHA. More recently, the buildings were divided into two Asset Management Properties (AMP), with Linapuni Street dividing the two AMPs. This means that, though the one single-family unit is stylistically part of the low-rise group (AMP 40), it is actually included with the high-rise buildings in AMP 52 due to its location. Because of this separation of AMPs, HPHA's building counts differ slightly than those used in this report. HPHA's AMP 40 includes

[1] Fung Associates, Inc. *Architectural Inventory Survey Hawaii Public Housing Authority (Federal Projects)*. May 2015.

40 low-rise units, in 12 duplex and row-house buildings. AMP 52 includes the 1 single-family 4-bedroom unit, and all of the high-rise units, (572 units total, with 347 under HPHA and the remainder used as rentals through Michaels Development Company).

Historic Context

See historic context in the 2006 report for overall context.

Table 1: Summary of NR Eligibility Evaluation

Building Type	Building	Year Built	National Register Significance	National Register Integrity	National Register Eligible
High-Rises	A and B	1965	Yes	Yes	Yes
Low-Rises	Row Houses C1-C8	1965	Yes	Yes	Yes
Low-Rises	Duplexes D1-D4	1965	Yes	Yes (D2-D4)	Yes (D2-D4)
Low-Rises	Single-Family E2	1965	Yes	Yes	Yes
Community Buildings	Community Building Family Education Resource Center	1965, 1976, unknown, 2003	1965 Yes, 1976 No Unknown No 2003 No	Yes Yes Yes Yes	1965 Yes, 1976 No Unknown No 2003 No

Description

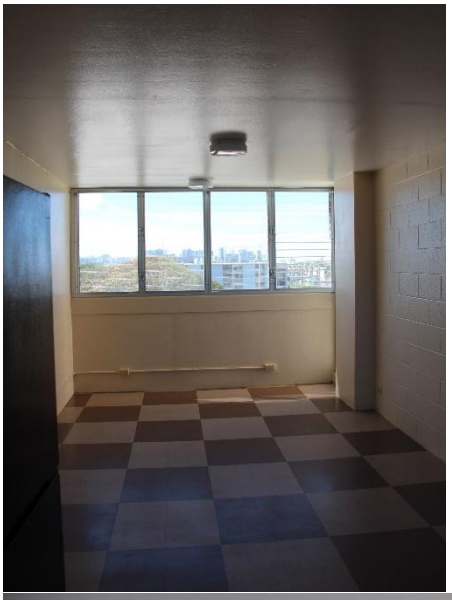
High-Rise Buildings:

The general description for the high-rise buildings remains similar to the 2006 report.

The following changes have been made to the building and apartments since the 2006 report was written:

- the original concrete masonry unit screens that sheltered the stairwells and central elevator lobbies have been removed and replaced with decorative metal railings;
- the original flat concrete entry awning has been replaced with an angled metal awning;
- the lanais on the opposite side of the buildings from the entry walkways have been enclosed as interior space in each apartment; and
- the apartments' kitchen windows have been replaced and their kitchen cabinets and counters have been renovated.

See the following page for the one-page historic assessment and photographs.



Project	Kuhio Park Terrace High-Rise Buildings
Date	1965
Significance	Kuhio Park Terrace is eligible for the NRHP under Criterion A as Hawaii's largest federally aided public housing complex, with 614 units, and illustrates the shift towards high-density high-rise projects, or "warehousing." KPT consisted of a mix of high-rise and low-rise housing with community amenities in a campus-like setting.
Character Defining Features	16-story high-rise buildings separated by large open grassy areas. 3-arm Radial plan, full length exterior walkways at apartment entrances side. Peg-board transoms above interior doors, tub/showers, jalousie windows.
Alterations	Concrete screens at stairwells and elevator lobbies removed, rear lanais enclosed, kitchen windows changed.
Integrity	Buildings have some alterations. Housing retains integrity of location, setting, feeling, and association. There have been changes to design, materials and workmanship.
National Register Eligibility	**Eligible**

Low-Rise Buildings

There are thirteen low-rise buildings including eight that are two-story row houses with four units, designated buildings C1 through C8, four that are one-story duplexes, designated D1-D4, and one that is one-story with only a single unit, E2. Originally there were two single-unit buildings, E1 and E2, but one was demolished sometime after 2010. The four bedroom units were laid out in six different floor plans in the original drawings; these were designated types 4-A though 4-F. The row houses include floor plan types 4-A through 4-D, while the duplexes include 4-E and 4F, and the single units appear to have been 4-E as well.

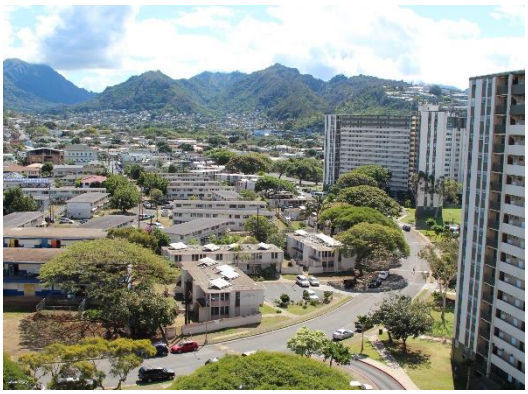
Row-House Buildings

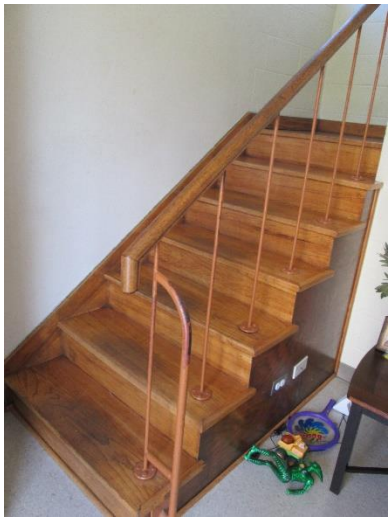
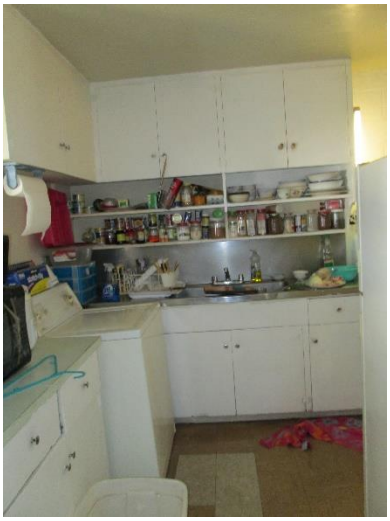
The two-story row-house buildings are rectangular in plan, with two protruding sections on the opposite side of the building from the units' entrances. Along the entry side of the buildings, there are concrete lanais, and at the back is an open, shared yard, typically with a free-standing concrete brick wall used to affix clotheslines from the back wall of the building. They have concrete slab foundations with concrete footings, walls that are a mix of cast concrete and concrete masonry units (CMU), and flat roofs that have wide, overhanging eaves. The four units at these buildings are divided by a vertical concrete wall at the open front lanais. Windows are mostly jalousie, with aluminum double-hung windows near the first floor front entrances. The exterior doors are flush wood and some have historic screen doors.

Each building includes one of each of the following unit types: 4-A, 4-B, 4-C and 4-D from left to right, respectively, with the center dividing wall between units 4B and 4C. Each building half is a mirror image of the other half (units 4-A and 4-B together are a mirror image of 4-C and 4-D together). Additionally, the two units at each half mirror one another, so, units 4-A and 4-B are mirror images, and units 4-C and 4-D are also mirror images. In all units, the living room, kitchen, dining area and half-bath are on the first floor of the units, while bedrooms and the main bathroom are upstairs.

Much of the historic interior fabric remains at these units, including kitchen cabinets and counters, bathroom fixtures and fittings such as shower/tubs and sinks, as well as wood staircases with metal and wood balustrades.

See the following page for the one-page historic assessment and photographs.



Project	Kuhio Park Terrace Row-House Buildings
Date	1965
Significance	Kuhio Park Terrace is eligible for the NRHP under Criterion A as Hawaii's largest federally aided public housing complex, with 614 units, and illustrates the shift towards high-density high-rise projects, or "warehousing." KPT consisted of a mix of high-rise and low-rise housing with community amenities in a campus-like setting.
Character Defining Features	Low-rise buildings separated by open grassy areas. Flat roofs, wide eaves, concrete wing walls at building corners, and as exterior dividers between units. Most set at 45 degree angle to street, and perpendicular to each other with shared yards. Glass jalousie windows, metal countertops and wood cabinets, wood staircases with wood and metal balustrades
Alterations	Some screen doors removed, two buildings re-roofed.
Integrity	Buildings are largely unaltered. Housing retains integrity of location, setting, design, feeling, and association. There have been minor changes to materials and workmanship, primarily at the interior.
National Register Eligibility	**Eligible**

Duplex Buildings

The four single-story, two-unit duplex buildings look similar to the four-unit buildings in plan. Their elevations are also somewhat similar to the four-unit buildings, albeit at only one story. Some still have an open lanai at the rear, and originally all had an enclosed area off of the lanai that was used for drying laundry, with a free-standing concrete brick wall used to affix the clothesline. Windows and doors are the same as well. The two units in each building are mirror images of one another with the living/dining rooms at the shared wall, and bedrooms arranged along the outer walls.

The interiors at three of these buildings (D2-D4) remain relatively intact, with remaining kitchen and bathroom elements including wood kitchen cabinets with stainless steel counters and integrated sinks, and tile shower/tubs in the bathrooms. Two buildings (D3 and D4), containing a total of four units remain in use as residences, while two other buildings (D1 and D2) have been converted for office and storage use. One unit in building D2 has become the management office for the low-rise buildings of Kuhio Park Terrace and Kuhio Homes, with minimal interior alterations, while the other unit in the same building has been converted for storage with minor alterations including removal of kitchen counters and cabinet doors. The two units in building D1 have been converted for use as storage, and have been more significantly altered, with removal of several interior walls at one of the units. Two of the duplex buildings, D2 and D3, have had the rear lanais enclosed as part of the interior space.

See the following pages for site plan and one-page historic assessment and photographs.

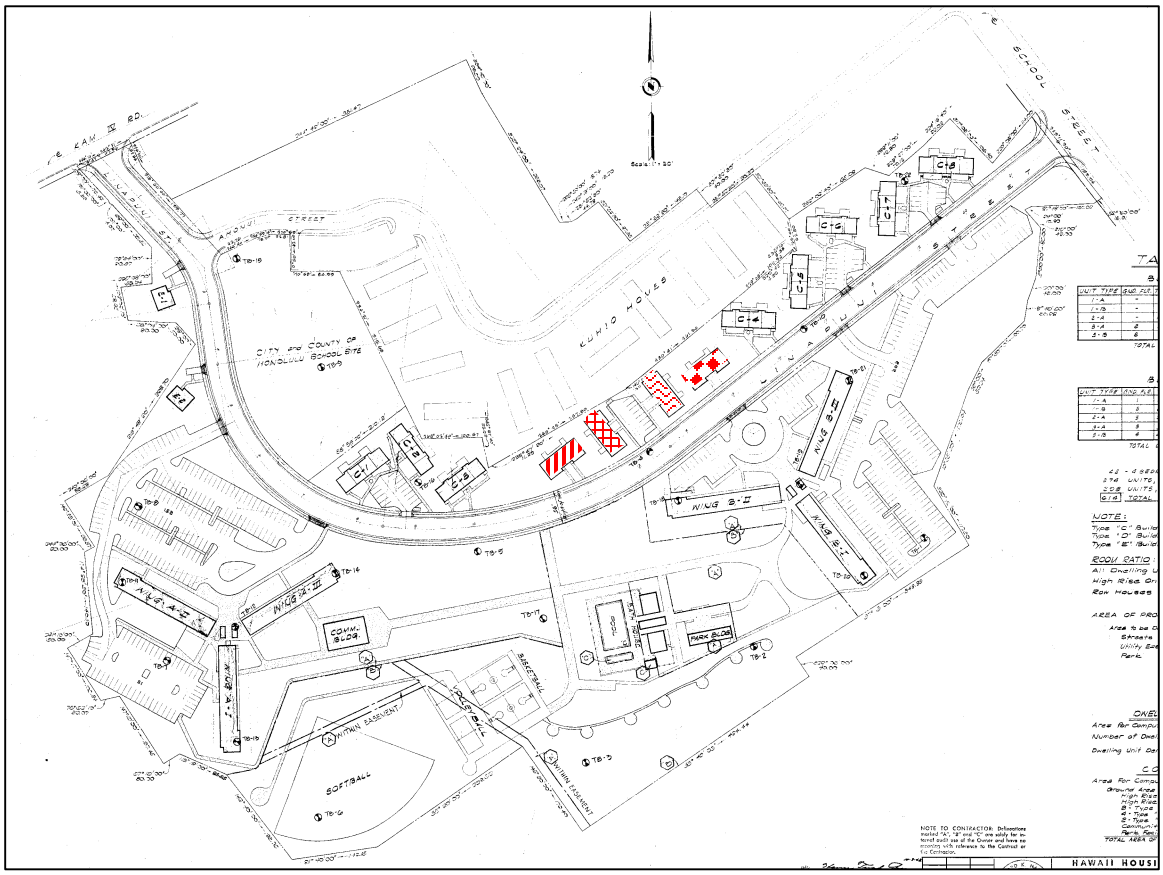


Figure 1: Original 1962 Site Plan showing location of Duplexes. D1 (diagonal lines) is converted for storage and has had interior walls removed, D2 (grid pattern) has been converted to office and storage, and along with residential D3 (zig-zag lines) has had rear lanais enclosed, D4 (checkerboard pattern) remains residential and retains open lanais.

Project	Kuhio Park Terrace Duplex Buildings
Date	1965
Significance	Kuhio Park Terrace is eligible for the NRHP under Criterion A as Hawaii's largest federally aided public housing complex, with 614 units, and illustrates the shift towards high-density high-rise projects, or "warehousing." KPT consisted of a mix of high-rise and low-rise housing with community amenities in a campus-like setting.
Character Defining Features	One-story buildings with flat roofs. Wide overhanging eaves and wing-walls, glass jalousie windows, metal countertops and wood cabinets.
Alterations	Some rear lanais have been incorporated into the units as interior space (D2 and D3), rear yard enclosures removed. Two buildings (D1 and D2) converted for office and storage use. One (D2) has minimal alterations, one unit in D1 has many interior walls removed.
Integrity	Most buildings have relatively minor alterations, retains integrity of location, setting, feeling, and association. Integrity of design, materials and workmanship have been compromised, most significantly at D1.
National Register Eligibility	**Buildings that retain interior walls D2 – D4 –Eligible** **All others D1 – Not Eligible**

Single-Family Building

The single remaining one-story, single unit building, E2 is a smaller version of the other two types of low-rise buildings. It is constructed of concrete, with a concrete slab foundation, a flat roof that has deep eaves, and wing walls at the corners of the buildings, and shielding the windows. Windows are glass jalousie. Doors are flush wood. The interior was not accessed, but is assumed to be similar to the duplex building units, as shown in the original building drawings.

See the following pages for site plan and one-page historic assessment and photographs.

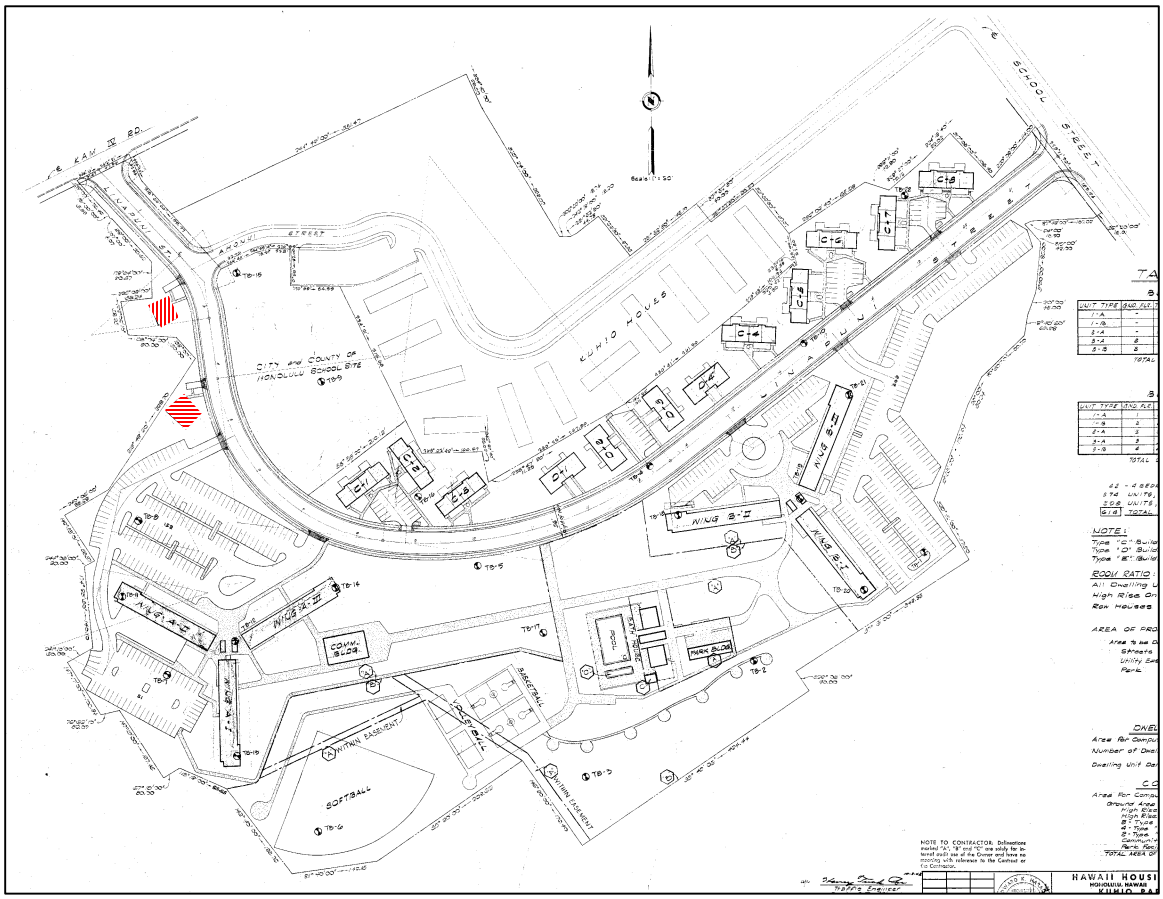
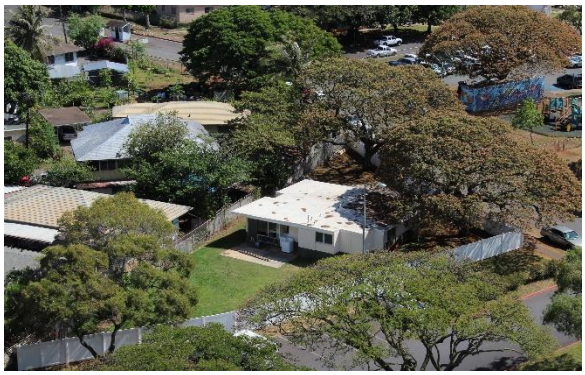


Figure 2: Original 1962 Site Plan showing location of remaining single-family, four bedroom building, E2 (horizontal stripes); and demolished single-family building E1 (vertical stripes).



Project	Kuhio Park Terrace Single-Family House
Date	1965
Significance	Kuhio Park Terrace is eligible for the NRHP under Criterion A as Hawaii's largest federally aided public housing complex, with 614 units, and illustrates the shift towards high-density high-rise projects, or "warehousing." KPT consisted of a mix of high-rise and low-rise housing with community amenities in a campus-like setting.
Character Defining Features	One-story buildings with flat roofs. Wide overhanging eaves and wing-walls, glass jalousie windows.
Alterations	None visible
Integrity	Building retains integrity of location, setting, materials design, workmanship, feeling, and association.
National Register Eligibility	**Eligible**

Community Buildings

There are four community buildings that are part of the Kuhio Park Terrace property. Only one of these was constructed at the same time as the residential buildings, while the other three were constructed in 1976, an unknown date, and 2003. The four are located between and to the southeast of the high rise buildings, approximately in a line. The three with later construction dates were evaluated only cursorily, as none are more than 50 years in age.

The 1965 community building (now Community Hall) was designed as part of the original Kuhio Park Terrace complex. It is a one story structure just to the southeast of high-rise building A, and overlooks the softball field that is just to its south, downhill from the buildings. It is constructed of concrete, with a slab foundation, and a flat roof with overhanging eaves on three sides. The eaves are widest on the side of the building facing the softball field, creating an open lanai. The roof is supported by large tapered, plus- or x-shaped concrete columns, as well as large horizontal concrete beams, whose ends are visible above the columns. There is an addition at the opposite side of the building that faces the street. The interior is comprised of one large room for community gatherings, with a smaller space at the building's rear that corresponds to the later addition, and acts as a prep and/or storage area. The street-facing addition was built in 1980, along with a concrete screen block wall that enclosed the open lanai on the opposite side. The screen block wall has since been removed.

The 1976 Family Education building is a two-tiered, one -story building constructed of concrete. It has a slab foundation, and a flat roof with a mansard surround. The walls are scored CMU, with sections of decorative concrete screen. Windows at the second tier are jalousie, and all windows and screens are further screened with metal mesh.

The PACT Head Start modular building is of an undetermined date, and is constructed of wood on a post and pier foundation with a gable roof. A section of the roof is extended on one side to provide an open lanai, and shelter the ramp up to the entrance. There are also wood awnings over the windows on the opposite side of the building. It has two adjacent play yards furnished with non-permanent playground equipment.

The 2003 Resource Center is centered between the two high-rise buildings with a large parking area between it and the street. It is a large concrete building with a complex hip roof that has a central extension toward the parking lot that forms an entrance. This large building appears as one-story from the street, but is sited on a hill, and has multiple stories as the hill allows.

1965 Community Hall

1976 Family Education Building

Unknown date PACT Head Start

2003 Resource Center

Project	Four Kuhio Park Terrace Community Buildings
Date	1965, 1976, unknown, 2003
Significance	1965 building only: Kuhio Park Terrace is eligible for the NRHP under Criterion A as Hawaii's largest federally aided public housing complex, with 614 units, and illustrates the shift towards high-density high-rise projects, or "warehousing." KPT consisted of a mix of high-rise and low-rise housing with community amenities in a campus-like setting.
Character Defining Features	One-story building with T-shaped concrete supports and large beams at 1965 building. Two levels and scored CMU at 1976 building. Wood construction and covered lanai and awnings at unknown date building. One-story concrete building with complex hip roof at 2003 building.
Alterations	Rear addition and windows changed at 1965 building, no exterior alterations to 1976 building, unknown date building, or 2003 building.
Integrity	The 1965 community center building retains integrity of location, setting, feeling, and association. There have been minor changes to design, materials and workmanship.
National Register Eligibility	**1965 Community Hall – Eligible** **All others – Not Eligible**

Integrity Summary

Integrity of design at the high-rise buildings has been somewhat compromised by the enclosure of all of the buildings' lanais, as well as the removal of the concrete grilles at the elevator core and stairwells, and replacement with metal railings. Nonetheless, the buildings retain integrity of location, setting, materials, workmanship, feeling and association.

The three other types of residential buildings that make up Kuhio Park Terrace retain integrity of location, setting, materials, workmanship, feeling and association. All of the original buildings remain in their original locations, with relationships to one another and the open spaces between them. The row houses and single-family house remain virtually unchanged since construction, also retaining integrity of design. The enclosure of the rear lanais at some of the duplex buildings, and loss of enclosed yards impacts their integrity of design somewhat. The materials have changed little, if at all, and in the majority of cases, their use has not changed, and where it has, the use has remained within the public housing mission.

Only one of the community buildings was constructed at the same time as the residential buildings at Kuhio Park Terrace. It is the building closest to high-rise building A. It retains its integrity of location, setting, feeling, and association. The alteration at the street side of the building has somewhat compromised the building's integrity of design, materials and workmanship. The other three buildings were built between 1976 and 2003, and retain all aspects of integrity. However, they are less than 50 years of age, and do not possess extraordinary significance under Criterion Consideration G, and so, are not eligible for the NRHP. They should be reevaluated when they reach 50 years of age.

The campus, as a cohesive group of buildings with associated landscaping, retains its integrity of location, setting, materials, feeling and association. The campus has lost some integrity of design due to the removal of a few of the community facilities, including the pool with adjacent bath house, and the park building, and the addition of three new community buildings. Despite the addition of these buildings, including a large central community building, the campus retains an open feeling. Much of the significant landscape features are retained as well, including large monkeypod trees shading the sidewalks and parking, eucalyptus trees around the high-rise buildings, as well as open grassy areas and the softball field at the rear of the complex.

Eligibility Summary

Many of the buildings at Kuhio Park Terrace have national register significance under Criterion A for their place in Hawaii's development of public housing. As Hawaii's largest federally aided public housing complex, with 614 units, the complex illustrates the shift towards high-density high-rise projects, or "warehousing." It was the state's first and last attempt to provide low-income family housing in publicly owned high-rise buildings. High-rise public housing had been a trend across the United States, and was regarded as an efficient and convenient way to provide low-income housing for a large number of families in a small footprint. Kuhio Park Terrace consisted of a mix of high-rise and low-rise housing with community amenities in a campus-like setting. It was able

to provide both a large number of units, and open space with recreational facilities for residents within a relatively small area.

Buildings that have significance and sufficient integrity to be considered eligible include both high-rise buildings, A and B; all row house buildings, C-1 through C-8, most duplex buildings including D-2 through D-4; the remaining single-family unit, E-2; and the 1965 Community Hall building located next to high-rise building A. Additionally, the campus overall has significance and appears to retain sufficient integrity to to be considered a historic district.

Building D1 has been significantly altered with the loss of a number of interior walls, and no longer has sufficient integrity to be considered eligible

EXHIBIT C

July 14, 2010 HPHA Letter to SHPO Section 106 Consultation for Environmental Reviews With Historic Property Evaluation for Five Public Housing Projects

Prepared By:

Mason Architects, Inc.

June 2010

LINDA LINGLE
GOVERNOR

DENISE M. WISE
EXECUTIVE DIRECTOR

BARBARA E. ARASHIRO
EXECUTIVE ASSISTANT

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DEPARTMENT OF HUMAN SERVICES
HAWAII PUBLIC HOUSING AUTHORITY
1002 NORTH SCHOOL STREET
POST OFFICE BOX 17907
Honolulu, Hawaii 96817

IN REPLY PLEASE REFER TO:

10:CMS/085

July 14, 2010

Ms. Laura H. Thielen, Director
Department of Land and Natural Resources
State of Hawai'i
Kalanimoku Building
1151 Punchbowl Street
Honolulu, Hawaii 96813

Dear Ms. Thielen:

Subject: Environmental Reviews for Federally-Subsidized Public Housing Projects Statewide - Section 106 Consultation

The State of Hawai'i, Hawai'i Public Housing Authority (HPHA), is currently conducting environmental reviews for their existing public housing projects located throughout the State. These environmental reviews are being conducted in conformance to the U.S. Department of Housing and Urban Development (HUD) requirements specified under 24 CFR Part 58 because federal funds are being used. One of the environmental review requirements is Section 106 consultation with the State Historic Preservation Officer under the National Historic Preservation Act, as amended (NHPA) (16 U.S.C. 470(f)).

The HPHA is proposing to conduct minor repair and rehabilitation projects to several existing public housing projects. Funding for these housing projects are being expended through Federal funds under the Economic Development Initiative (EDI) Special Project Grant. The proposed improvements are not considered a "major construction activity" and would involve one or a combination of the following actions identified below.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent;
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons;

3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland;
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation;
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls);
7. Interior and exterior renovations and rehabilitation;
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site;
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use; and

A historic architectural assessment was conducted for five (5) housing projects that are 50 years old by Mason Architects, Inc. This evaluation determined that the buildings within three (3) of the housing projects do meet the National Register eligibility criteria. These projects are Lanakila V, Kalihi Valley Homes, and Punchbowl Homes. This historic architectural assessment is similar to that conducted in 2006 for six (6) other housing projects as part of HPHA's environmental review.

Based upon the architectural assessments, a "no adverse effect" determination is proposed for the various rehabilitation improvements implemented for the three housing projects. Measures will be implemented to mitigate effects to buildings consisting of the following:

1. When considering rehabilitation improvements or building modifications: 1) the buildings' character defining features shall be retained to the extent practicable; and 2) the renovations shall adhere to the Secretary of the Interior's Standards for Rehabilitation.
2. If rehabilitation improvements or building modifications cannot retain the character defining features or adhere to the Secretary of the Interior's Standards for Rehabilitation, Historic American Buildings Survey (HABS) will be conducted subject to the following conditions:

a. Level II HABS documentation will be conducted in accordance with the National Park Service standards; and
b. A representative sample of multiple building types would be selected for HABS documentation due to multiple types of buildings constructed for housing projects.

Documentation supporting this determination is attached, and we are soliciting your review and concurrence with this determination. We would greatly appreciate your written response within 30 days of receipt of this letter, or sooner if possible.

Please contact Mr. Mitchell Kawamura, Project Engineer at 832-5373 or via email at Mitchell.H.Kawamura@hawaii.gov if you have any questions.

Sincerely,

Denise M. Wise

Denise M. Wise
Executive Director

Enclosures – Section 106 Documentation

cc: Mitchell H. Kawamura, Project Engineer, HPHA
✓Ronald A. Sato, Helber Hastert & Fee Planners, Inc.
Pua Aia, Administrator, SHPD

EXHIBIT A

Figures

HAWAII PUBLIC HOUSING AUTHORITY

Environmental Reviews for Public Housing Projects
Section 106 Documentation

Figure 1

Project Location - Lanakila Housing

HAWAII PUBLIC HOUSING AUTHORITY

Environmental Reviews for Public Housing Projects
Section 106 Documentation

Figure 2

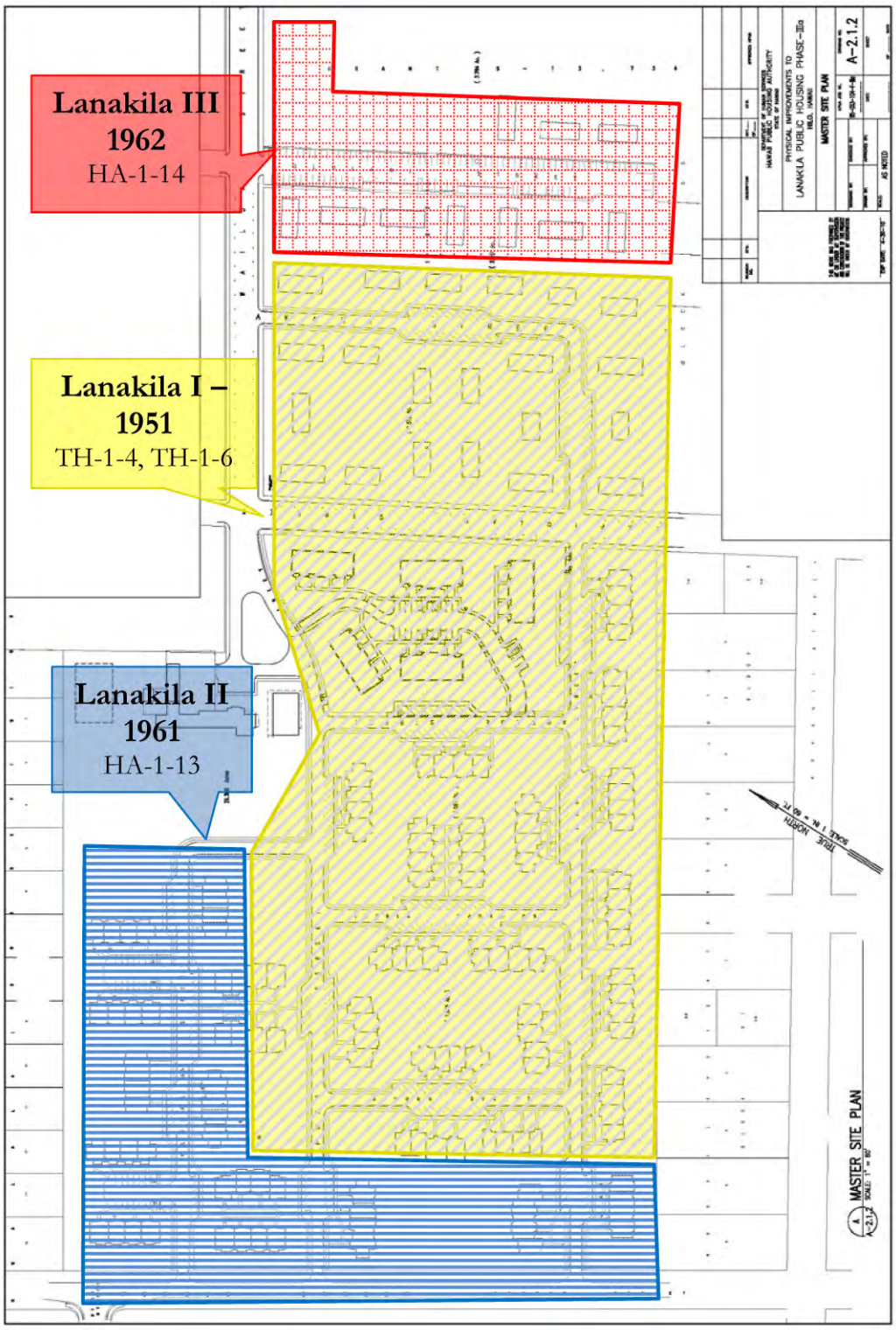
Project Location - Kalihi Valley Housing

HAWAII PUBLIC HOUSING AUTHORITY

Environmental Reviews for Public Housing Projects
Section 106 Documentation

Figure 3

Project Location - Punchbowl Housing



NOT TO SCALE
Source: Mason Architects, Inc.

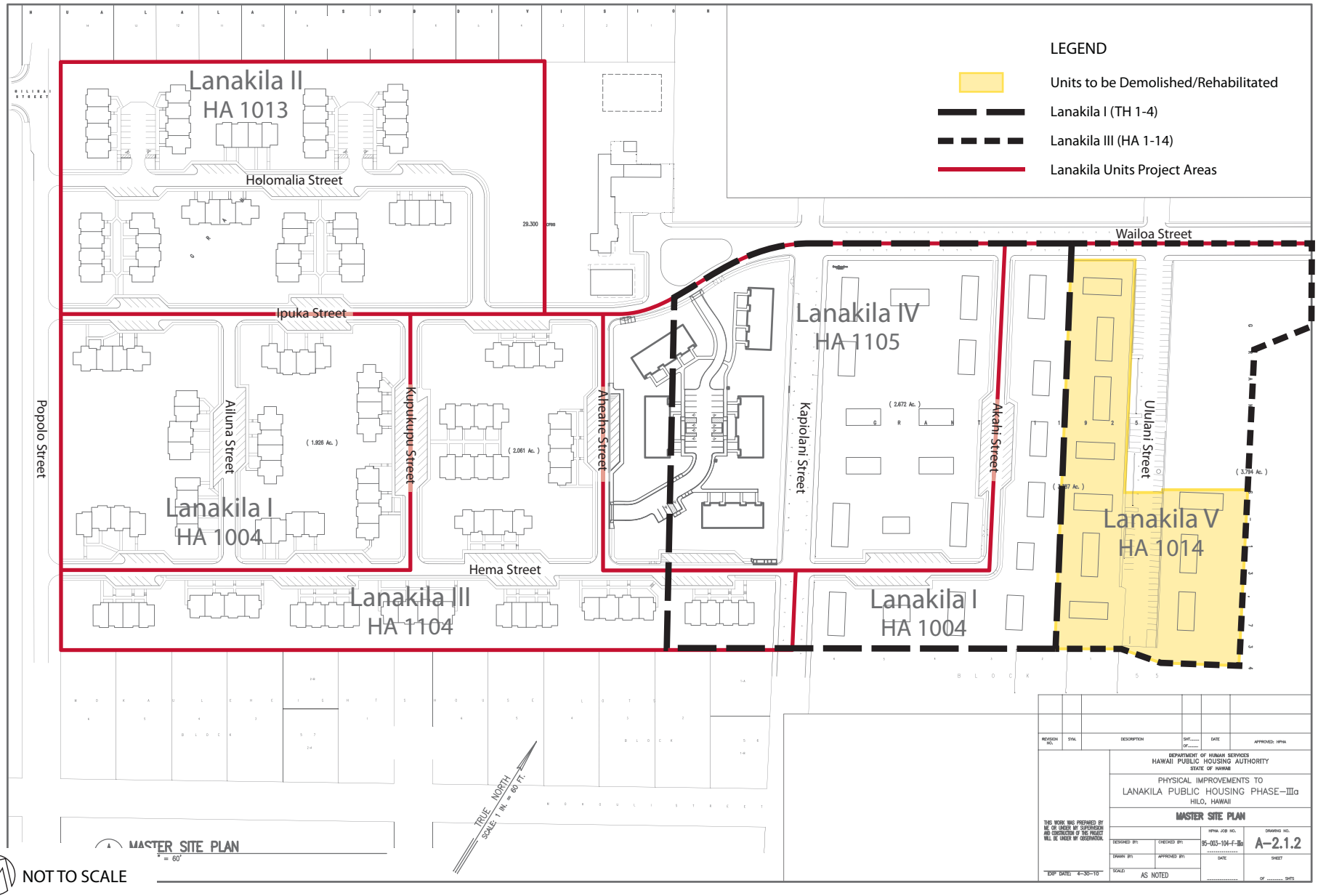
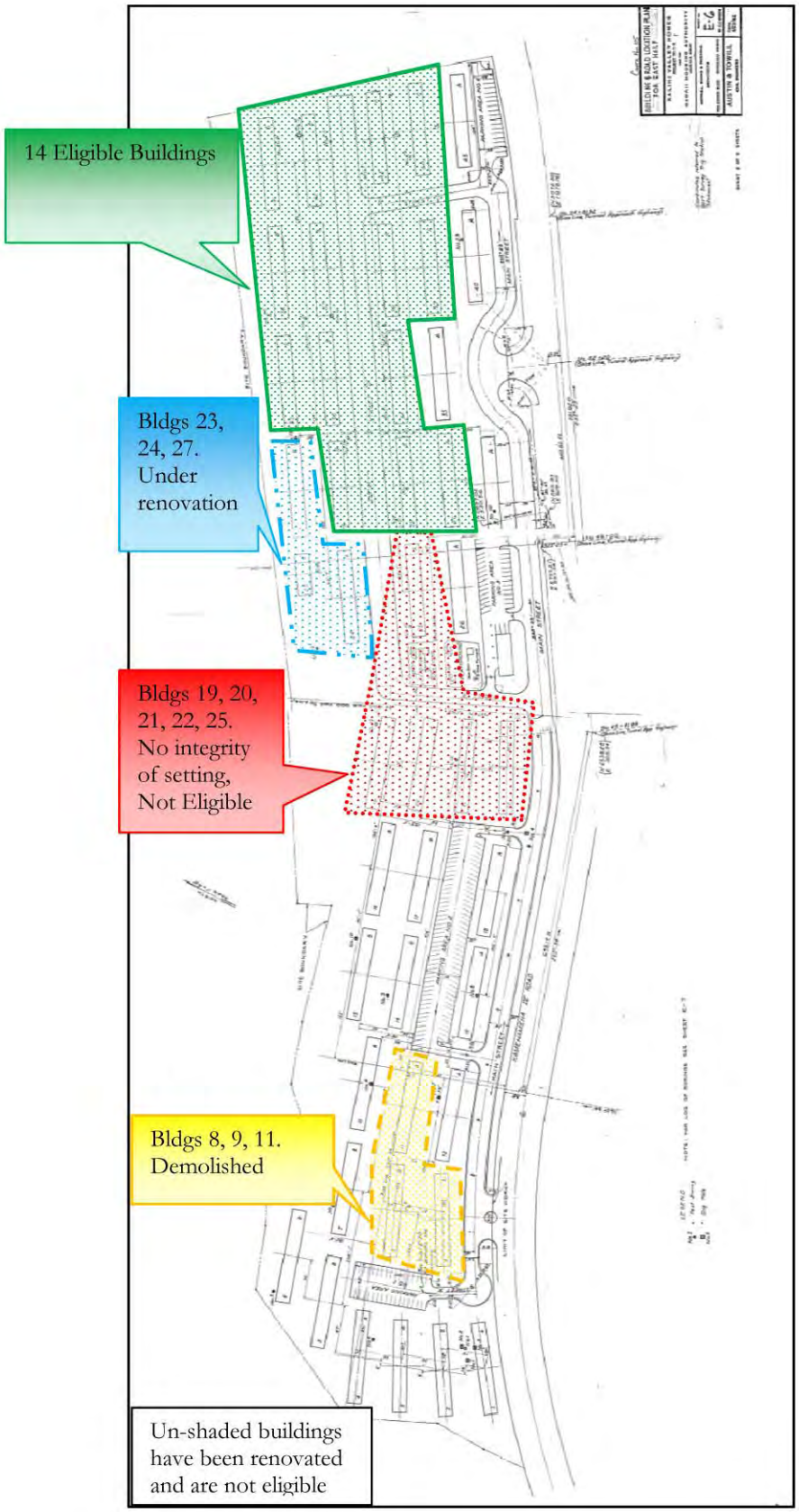


Figure 5

Lanakila V Project Area



NOT TO SCALE
Source: Mason Architects, Inc.

Figure 6

Kalihi Valley Homes Eligible Buildings

EXHIBIT B

Historic Property Evaluation

Historic Property Evaluation
for
Five Public Housing Projects:

Lanakila Homes V – Hilo
Kalihi Valley Homes – Honolulu
Kuhio Homes – Honolulu
Punchbowl Homes – Honolulu
Lanakila Homes II – Hilo

Prepared by
Mason Architects, Inc.
119 Merchant Street, Suite 501
Honolulu, HI 96813

for
Helber Hastert & Fee, Planners
and the
Hawaii Public Housing Authority

June 2010

Executive Summary

This report is a historic architectural assessment of selected public housing projects operated by the Hawaii Public Housing Authority (previously known as Housing and Community Development Corporation of Hawaii [HCDCH]; and Hawaii Housing Authority [HHA]). It is being undertaken in anticipation of future repairs and rehabilitation that will be funded with federal monies. It will fulfill the initial steps of Section 106 of the National Historic Preservation Act (NHPA) which requires identification and evaluation of potential historic and cultural resources in the area affected by a federal action, so that federal agencies may "take into account the effects of their undertakings on historic properties and afford the [Advisory] Council [on Historic Preservation] an opportunity to comment on such undertakings."

The objective of this analysis is to study five HPHA housing projects targeted for repairs and rehabilitation, and to evaluate which should be considered historic resources. In keeping with Section 106 guidelines, this report identifies those which have potential for listing on the National Register of Historic Places (NR).

Note that there are other HPHA housing projects which are also targeted for repairs and rehabilitation, but these are not included in this report for two different reasons. The first reason is that six public housing projects were previously studied in 2006, also by Mason Architects, Inc. That 2006 report evaluated Lanakila Homes I and III (both in Hilo – some of which are also evaluated in this report, as some buildings of both Lanakila I and III are included in the area now called Lanakila Homes V), as well as Honolulu public housing -- Mayor Wright Homes, Palolo Valley Homes, Kaahumanu Homes, and Kuhio Park Terrace. The second reason is that other HPHA housing projects were constructed after 1965 and, thus, have not reached the age threshold normally used for historic resources.

The NR uses a general age threshold of 50 years or older. The five public housing projects operated by HPHA which are included in this study mostly met this age criteria. Four of the projects were originally built over 50 years ago (in the case of Lanikila V a portion of the area that now has that designation was built a few years later, with exactly the same design as the earlier portion). A fifth public housing project in the study, Lanakila II, was originally built 59 years ago, but is essentially new, having been rebuilt in its entirety within the last decade.

Because Lanakila II has been completely rebuilt in the past five years, it is no longer comprised of historic structures. The new buildings are not historically significant and do not have extraordinary importance under Criterion G for facilities less than 50 years of age. Therefore, this housing is evaluated as ineligible for the National Register of Historic Places.

Each of the housing projects covered in this report were visited, photographed, researched, and evaluated for historic significance. After consideration of each resource, three of the five projects were considered to meet National Register eligibility criteria. Their significance, for the most part, is based on their role in the social history of Hawaii, being representative of the efforts of a Territory-wide and State-wide housing reform movement; in addition, the aftermath of the 1960 tidal wave in Hilo is a factor in the eligibility for the buildings at Lanakila Homes completed in 1962. One of the housing projects, Kuhio Homes, does meet NR significance criteria, but does not possess sufficient

levels of integrity (considering the aspects of integrity defined by the NR as location, design, setting, materials, workmanship, feeling and association), necessary for inclusion in the National Register; and is not considered eligible because of this. Additionally, one of the projects evaluated, Kalihi Valley Homes possesses sufficient integrity only at some of its buildings that are relatively unaltered.

Table 1 page summarizes these evaluations. The three projects determined NR eligible are highlighted.

1. Table: Summarizing NR Eligibility Evaluation

Housing Project	Year Built	Nat. Register Significance	Nat. Register Integrity	National Register Eligible
Lanakila II	1951	No	N/A	No
Kalihi Valley Homes	1953	Yes	At unaltered buildings	Yes
Kuhio Homes	1953	Yes	No	No
Punchbowl Homes	1960	Yes	Yes	Yes
Lanakila V	1951 1962	Yes	Yes	Yes

2. Organization of Report

The first section of the report summarizes the National Register eligibility criteria. The second section is a brief history of public housing in Hawaii. Section three includes historic resource information and assessments for each of the housing projects. These include historic contexts, descriptions, maps or site plans, and one-page historic assessment photo and summary sheets. The fourth section is a summary of National Register findings. The following section contains recommendations for future action (to comply with Section 106 requirements). A bibliography is provided at the end of the report.

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National Register of Historic Places' Eligibility Criteria

In order to determine the significance of a historic property, the structure must be evaluated based on the National Register of Historic Places' Criteria for Evaluation. The following excerpt was taken from the National Register Criteria, Title 36 CFR, §60.4, *Criteria for Evaluation*:

> The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and
>
> A. that are associated with events that have made a significant contribution to the broad patterns of our history; or
>
> B. that are associated with the lives of persons significant in our past; or
>
> C. that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
>
> D. that have yielded, or may be likely to yield, information important in prehistory or history.

National Register Bulletin No. 15, *How to Apply the National Register Criteria for Evaluation* provides an explanation on how to apply the criteria listed above. In summary, historic resources are evaluated by applying the four significance criteria A through D, and then determining which of the seven aspects of integrity are present to convey its significance: location, design, setting, materials, workmanship, feeling, or association.

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History of Public Housing in Hawaii

(Much of the information in this section is taken from a previous report "Historic Property Evaluation for Six Public Housing Projects: Lanakila Homes I – Hilo; Mayor Wright Homes – Honolulu; Palolo Valley Homes – Honolulu; Kaahumanu Homes – Honolulu; Lanakila Homes III - Hilo; Kuhio Park Terrace – Honolulu" by Mason Architects, 2006.)

I see one-third of a nation ill-housed, ill-clad, ill-nourished. It is not in despair that I paint you that picture. I paint it for you in hope – because the Nation, seeing and understanding the injustice in it, proposes to paint it out. . . . The test of our progress is not whether we add more to the abundance of those who have too much; it is whether we provide enough for those who have too little.
--Franklin Delano Roosevelt, second inaugural address, January 20, 1937

1. History

Public housing programs in the United States and its territories had their origin as part of President Franklin D. Roosevelt's response to the Great Depression of the 1930s. Construction of low-cost housing and slum clearance was part of the 1933 National Industrial Recovery Act and similar legislation which established the Public Works Administration (PWA) and a whole set of other alphabet-soup agencies. The PWA's Housing Division planned to raise employment levels through both new housing construction on vacant land and slum clearance, with or without new housing. Slum clearance became the main focus of the Housing Division's managers. By the end of 1934 the PWA was encouraging state and territorial governments to pass legislation which would allow them to participate in PWA programs.

Public housing in Hawaii began in 1935 when the Territorial Legislature formed the Hawaii Housing Authority (HHA) in order to provide residents who were in low-income brackets with decent and affordable housing. The HHA operated under the PWA programs until the Federal government, pushed by President Roosevelt's commitment to public housing that was contained in his second inaugural address, enacted the United States Housing Act of 1937. This provided federal funding under the United States Housing Authority (USHA) for local public housing authority projects. This program gave local public housing authorities, such as HHA, the responsibility to design, build, and operate housing projects in their communities while the USHA provided financial help and, if required, technical assistance. In Hawaii, this program was used by HHA for slum clearance and low-rent housing. In 1940 the HHA began managing its first federally aided low-rent housing project at the Kamehameha Homes project.

Slum clearance was proposed as early as 1938 in Palama (the area now occupied by Mayor Wright Homes). This initial plan called for the families in the area to be relocated to "500 low cost houses" that were to be constructed at the corner of N. King and Kalihi Streets. One year later the plan had changed to involve the construction of 350 housing units on the site in "Honolulu's first slum clearance project" (Honolulu Star-Bulletin, 1939). This project, the Mayor Wright Homes (project TH-1-3) was not started by the time World War II began and was "deferred due to the war". Kalihi Valley Homes was built on a 26-acre site, which was a collection of houses and pig farms, also considered a slum area. This parcel was gained through the Territory's exercise of eminent domain, which allowed the land to be condemned and taken from its owners, with payment of fair value for the land. Slum clearance in Hilo was proposed

in 1941, and a location chosen for construction of public housing as early as April of the same year, with an approximately 13-acre site bordering Punahoa Street. This area was considered a slum clearance project, with forty substandard homes proposed to be replaced with the new project. It was considered an ideal location near the iron works, sugar cane products factory, fish market and, as well as nearby shopping. Both the projects at Mayor Wright Homes and Lanakila Homes were intended to initially be used to house people displaced by slum clearance projects.

The issue of slum clearance received two different responses from public housing reformers on the continental United States during the 1930s. One group felt that clearing slums was an important part of public housing and that it should be pursued. Another group felt that it only benefited real estate interests that were focused on selling the slum property at higher prices and would result in housing too costly to benefit its intended recipients, the urban poor.

During the 1940s the HHA moved forward with several other projects. Kamehameha Homes (Project TH-1-1) was completed in 1940 with 221 units at N. King and Kalihi Streets. Kalakaua Homes (Project TH-1-2) was competed in 1942 with 140 units.

Lanakila Homes (projects HA-1-4 and HA-1-6) was originally planned in 1940 as a 90-unit project for low-income family housing. Construction was postponed due to WWII, and in the meantime, the site that had originally been planned for the project, on Banyan Street (now Drive) across from the Naniloa Hotel, was designated for hotel and apartment use (HSB, 1950). Lanakila was moved to an alternate site of approximately 42 acres that was more convenient to the "industrial center where most of the tenants would probably work" (Hawaii Housing Authority [hereafter abbreviated as HHA], 1946).

Numerous other housing projects were undertaken by the HHA, both during the war and after. Defense housing became a priority after the attack on Pearl Harbor and HHA built and managed housing for defense workers. After the war, these buildings were operated as civilian housing and as temporary veterans' homes. The war itself had resulted in a huge influx of both military and civilian personnel, causing a drastic housing shortage, and, combined with the already high cost of land in the islands, driving rents to levels that average workers could not pay. This shortage lasted well beyond the war, despite HHA's efforts.

In 1944 the National Housing Agency (NHA) estimated that about one-third of the housing needed after World War II would be for low-income families. The NHA speculated that the lack of profitability for private enterprise to supply this housing would create a shortage. Although the G.I. Bill gave veterans low loan rates, a housing crisis followed the war and public housing was utilized to provide homes for veterans. By 1948 HHA was managing 16 housing projects totaling 4,500 units on Oahu, Maui, and the Big Island that included projects for permanent homes, temporary war homes, temporary veterans' homes, and emergency homes (HHA, 1951: 2-3).

An additional stress on the amount of low-income housing in Hilo was the April 1, 1946 tsunami that killed 159 people, destroyed 283 homes and damaged over 300 more.

A request was made to reactivate the Lanakila project in 1948, and was conditionally approved by the U.S. Public Housing Administration in 1949, with the requirements that preliminary plans

and supporting data be submitted for full approval; this included plans drawn up by architect Bruce P. Harden, and the results of a survey of substandard housing in Hilo. Lanakila Homes was under construction in 1950. The reactivated project included 60 more units (30 more buildings) than had originally been planned, arranged at the perimeter of the original project boundaries.

The following year the National Housing Act of 1949 injected increased federal funding into HHA construction plans. This money for combined Hawaii/U.S. projects created a surge in new HHA construction in the early 1950s; Palolo Homes I (82 units in 1951), Lanakila Homes I (Hilo, 150 units in 1951), and Puahala Homes (28 units in 1952), were all initially occupied before the 364-unit Mayor Wright Homes in October 1952. In 1953 a number of projects opened, including Kalihi Valley Homes and Kuhio Homes.

By the last half of the 1950s Honolulu was in a period of growth and population increase which found construction lagging behind. The HHA noted that an "acute housing shortage continued, particularly in the low rent areas" (HHA, 1958: 18). Their response included the opening of two projects: Palolo Valley Homes in June, 1957, and Kaahumanu Homes in October, 1958 (HHA, 1958: 19-20).

Also in the late 1950s, Hawaii Housing Authority began anticipate a growing need for low-income housing for the elderly, and those with disabilities. To meet that need, in 1957, the Authority contracted plans for a large mid-rise building project that would accommodate a large number of elderly and/or disabled residents, with spaces for clinics and community activities, as well as design features to provide easier access and mobility for the residents. The original plans for this project (TH-1-10) called for a complex that would have 624 units with 96 reserved for occupancy by those 65 or older, in four seven-story buildings located on seventeen acres in Kalihi Kai. Ultimately, the project was scaled back to 156 units in two buildings, one with 144 units and the other with 12 units. In the larger building 96 units were reserved for the elderly, and the entire project was relocated to the slopes of Punchbowl, on the former location of Robert Louis Stevenson Middle School.

During the early 1960s the Queen Emma housing project and the Kukui slum clearance project, both undertaken by the Honolulu Redevelopment Agency, provided residential housing at the north edge of downtown Honolulu. A second tsunami struck Hilo in 1960, and again left hundreds homeless, and provided the impetus to add more buildings to the existing Lanakila Homes project, resulting in the Lanakila III project completed in 1962.

By 1970 it was recognized that although large amounts of resources and energy were expended on the problem of providing adequate public housing, the HHA was still coming short of its goals. According to Marshal Kaplan:

> The need for adequate shelter has not been satisfied in the marketplace. Despite production of over 60,000 housing units during the 1960s, decent housing and a suitable living environment elude many Hawaii residents. In fact, there is persuasive evidence that more than one in every five Hawaii households cannot afford the housing they occupy, one in five are overcrowded, and at least one in eight occupies substandard, dilapidated housing.

The problem of affordable rentals still troubled Hawaii into the 1990s as the State tried to ease the situation with several economic solutions that were offered to developers to encourage them to provide low-rent housing. Among these were a tax credit of 9 percent and a rent subsidy of up to $175 per unit per month (Ong, 1991). In February 1991 there were more than 8,000 applicants on waiting lists for HHA public housing or rental assistance and less than 6,000 units available The HHA stated that the annual turnover in low-income housing was around 2 percent. Although rents were fixed at 30 percent of a family's income, it was still cheaper and more certain than rents on the open market.

2. Public Housing Context Summary

The development of low-cost housing for the urban poor as well as urban renewal in the form of slum clearance, have long been viewed as failed experiments. As early as 1962, with the Federal program barely fifteen years old, it was noted by Martin Anderson that:

> So far the federal urban renewal program has been a political asset to many local politicians – they could boast of "getting their share of the federal money" and prove their claims of "getting the city moving again" by pointing to bulldozers and cranes busily destroying and rebuilding. Usually, since it was the poor people…who were getting pushed around, many people did not hear much about the program or did not care.

Although much of the urban renewal that took place on the mainland during the 1950s and 60s resulted in little low-rent housing, this does not seem to be the case here in Hawaii where projects centered on providing it. One criticism of public housing that could describe the situation in Hawaii is that the programs have replaced slums with slums. This was recognized on the mainland as early as 1961, and was summarized by the well-known, anti-urban renewal writer Jane Jacobs: "Our present urban renewal laws…at best, merely shifts slums from here to there…at worst, destroys neighborhoods where constructive and improving communities exist and where the situation calls for encouragement rather than destruction." Also, programs in Hawaii have done little to relieve the chronic problem of finding affordable rentals that has existed at least since World War II.

A number of squalid and destitute situations that low-income families had to endure and that the HHA was convinced new housing construction would address, were pointed out by HHA in the early days of the organization. The buildings and programs were set up to ameliorate the degraded conditions of low-income housing in Hawaii, but they only did so for relatively few people. The lack of housing continued as more and more low-income projects went up. Early HHA efforts to correct slum, tenement, and unsanitary conditions were centered on the idea that new buildings would improve the living conditions of low-income renters. By the early 1960s it was generally understood that problems plaguing low-income renters are not gotten rid of by buildings, but by people working to eliminate the sources of the troubles. It required more than just new construction, it needed the efforts of the people who occupied and owned/managed the buildings. Again, Jane Jacobs summarizes that, "We expect too much of new buildings, and too little of ourselves."

Perhaps this fact was finally recognized by the HHA in the 1990s when "HHA realized the tremendous value of a comprehensive approach to resident development." Just months before

the July 1998 date when the HHA would merge with other State housing agencies into the Housing and Community Development Corporation of Hawaii, HHA stated, "a public housing agency can no longer only build housing, it must build better communities." It proposed to do this with "holistic and comprehensive approaches to public housing" that "must include economic self-sufficiency programs, an empowered resident base, and a service-oriented agency that is truly responsive to the needs of residents" (HHA, 1996-97: 44).

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Historic Resource Information and Assessment Summaries

1. Lanakila Homes V

a. Historic Context

Lanakila Homes I (TH-1-4, TH-1-6), II (HA-1-13) and III (HA-1-14) have now been divided into five project areas, no longer conforming to the original projects' boundaries. The current Lanakila I (HA-1004) consists of two areas, separated by three blocks, including part of Lanakila III (HA-1104) and all of Lanakila IV (HA-1105) Its boundaries at the west portion of Lanakila I are Hema, Kupukupu, Ipuka and Popolo Streets. The nine buildings at the east portion of Lanakila I form a reverse L shape along the southeast side of Hema Street, and the northeast side of Akahi Street. Lanakila II (HA-1013) maintains most of the original Lanakila II (HA-1-13) project boundaries, though the section southwest of Ipuka Street has been included in the west portion of Lanakila I. Lanakila III (HA-1104) does not include any of the original buildings of Lanakila III (HA-1-14), but is located along the southeast side of Hema Street, as well as in the block bounded by Hema, Kupukupu, Ipuka and Aheahe Streets. Lanakila IV is made up of two blocks that were formerly part of Lanakila I (TH-1-4, TH-1-6), bounded by Hema, Aheahe, Ipuka, Wailoa and Akahi Streets. Lanakila V (HA-1014) is made up entirely of the former Lanakila III (HA-1-14). Original Lanakila I (TH-1-4, TH-1-6) buildings remain only in the current east portion of Lanakila I (HA-1004) and the east portion of Lanakila IV (HA-1105) – between Kapiolani, Wailoa and Hema Streets. All but three of these original buildings are slated for demolition. Five of the fifteen original Lanakila III (HA-1-14) buildings have been demolished, and the remaining ten in the current Lanakila V (HA-1014) area are slated for demolition.

Both Lankila I (TH-1-4, TH-1-6) and Lanakila III (HA-1-14) were evaluated in a 2006 report. Lanakila I was evaluated as eligible for the National Register of Historic Places, while those located in Lanakila III were evaluated as not eligible for the National Register. This report updates the 2006 report in regard to the parts of Lanakila III that are within the boundaries of Lanakila V (HA-1014). The findings of the 2006 report still apply to the remaining Lanakila I buildings.

During 1950 the Lanakila Homes project in Hilo (referred to as project TH-1-4 in the 1950s, now called Lanakila 1004 or Lanakila I), was going out for bidding (HSB, 1950). Construction was set to begin in October 1950 and the duplex units were ready for occupancy in October the following year (HSB, 1951). Drawings for the 150-unit project were produced by architect Bruce Price Harden of Hilo and dated August 1950. The administration building at the Lanakila Homes project (1951) has a plaque near the entry dated March 8, 1952 that commemorates the opening of the project.

In the period between 1940, when the Kamehameha Homes Housing Project was opened, and 1951 when Lanakila I was opened, the HHA completed fourteen public housing projects. These included permanent homes (Kamehameha [1940], Kalakaua [1942], Palolo [1951]), temporary war homes, temporary veteran's homes, and emergency homes projects. Thirteen of these original projects have been demolished, and the 1951 Palolo Homes have been extensively renovated; this

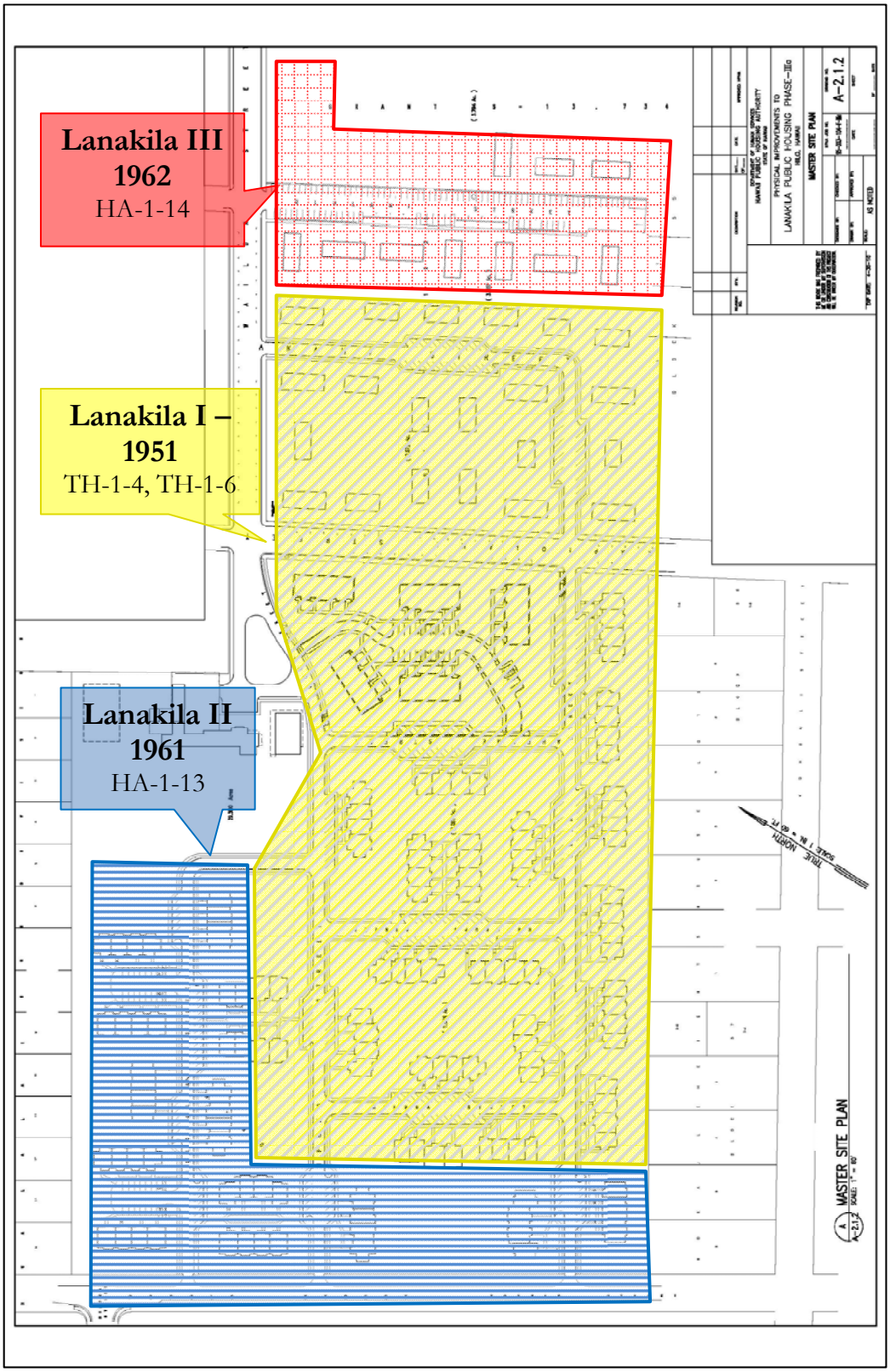
makes the remaining buildings in the 1951 section of Lanakila Homes the oldest and most intact extant examples of federally assisted public housing in the State.

The first Lanakila Homes, constructed as part of the projects numbered TH-1-4 and TH-1-6 (later HA-1-4 and HA-1-6, then Lanakila 1004), opened on October 1, 1951 (HHA, 1951). This had been an early project planned by HHA in 1940 to include only 90 units (45 buildings), but it was put on hold due to the United States' entry into WWII. The project was reactivated after the war, and before the reactivation, the April 1, 1946 tsunami devastated Hilo, leaving hundreds of additional people in need of affordable housing. In response to this, the project was enlarged to include 60 more units (30 buildings) to total 150 units in 75 buildings. At the same time, it was moved from its pre-war planned location, near downtown Hilo, to a site closer to the more industrial areas of Hilo. Only 21 of the original 75 buildings remain, with nine of those buildings in the area now designated as Lanakila I, and 12 of them included in the area now called Lanakila IV.

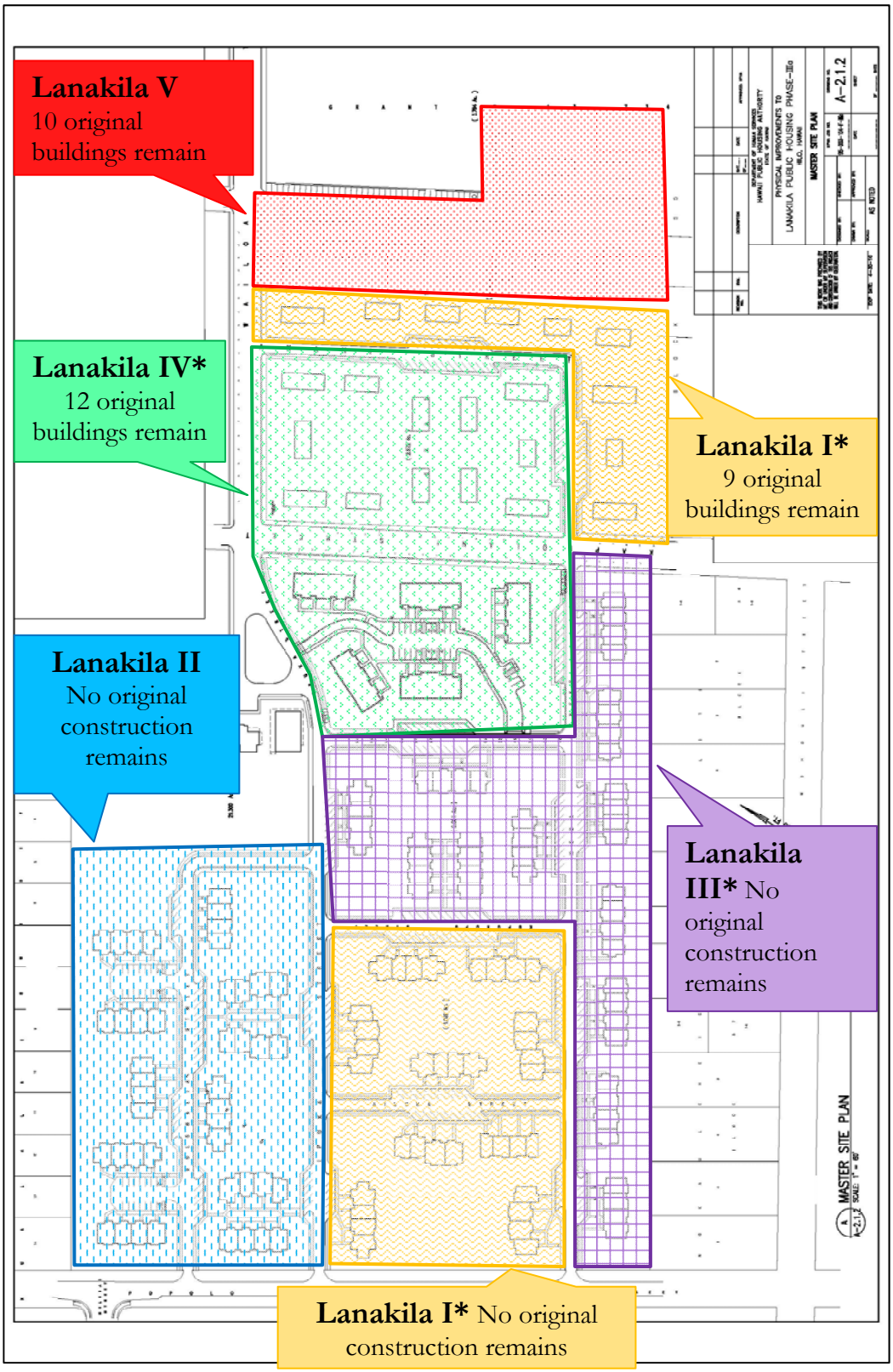
All ten of the buildings in the area now designated as Lanakila Homes V were built in 1962. The 1962 construction was originally referred to as project HA-1-14 in the 1960s, and later called Lanakila 1014. Originally 15 buildings (30 units) were constructed that year, but only 10 remain. These 15 structures were built at the east end of the Lanakila I development along both sides of Ululani Street. This 1962 development was initiated in response to the tsunami of May 23, 1960 which struck Hilo and left hundreds of people homeless (HHA, 1961: 9-10). The houses here were designed by architect Bruce Harden, who was the architect for Lanakila I, , and as such are virtually identical to the 1951 houses in the now-designated Lanakila I and Lanakila IV areas. All fifteen buildings were surveyed in 2006 as Lanakila III, or Lanakila Homes III and deemed not eligible for the National Register of Historic Places. At the time, the buildings were only 44 years old, and did not possess the exceptional significance required to be considered eligible for properties less than fifty years of age. This report changes that 2006 evaluation.

b. Description

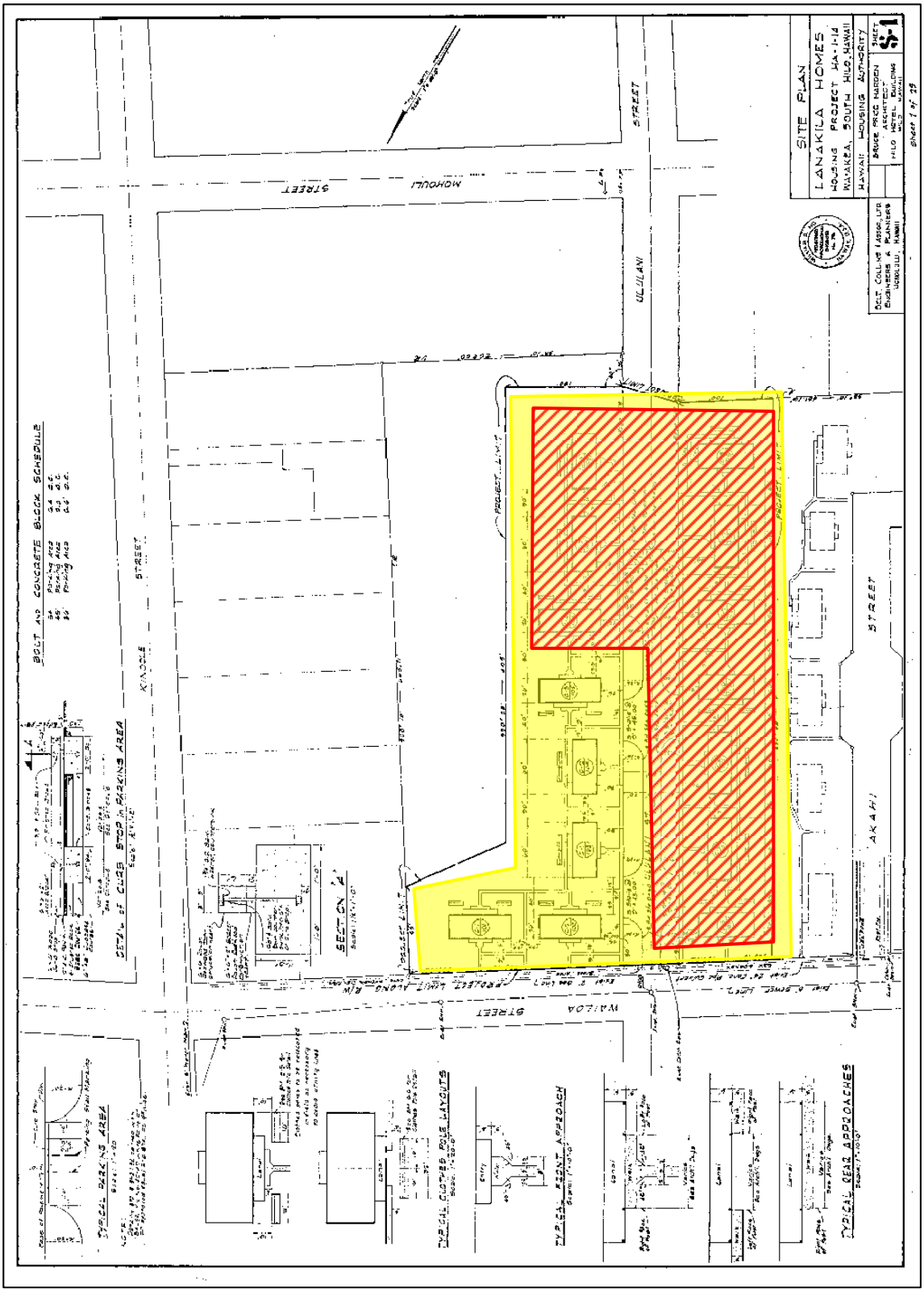
Lanakila Homes V comprises ten original duplex buildings, which are a combination of both one- and two-story duplex buildings. Ten duplexes (seven on the southwest side of Ululani Street and three on the northeast side of Ululani Street) were part of the 1962 Lanakila III addition. These ten 1962 structures exhibit the same type of original fixtures, details, and finishes as Lanakila I, and there is no noticeable difference in these two early Lanakila development phases. The buildings all have concrete slabs and exterior walls of concrete up to about 3'-6" above grade, above that height is single-wall construction with vertical tongue and groove boards. Interior walls are also single-wall construction, except for the party wall which is double-wall construction. The buildings have undergone some renovations; all buildings have been re-roofed with corrugated metal and have security screens added that cover the windows. Bathrooms have been renovated, and some of the kitchens have been altered with laminate countertops and stainless steel sinks. These buildings have many original features remaining; some units have original porcelain farmhouse-type kitchen sinks, and many retain original doors and 2/2 double-hung windows. Due to their abandonment and planned demolition in the last decade or so, the buildings exhibit signs of deterioration from neglect. Foliage around the buildings including grass, trees and shrubbery is now overgrown and encroaching on the sides of the buildings, as well as the roads and walkways that lead to them. The exterior paint is faded and peeling. There is evidence of vandalism including broken windows, damage to interior walls, ceilings and fixtures, as well as graffiti.



Current site plan of Lanakila Homes with shading indicating original development areas and dates (not all original buildings).



Current site plan of Lanakila Homes showing current development locations and names. Asterisks indicate areas that are not included in this report.



Original Lanakila III (HA-1-14) site plan showing 1962 buildings (shaded) and streets – ten of these fifteen buildings are extant and included in Lanakila V (hatched).

See the following page for the one page historic assessment and photographs

Historic Assessment: Lanakila Homes V (1951, 1962)

Clockwise from top left: Lanakila V neighborhood, typical remaining kitchen cabinets with evidence of vandalism, typical duplex entry.

Project	Lanakila Homes V (Wailoa, Akahi, Hema, and Ululani Streets, Hilo)
Date	1951, 1962
Significance	Lanakila Homes is associated with public housing in Hawaii and with the social history of Hawaii. The project represents the housing reform movement of the Territory and the State and is also significant as the oldest extant examples of public housing in the state. The 1962 housing is identical to the 1951 buildings and both the earlier and later housing have an association with the history of Hilo's 1946 or 1960 tsunami.
Character Defining Features	Gable roof, rounded rafter tails, concrete exterior wall to 3'-6" above grade and single-wall construction above that, 2/2 double-hung windows, v-joint canec panel ceilings in a centered pattern, kitchens with farmhouse-type porcelain sinks, metal countertops and wood cabinets. Low-rise buildings separated by open grassy areas.
Alterations	Security screens, laminate kitchen cabinets with stainless steel sinks, renovated bathrooms, and re-roofed.
Integrity	Buildings have some alterations. Housing retains integrity of location, setting, design, feeling, and association. There have been minor changes to materials and workmanship.
National Register Eligibility	**Eligible**

2. Kalihi Valley Homes

a. Historic Context

Kalihi Valley Homes was originally planned in 1951, and was conceived as a 400-unit project costing approximately five million dollars. It was built on about 26 acres acquired through condemnation proceedings from private property owners. The site was chosen for a number of reasons. It was considered a slum area in need of clearance, containing sub-standard housing, as well as piggeries. It was also deemed an advantage to be near the planned site of a new roadway – Likelike Highway between Honolulu and Kaneʻohe. In addition a new playground, and a new school were to be built nearby. Another reason for chosing this site was that the land was relatively inexpensive, due to the Territory's ability to acquire it through condemnation by eminent domain. The final reason for this site was its location convenient to likely work-places for its tenants. Merrill, Simms and Roehrig was the architectural firm for Kalihi Valley Homes. This firm designed a number of notable buildings in Hawaiʻi during the 1950s and 60s, including the Pacific Club (with Vladimir Ossipoff), Hawaiian Electric Company's Leslie Hicks Building, the Hawaii County Library in Hilo, and the Neal Blaisdell Concert Hall. Construction on Kalihi Valley Homes began in August of 1952, with 25 percent, or nine buildings, completed by December of that year (HHA 1952). The project was completed in its entirety in November 1953 with an initial move-in date of August 25, 1953 for some units. The project consisted of 400 one- to five-bedroom units in 45 buildings. The structure of the buildings was referred to as "egg crate" by HHA, meaning "reinforced concrete walls at the exterior and party walls act as beams and columns supporting the reinforced flat slabs that form the second floors and the roofs of the structure" (HHA, 1953).

The formal dedication of the project took place on February 26, 1954 with about 700 people in attendance, including tenants, U.S. Public Housing Administration (PHA) officials, Hawaii Housing Authority staff, city and territorial politicians, the pastor of Kaumakapili Church, the Aloha Week king and queen with attendants, as well as the Royal Hawaiian Band. The Regional Director of the PHA congratulated those responsible and noted that decent homes make better citizens. "He pointed out that Communism, which feeds on dissatisfaction, filth, and overcrowded living conditions wouldn't have a chance to breed in wholesome homes" (Honolulu Advertiser [hereafter abbreviated as HA], 1954).

b. Description

The Kalihi Valley Homes buildings are placed in informal rows, with the location of some skewed to follow the lot boundaries or topographic constraints. Because the buildings are terraced along the slope of the valley wall, there is a view of Honolulu and the ocean from many of the apartments' upper floor. The buildings are two-story concrete structures with flat roofs and concrete canopies above doorways and windows. Concrete walkways connect many of the buildings to one another.

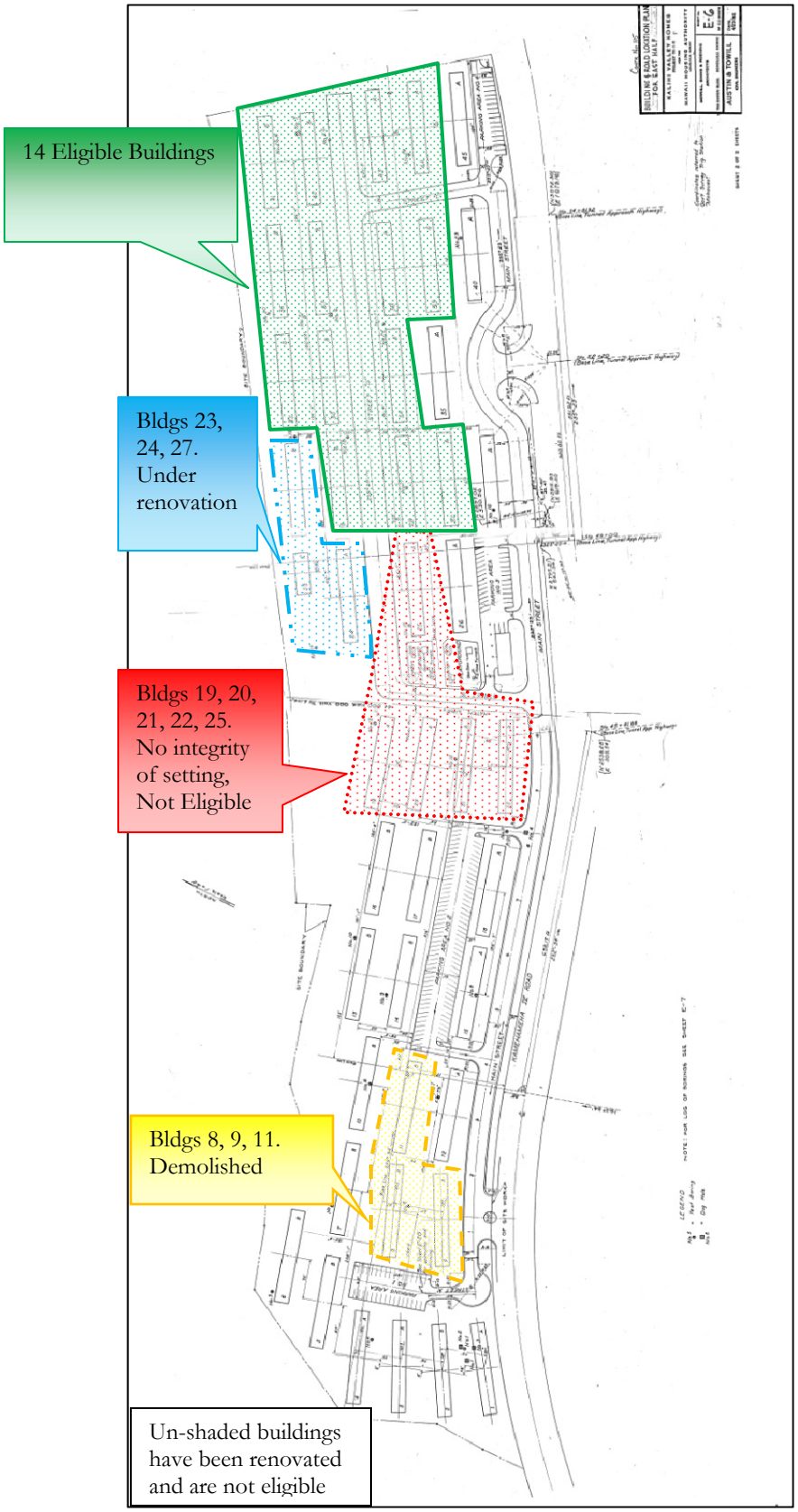
There are three building layouts. The 23 remaining Type A buildings (three originals have been demolished) contain nine units each – two one-bedroom, four three-bedroom, two four-

bedroom and one five-bedroom apartment. The eighteen Type B buildings also have nine units each– four two-bedroom, one three-bedroom plus four four-bedroom apartments. Only one Type C building was constructed, which has four three-bedroom apartments. Most units are two-story apartments, with kitchen and shared living/dining area at the lower level, and bedrooms and bath on the upper floor, though there are some small apartments that are on one level only. The rear of each apartment (except for the one-level apartments on the upper floor) includes a lanai laundry area, which separated from neighboring units by CMU walls.

Two phases of alterations have been completed at Kalihi Valley Homes, between 2001 and the present. The first phase demolished three buildings, and altered twelve others. Alterations included adding pitched roofs and porches, replacing the windows and doors, adding sliding glass doors at the rear of the kitchen, and renovating the kitchens. The second phase, which involved eight buildings, made most of the same changes; however, pitched roofs and porches were not added, leaving the flat roof profile and façade of the original buildings intact. Another three structures (Buildings 23, 24, and 27) are under renovation at the present time.

The remaining nineteen buildings at Kalihi Valley Homes are relatively unaltered. Walls for wind and rain protection have been added at the second-floor stair landings, but are historic in their own right. Original wood-frame sliding windows remain, as do most original entry doors. At the interiors, many original doors also remain, as well as most bathroom fixtures. Kitchens have been renovated, and an original storage room on the first floor appears to have been removed, or not constructed according to plans.

Due to alterations, most buildings at Kalihi Valley Homes do not retain enough aspects of integrity to be considered eligible for the National Register. The 20 buildings in Phases I and II, which have been renovated since 2001, and the three buildings currently under renovation, are too altered to retain eligibility. Five more structures (Buildings 19-22, and 25) do not retain a high degree of integrity of setting, and also cannot be considered eligible, despite their other intact aspects of integrity; this is largely due to their separation from the greater group of intact buildings, and closer proximity to the altered buildings. Fourteen of the original buildings remain relatively unchanged, and also retain enough integrity of setting, despite the nearby alterations, to be considered eligible. These buildings are those numbered between 28 and 44, with the exception of Buildings 31, 35 and 40 (which have been renovated). Eight of these buildings lie along Kalaunu Street, from which most of the renovated buildings are not readily visible, and the original character of the project remains intact. Six other intact buildings surround these eight and provide a buffer allowing the eight along Kalaunu Street to retain the highest integrity of setting of the grouping.



See the following page for the one-page historic assessment and photographs.

c. Historic Assessment: Kalihi Valley Homes (1953)

Clockwise from top left: front façade of a typical unit, rear of a typical unit showing the laundry areas, added wind screen wall on 2nd-floor landing, minimally renovated kitchen.

Project	Kalihi Valley Homes
Date	1953
Significance	Kalihi Valley Homes is associated with public housing and the general social history of Hawaii. The project represents the housing reform movement of the Territory and the State and is an intact, early example of concrete construction used for this purpose by the Territory, as well as the Territory's largest project at its date of completion.
Character Defining Features	Flat roof line, canopies over doorways and windows, wood-frame sliding windows, three-panel interior doors, and wood kitchen cabinets. Low-rise buildings terraced on hillside and separated by grassy areas and walkways.
Alterations	Pitched roofs and porches added to 12 buildings. Windows, doors, and kitchens altered in those 12 plus 8 other buildings. Minor kitchen alterations in remaining buildings
Integrity	Many buildings have been altered. However,14 retain sufficient integrity of location, setting, design, feeling, and association.
National Register Eligibility	Buildings 28, 29, 30, 32, 33, 34, 36, 37, 38, 39, 41, 42, 43 and 44 are **Eligible**

3. Kuhio Homes

a. Historic Context

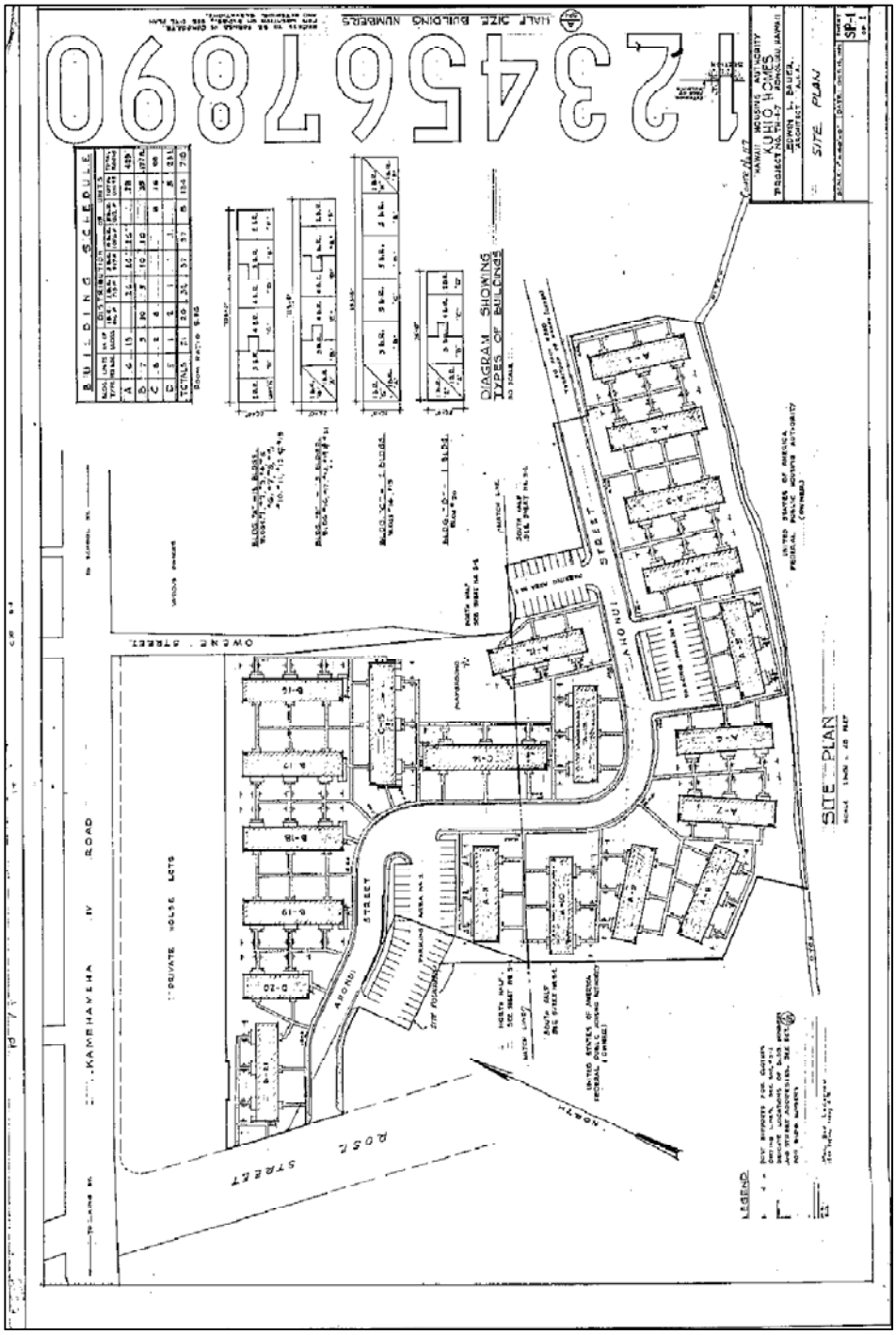
Kuhio Homes (Project TH-1-7) was completed in late 1953, and had an initial move-in date of November 16, 1953. The project consisted of 134 units of housing in 21 two-story buildings (HHA, 1954). The homes were built adjacent to the Kalihi War Homes temporary housing project that had been constructed to help alleviate the wartime housing shortage. Kuhio Homes was built as a part of the ongoing early 1950s attempts to provide enough affordable housing for Hawai'i's lower-income residents, including recently discharged veterans and young families.

The architect for this project was Edwin L. Bauer, who designed a number of notable buildings during the 1950s; the resort hotels Breakers, Hawaiiana Hotel, and Henry J. Kaiser's original Hawaiian Village in Waikiki. He also designed St. Elizabeth's Church on North King Street, and Holy Trinity Church on North School Street. In 1959 Bauer received an honors award from the American Institute of Architects for the Kilauea Catholic Mission Church that he designed on Kauai. In addition, in 1957, he designed the Palolo Homes housing project (Phase II) for HHA.

b. Description

The buildings at Kuhio Homes are two-story concrete structures with flat roofs and cantilevered overhanging eaves. The interior partition walls are concrete masonry units. The buildings are arranged generally parallel to one another, in a winding fashion along and around a curving street and parking cul-de-sacs. The buildings have parking areas, grassy areas and concrete walkways between them, as well as clotheslines in many areas. The front sides of the buildings have main entries to the living areas of the units. Cantilevered concrete canopies extend over the shared front lanai, protecting the entry door and living room windows of two adjacent units. The rear sides of the buildings have laundry areas outside the kitchens. There is a shared water heater closet between adjacent units, and the roof of this projecting room is extended over the rear doors and continues, with a narrower projection, over the kitchen windows of adjacent units.

The buildings at Kuhio Homes have been altered somewhat over the years. The original windows have been replaced with aluminum-frame fixed-pane and jalousie windows. Original exterior flush wood doors have been replaced, primarily with metal-clad doors. Screen doors have been replaced as well. The original asphalt tiles on the floors have been covered with new vinyl composition tile. Interior panel doors have been replaced with flush ones, although original transom panels remain above the interior doors. Kitchens and bathrooms have been renovated with laminate countertops, and newer cabinets, with newer plumbing fixtures in the bathrooms as well. When individual electric meters were installed for each unit, numerous metal conduits were attached to the exterior of the buildings.



Kuhio Homes original site plan showing location of all buildings.

See the following page for the one-page historic assessment and photographs.

c. Historic Assessment: Kuhio Homes (1953)

Clockwise from top left: Typical building with connecting walkways, lanai with concrete canopy, typical bathroom, interior ceiling slope at second-story following low roof pitch.

Project	Kuhio Homes
Date	1953
Significance	Kuhio Homes is associated with public housing in Hawaii and with the social history of Hawaii. The project represents the housing reform movement of the Territory and the State.
Integrity	Buildings have been altered. Retain integrity of location, setting, and association. Integrity of design, materials, feeling and workmanship has been greatly compromised.
Character Defining Features	Low-slope roof with overhanging eaves, cantilevered canopies
Alterations	Windows replaced, exterior and interior doors replaced, multiple electrical conduits installed on exterior of buildings.
National Register Eligibility	**Not eligible**

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4. Punchbowl Homes

a. Historic Context

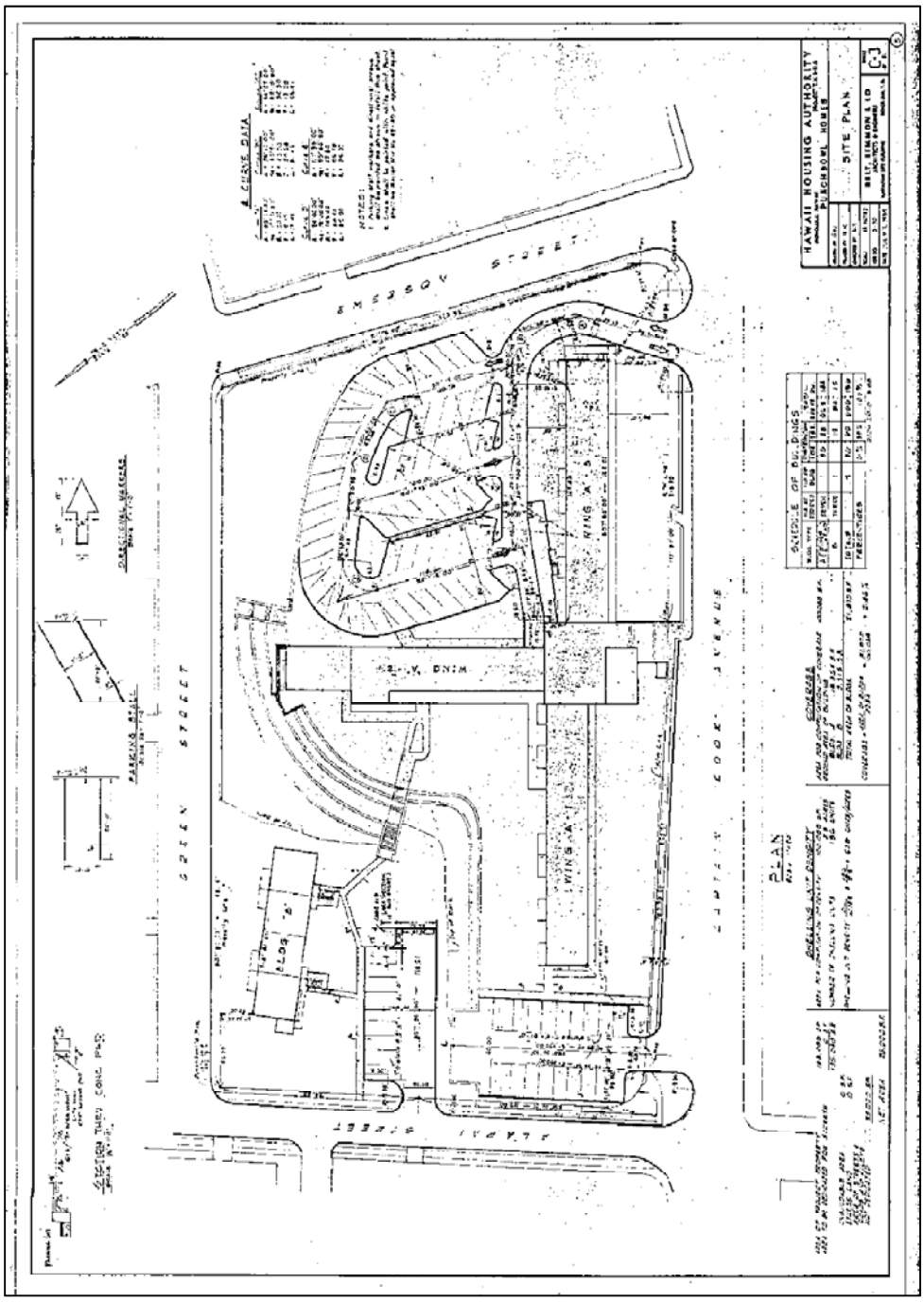
Architects Belt, Lemmon and Lo prepared construction drawings for Punchbowl Homes in 1959. As originally planned in 1957, the project was to have included four buildings, totaling 624 units, on a seventeen-acre site in Kalihi Kai. The project had to be scaled down to 156 units in two buildings when the original parcel of land could not be rezoned due to protest by the residents of the planned location. The new site was the former Robert Louis Stephenson middle school, located on a terraced plot on the makai slope of Punchbowl crater. The building was the first attempt by the HHA to address the needs of lower-income elderly and disabled residents, and the first public housing in the state for specifically designed for such populations. This project was planned with 96 units for the elderly and sixty units for other low-income renters. The HHA's reasoning for combining the two was that the rent received from the elderly would not be enough to provide for the needs of the building, and that the rents received from other low-income renters would be greater, to make up for the shortfall.

The initial move-in day was December 27, 1960 (HHA, 1960). This project was one of a number of other projects undertaken during the late 1950s to alleviate the continuing housing shortage on O'ahu, but was the only one to address the shortage of affordable housing for the island's growing elderly population.

b. Description

The main building at Punchbowl Homes is seven stories and the footprint has three arms, forming a "T" shape. An additional building at the mauka/'Ewa corner of the site is a simple three-story structure with rectangular plan, except for the projecting lanai in the rear and stairs in the front. Both buildings are constructed of concrete and have flat roofs. The main building has balcony walkways/exterior hallways with concrete barrier railings at each floor at the front side, facing Captain Cook Street, giving this facade a strong sense of horizontality. At the rear vertical bands of ornamental masonry grille work screen private service lanai for each apartment. The smaller three-story building also has the ornamental masonry grille work at all the rear lanai; however, the front presents a different image, with stairways leading to entry doors, and no exterior balcony or walkway.

The exterior and interior doors are mostly flush wood types, with two-panel doors at the rear which have a sliding top panel over a screen section. In the seven-story building, the front entry is from the balcony walkways, while the kitchen/rear doors open to the decorative-block enclosed lanai laundry areas. The windows are primarily double-hung one-over-one aluminum-frame with clear glass. The bathroom windows use obscured glass. At the interior, the apartments retain their original layout (open-plan in the living/dining/kitchen areas), with original asphalt tile remaining in many apartments, painted concrete ceilings, and original fixtures throughout. The kitchens have integrated sink and countertop, with original cabinetry, including pull-out cutting boards. The bathrooms and bedrooms of the units for the elderly have wide doors, to allow wheelchair access; in addition, the bathrooms are outfitted with grab bars, and showers have low enclosures for easy entry and exit. The bedrooms retain emergency call-switch mechanisms.



Punchbowl Homes site plan showing building locations and streets.

See the following page for the one-page historic assessment and photographs.

c. Historic Assessment: Punchbowl Homes (1960)

Clockwise from top left: rear of building showing ornamental masonry grills and entry walkways, typical kitchen, front of three-story building showing exterior entry stairs, typical exterior hallway of main building.

Project	Punchbowl Homes, 730 Captain Cooke Ave.
Date	1960
Integrity	Retain integrity of location, setting, and feeling design, materials, workmanship, and association.
Character Defining Features	Full length exterior hallway at entry side, original windows and doors, lanai with ornamental masonry grille work, main entry and lobby.
Alterations	Only minor alterations noted
Significance	Punchbowl Homes is associated with public housing and with the social history of Hawaii. The project represents the first housing planned by the Territory and the State for the elderly and disabled.
National Register Eligibility	**Eligible**

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5. Lanakila Homes II

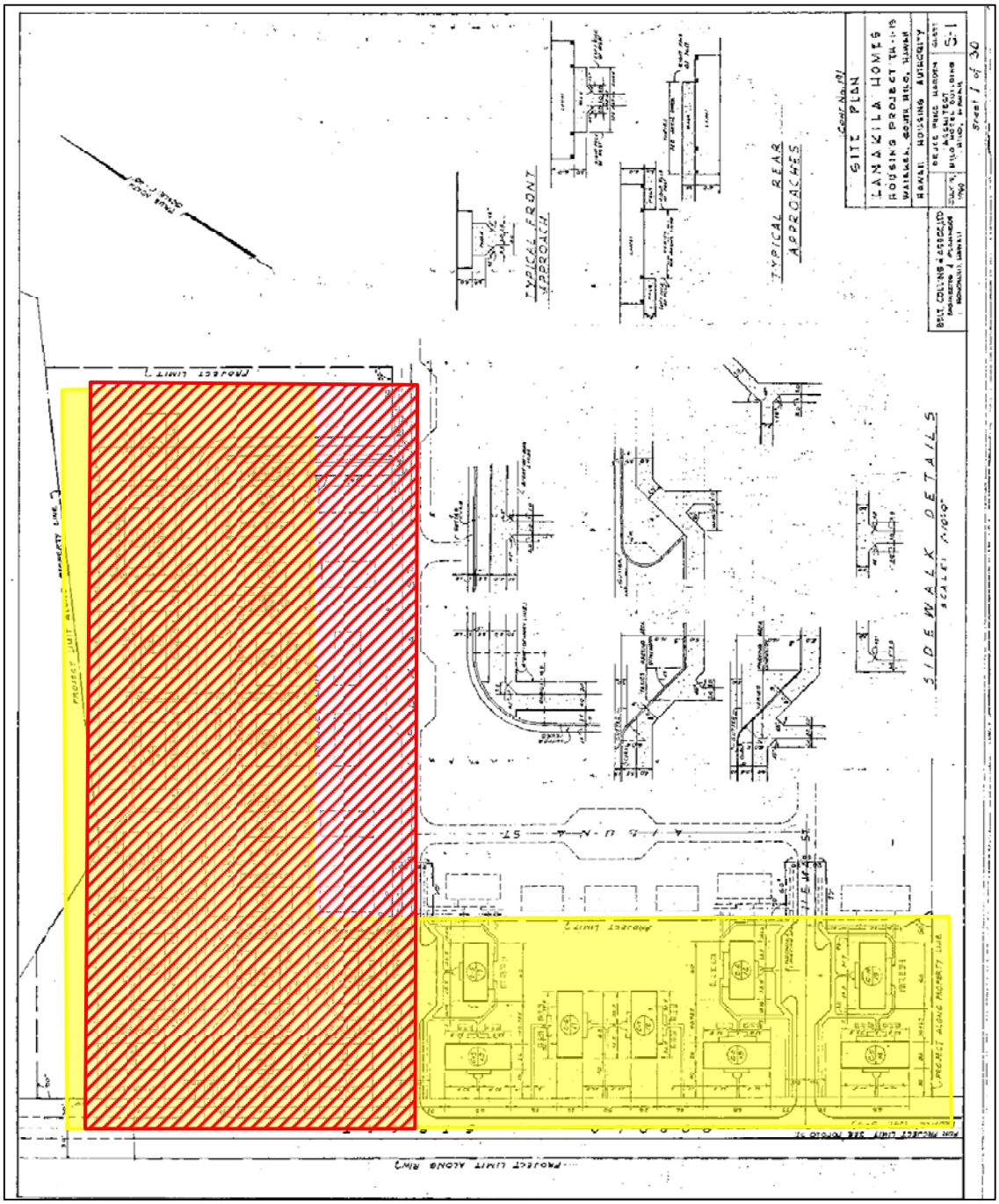
a. Historic Context

Lanakila Homes II was built in 1961 at the west side of the Lanakila I development, along Holomalia and Popolo Streets. Originally referred to as project HA-1-13 in the 1960s, it is now called Lanakila 1013, Lanakila II, or Lanakila Homes II. This development was initiated in response to the tsunami of May 23, 1960 which struck Hilo and left hundreds of people homeless (HHA, 1961: 9-10). The houses here were designed by architect Bruce Harden, who was the architect for Lanakila I, and as such were almost identical to the original adjacent Lanakila Homes I project.

b. Description

None of the original 1961 duplexes remain. The new four-unit buildings are mostly single-story with some two-story buildings that have bedrooms on the second floor. The low-rise buildings are arranged with very large open areas of lawn between them which helps to enhance the feeling of community. Due to the low-rise buildings with a wide spacing, the Lanakila Homes project, of all the projects examined for this report, most resembles a privately developed neighborhood of homes. The buildings all have concrete slabs, double-wall construction with shiplap hardboard exterior wall cladding, and roofs of ribbed metal panels. Interior wall finishes are gypsum board panels. These buildings have no remaining structural or decorative features of the originals.

Most of the Lanakila Homes housing project, primarily southwest of Aheahe Street, was the site of extensive reconstruction in 2004 and 2005, with most blocks of buildings being completely rebuilt. The only remaining original buildings are located in Lanakila I and III (some of which is now designated Lanakila V), northeast of Kapiʻolani Street. See the section above on Lanakila V, a recent area designation which encompasses duplexes built in both 1951 and 1962, with almost identical plans.



Lanakila II original 1961 site plan showing location of 1961 buildings and streets (shaded), with hatching indicating area currently called Lanakila II (HA-1013).

See the following page for the one-page historic assessment and photographs.

c. Historic Assessment: Lanakila Homes II (ca. 2005)

Clockwise from top left: typical neighborhood view, two-story building with four apartments, interior of one- bedroom unit with typical layout , except for some accessibility modifications.

Project	Lanakila Homes II (northeast of Popolo St., Hilo)
Date	Originally 1951, rebuilt in 2004-2006
Significance	The new buildings are only a few years old and are not significant historic resources.
Character Defining Features	N/A
Alterations	Completely rebuilt 2004-2006
Integrity	Has no aspects of historic integrity
National Register Eligibility	**Not Eligible**

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Summary of National Register Findings

General

The application of National Register Criterion A is dependent on the property having an important association with an event or historic trend that has made a significant contribution to the development of a community, a state, or the nation. The public housing projects studied in this report have a role in the social history of Hawaii as representative of the efforts of a Territory-wide and State-wide housing reform movement; they are also important historic examples of cooperative endeavors between the Federal and Territorial (State) governments to eliminate slums and improve housing for the poor. The early examples represent changing attitudes in the government's responsibility for providing housing for the poor. Changing construction parameters in what was acceptable and cost-efficient for public housing are also illustrated by the various projects, with the evolution from single-wall wood construction in the early examples, to masonry construction used in later work.

Five historic housing projects were evaluated for this report. Their potential for National Register eligibility lies under National Register Criterion A, for their association with public housing in Hawaii. They represent the starting point and subsequent evolution of a social movement and way of providing housing for the low-income population. The early examples used low-rise buildings with wide expanses of open space between them to foster a sense of community among the residents, a concept deemed important in the betterment of the low-income population. Punchbowl Homes, the one mid-rise development, was specifically designed for the elderly and disabled.

This conclusion of eligibility applies for the portion of Lanakila V [1951], Kalihi Valley Homes, and Punchbowl Homes projects that are over fifty years old and for the portion of Lanakila V [1962] project which will be turning fifty years old within the next two years. The Kuhio Homes project [1953] project was evaluated as ineligible because it lacks the integrity necessary for inclusion in the National Register. The Lanakila II project was evaluated as ineligible because none of the original 1961 buildings remain, having been demolished and completely rebuilt within the last ten years.

Eligibility for properties less than 50 years old

Under Criteria Consideration G, properties less than 50 years old are normally not considered for listing in the National Register. They may be listed only if they are of exceptional importance. "A property that has achieved significance within the last fifty years can be evaluated only when sufficient historical perspective exists to determine that the property is exceptionally important". All of the projects considered here, except for Lanakila II, either are over 50 years old, or will be within two years, and have been evaluated as properties that meet the 50-year criteria. Lanakila II, although originally built in 1961, was reconstructed in the last decade, and does not meet the criteria consideration of exceptional importance.

Recommendations (Section 106 compliance)

Prior to embarking on the future repairs and rehabilitation of the housing projects discussed in this report, consultation with the Hawaii State Historic Preservation Division (SHPD) is required. It will be SHPD's role to review the findings of this report and concur on National Register eligibility.

In the next step of the Section 106 process, the "effect" of the project(s) on historic resources must be determined by the federal agency proposing, regulating, or funding the project. SHPD will need to concur with this "effect." There are three possible "effect" findings: "No historic properties affected," "No adverse effect" and "Adverse effect," as described below:

- "No historic properties affected" means that either there are no historic properties present or there are historic properties present but the undertaking will have no effect upon them of any kind (that is, neither harmful nor beneficial). An "effect" means alteration to the characteristics of a historic property qualifying it for inclusion in, or eligibility for, the National Register of Historic Places (NR).

- "No adverse effect" means that there could be an effect, but the effect would not be harmful to those characteristics that qualify the property for inclusion in the NR. In other words, it would not diminish or adversely affect the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. This finding is likely if the renovations to the buildings follow the Secretary of the Interior's Standards for Rehabilitation.

- An "adverse effect" means an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the NR in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling or association. Consideration is given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for NR. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance, or be cumulative. If an "adverse effect" is determined, an MOA (Memorandum of Agreement) or PA (Programmatic Agreement) between the federal agency and the State Historic Preservation Officer (SHPO) is prepared. Other parties are allowed to be MOA and PA signatories.

Accordingly, if it is determined by the federal agency and SHPD that the nature of the proposed actions (demolition or future repairs and rehabilitation work) will result in an "adverse effect" to those properties evaluated in this report as National Register eligible, a Programmatic Agreement or a Memorandum of Agreement will need to be prepared. The PA could include provisions for mitigation, such as Historic American Building Surveys (HABS) recordation of the National Register eligible buildings.

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EXHIBIT C

Comment Letters From Consulted Parties

PHONE (808) 594-1888

FAX (808) 594-1865

STATE OF HAWAI'I
OFFICE OF HAWAIIAN AFFAIRS
711 KAPI'OLANI BOULEVARD, SUITE 500
HONOLULU, HAWAI'I 96813

HRD10/5154

August 27, 2010

RECEIVED
SEP - 2 2010
HELBER, HASTERT & FEE
PLANNERS

Ronald A. Sato, Senior Planner
Helber, Hastert & Fee
Pacific Guardian Center, Makai Tower
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813

RE: National Historic Preservation Act Consultation
Hawai'i Public Housing Authority repair and rehabilitation projects
Island of O'ahu

Aloha e Ronald Sato,

The Office of Hawaiian Affairs (OHA) is in receipt of your July 27, 2010 letter initiating consultation pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended (36 CFR) for a proposed undertaking by the State of Hawai'i Public Housing Authority (HPHA) via Federal funds through an U.S. Department of Housing and Urban Development (HUD) - Economic Development Initiative Special Project Grant.

It is our understanding this proposed undertaking involves minor repair and rehabilitation to several existing public housing projects. Your letter details that a historic architectural assessment (assessment) has been conducted at Lanakila V, Kalihi Valley and Punchbowl Public Housing Projects (housing projects). This assessment concluded that the architectural characteristics of these housing projects do not meet the eligibility criteria established for the National Register of Historic Places. HUD is proposing a "no adverse effect" determination for this proposed undertaking. OHA concurs with this determination.

Thank you for initiating consultation at this early stage and providing an opportunity to comment on this proposed undertaking. We look forward to seeing the proposed repair and rehabilitation projects completed, as they will certainly benefit our community. Should you have any questions, please contact Keola Lindsey at 594-0244 or keolal@oha.org.

'O wau iho nō me ka 'oia'i'o,

Clyde W. Nāmu'o
Chief Executive Officer

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU
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KIRK W. CALDWELL
ACTING MAYOR

DAVID K. TANOUE
DIRECTOR

ROBERT M. SUMITOMO
DEPUTY DIRECTOR

2010/ELOG-1567(jp)
UDB MISC

September 2, 2010

RECEIVED
SEP - 3 2010
HELBER, HASTERT & FEE PLANNERS

Mr. Ronald A. Sato
Helber Hastert & Fee Planners, Inc.
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813

Dear Mr. Sato:

Subject: Request for Comments
Environmental Reviews for Federally Subsidized Public Housing
Statewide - Section 106 Consultation
State of Hawaii - Department of Human Services - Hawaii Public Housing Authority

This is in response to your letter (received July 29, 2010), regarding your request for comments on federally subsidized public housing statewide. The Department of Planning and Permitting has reviewed the historic architectural assessment for the proposed rehabilitations of five housing projects by the Hawaii Public Housing Authority and have the following comments regarding the Punchbowl Homes located within the Punchbowl Special District. Please note that any major exterior repairs, alterations, or additions to the Punchbowl Homes may require a Minor Special District Permit. For information on the Punchbowl Special District, please see Section 21-9.50 of the Land Use Ordinance, which can be found online at http://www.honolulu.gov/refs/roh/21_990.pdf. Special District Permit application instructions and Punchbowl Special District Design Guidelines can also be found online at http://honoluludpp.org/downloadpdf/zoning/SDDMINOR.pdf and http://honoluludpp.org/downloadpdf/zoning/PBSD.pdf, respectively.

Thank you for the opportunity to comment on this project. If you have any questions, please contact Joan Pawsat of our Urban Design Branch at 768-8056.

Very truly yours,

Anthony X. Cliburg
FOR David K. Tanoue, Director
Department of Planning and Permitting

DKT:nw

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EXHIBIT C

Historic Property Evaluation for Six Public Housing Projects

Prepared By

Mason Architects, Inc.

April 2006

Historic Property Evaluation
for
Six Public Housing Projects:

Lanakila Homes I – Hilo
Mayor Wright Homes – Honolulu
Palolo Valley Homes – Honolulu
Kaahumanu Homes – Honolulu
Lanakila Homes III - Hilo
Kuhio Park Terrace – Honolulu

Prepared by
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119 Merchant Street, Suite 501
Honolulu, HI 96813

for
Helber Hastert & Fee, Planners
and the
Housing and Community Development Corporation of Hawaii

April 2006

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A. **Executive Summary**

This report is a historic architectural assessment of selected public housing projects operated by the Housing and Community Development Corporation of Hawaii (HCDCH). It is being undertaken in anticipation of future repairs and rehabilitation that will be funded with federal monies. It will fulfill the initial steps of Section 106 of the National Historic Preservation Act (NHPA) which requires "Federal agencies to take into account the effects of their undertakings on historic properties and afford the [Advisory] Council [on Historic Preservation] an opportunity to comment on such undertakings" (36 CFR Part 800.1).

The objective of this analysis is to identify and evaluate which, if any, of HCDCH's housing projects targeted for repairs and rehabilitation are considered historic resources, and in keeping with Section 106 guidelines, which have potential for listing on the National Register of Historic Places (NR).

The NR uses a general age threshold of 50 years or older. Six public housing projects operated by HCDCH were selected for study which meet, or will soon meet, this age criteria. Two of the projects (Lanakila I, built in 1951, and Mayor Wright Homes, built in 1952) are over 50 years old. Two other projects (Palolo Valley Homes, built in 1957, and Kaahumanu Homes, built in 1958) will be that age within two years and were treated as 50 years old for evaluation purposes here. The other projects (Lanakila III, built in 1962, and Kuhio Park Terrace, built in 1965) were examined in accordance with the National Register guidelines for evaluating properties less than 50 years old since they will not meet the 50-year cutoff for several more years.

Each of the housing projects covered in this report were visited, photographed, researched, and studied for historic significance. After consideration of each resource, four of the six projects were evaluated as meeting National Register significance criteria (the two projects less than 50 years old did not – Lanakila III and Kuhio Park Terrace). Their eligibility is based on their role in the social history of Hawaii representative of the efforts of a Territory-wide and State-wide housing reform movement. However, two of these four projects, Mayor Wright Homes and Kaahumanu Homes, do not possess sufficient levels of integrity (defined as Location, Design, Setting, Materials, Workmanship, Feeling and Association) necessary for inclusion in the National Register, and are not considered eligible because of this. Two of the projects examined are less than fifty years old (Lanakila III, built in 1962 and Kuhio Park Terrace, built in 1965) and are not considered eligible because they do not meet the National Register guidelines of exceptional importance required for properties less than 50 years old. The properties considered eligible are Lanakila Homes I in Hilo, and Palolo Valley Homes.

The table on the next page summarizes these evaluations. The two projects determined eligible are highlighted.

1. Table 1: Summary of NR Eligibility Evaluation

Housing Project	Year Built	Nat. Register Significance	Nat. Register Integrity	National Register Eligible
Lanakila I	1951	Yes	Yes	Yes
Mayor Wright Homes	1952	Yes	No	No
Palolo Valley Homes	1957	Yes	Yes	Yes
Kaahumanu Homes	1958	Yes	No	No
Lanakila III	1962	Not exceptional for properties less than 50 y.o.	NA	No
Kuhio Park Terrace	1965	Not exceptional for properties less than 50 y.o.	NA	No

2. Organization of Report

The first section of the report is a summary of the National Register eligibility criteria. The following section is a brief history of public housing in Hawaii. To follow are historic resource information and assessments for each of the housing projects. These include historic contexts, descriptions, and one-page historic assessment photo and summary sheets. The fourth section is a summary of National Register findings, and the final section contains recommendations for future action (in adherence with Section 106 requirements).

B. National Register of Historic Places' Eligibility Criteria

In order to determine the significance of a historic property, the structure must be evaluated based on the National Register of Historic Places' Criteria for Evaluation. The following excerpt was taken from the National Register Criteria, Title 36 CFR, §60.4, *Criteria for Evaluation*:

> The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and
>
> A. that are associated with events that have made a significant contribution to the broad patterns of our history; or
>
> B. that are associated with the lives of persons significant in our past; or
>
> C. that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
>
> D. that have yielded, or may be likely to yield, information important in prehistory or history.

National Register Bulletin No. 15, *How to Apply the National Register Criteria for Evaluation* provides an explanation on how to apply the criteria listed above. In summary, the historic integrity of a resource is evaluated by applying the four significance criteria A through D and determining, through which of the seven elements the resource conveys its significance: location, design, setting, materials, workmanship, feeling, or association.

C. History of Public Housing in Hawaii

I see one-third of a nation ill-housed, ill-clad, ill-nourished. It is not in despair that I paint you that picture. I paint it for you in hope – because the Nation, seeing and understanding the injustice in it, proposes to paint it out. . . . The test of our progress is not whether we add more to the abundance of those who have too much; it is whether we provide enough for those who have too little.

--Franklin Delano Roosevelt, second inaugural address, January 20, 1937

1. History

Public housing programs in the United States and its territories had their origin as part of President Franklin Roosevelt's response to the Great Depression of the 1930s. Construction of low cost housing and slum clearance was part of the 1933 Federal Emergency Administration of Public Works (PWA) Housing Division's plan to raise employment levels (Robinson, 1999: Vol 2, 12). Slum clearance became the main focus of the Housing Division's managers (Robinson, 1999: Vol 2, 29). By the end of 1934 the PWA was encouraging state and territorial governments to pass legislation which would allow them to participate in PWA programs (Robinson, 1999: Vol 2, 31).

Public housing in Hawaii began in 1935 when the Territorial Legislature formed the Hawaii Housing Authority (HHA) in order to provide residents who were in low income brackets with decent and affordable housing. The HHA operated under the PWA programs until the Federal government, pushed by President Roosevelt's commitment to public housing that was contained in his second inaugural address, enacted the United States Housing Act of 1937. This provided federal funding under the United States Housing Authority (USHA) for local public housing authority projects. This program gave local public housing authorities, such as HHA, the responsibility to design, build, and operate housing projects in their communities while the USHA provided financial help, and if required, technical assistance. In Hawaii, this program was used by HHA for slum clearance and low-rent housing (Hawaii Housing Authority, 1996-97: 3). In 1940 the HHA began managing its first federally-aided low-rent housing project at the Kamehameha Homes project.

Slum clearance in Palama (the area now occupied by Mayor Wright Homes) was proposed as early as 1938. This initial plan called for the families in the area to be relocated to "500 low cost houses" that were to be constructed at the corner of N. King and Kalihi Streets ("Slum Area," HSB). One year later the plan had changed to involve the construction of 350 housing units on the site in "Honolulu's first slum clearance project" ("FDR Approves Contracts to Obtain Funds" HSB). This project, the Mayor Wright Homes (project TH-1-3) was not started by the time World War II began and was "deferred due to the war" (HHA Annual Reports, 1948: np).

The issue of slum clearance received two different responses from public housing reformers on the continental United States mainland during the 1930s. One group felt

that clearing slums was an important part of public housing and that it should be pursued. Another group felt that it only benefited real estate interests that were focused on selling the slum property at higher prices and would be too costly to benefit its intended recipients, the urban poor (Robinson, 2002: Vol 2, 29).

During the 1940s the HHA moved forward with several other projects. Kamehameha Homes (Project TH-1-1) was completed in 1940 with 221 units at N. King and Kalihi Streets. Kalakaua Homes (Project TH-1-2) was competed in 1942 with 140 units, and by 1946 the Lanakila Homes (Project TH-1-4) was planned for Hilo with 90 units.

Numerous other housing projects were undertaken by the HHA, both during the war and after. Defense housing became a priority after the attack on Pearl Harbor and HHA built and managed housing for defense workers. After the war, these buildings were operated as civilian housing and as temporary veterans' homes.

In 1944 the National Housing Agency (NHA) estimated that about one-third of the housing needed after World War II would be for low-income families. The NHA speculated that the lack of profitability for private enterprise to supply this housing would create a shortage (Robinson, 1999: Vol 2, 55). Although the G.I. Bill gave veterans low loan rates, a housing crisis followed the war and public housing was utilized to provide homes for veterans. By 1948 HHA was managing 16 housing projects totaling 4,500 units on Oahu, Maui, and the Big Island (Annual Reports 1996-97, 22) that included projects for permanent homes, temporary war homes, temporary veterans' homes, and emergency homes (Annual Reports, 1951: 2-3).

The following year the National Housing Act of 1949 injected increased Federal funding into HHA construction plans. This money for combined Territorial/Federal projects created a surge in new HHA construction in the early 1950s; Palolo Homes I (82 units in 1951), Lankila Homes I (Hilo, 150 units in 1951), and Puahala Homes (28 units in 1952), were all initially occupied before the 364-unit Mayor Wright Homes in October 1952. In 1953 a number of projects opened, including, Kalihi Valley Homes, Kuhio Homes, and more construction at Palolo Homes.

By the last half of the 1950s Honolulu was in a period of growth and population increase which found construction lagging behind. The HHA noted that an "acute housing shortage continued, particularly in the low rent areas" (Annual Report, 1958: 18). Their response included the opening of two projects; Palolo Valley Homes in June 1957, and Kaahumanu Homes in October 1958 (Annual Report, 1958: 19-20). During the early 1960s the Queen Emma housing project and the Kukui slum clearance project, both undertaken by the Honolulu Redevelopment Agency, provided residential housing at the north edge of downtown Honolulu.

By 1970 it was recognized that although large amounts of resources and energy were expended on the problem of providing adequate public housing, the HHA was still coming short of its goals.

> The need for adequate shelter has not been satisfied in the marketplace. Despite production of over 60,000 housing units during the 1960s, decent housing and a suitable living environment elude many Hawaii residents. In fact, there is persuasive evidence that more that one in every five Hawaii households cannot afford the housing they occupy, one in five are overcrowded, and at least one in eight occupies substandard, dilapidated housing (Marshal Kaplan, 1971: 1).

The problem of affordable rentals still troubled Hawaii into the 1990s as the State tried to ease the situation with several economic solutions that were offered to developers to encourage them to provide low-rent housing. Among these were a tax credit of 9 percent and a rent subsidy of up to $175 per unit per month (Ong, "Affordable rentals: State tries several solutions," HA). In February 1991 there were more than 8,000 applicants on waiting lists for HHA public housing or rental assistance and less than 6,000 units available The HHA stated that the annual turnover in low-income housing was around 2 percent. Although rents were fixed at 30 percent of a family's income, it was still cheaper and more certain than rents on the open market. "Nobody wants to move" (Ong, "State to focus on the lack of affordable rentals," HA).

2. Public Housing Context Summary

The development of low-cost housing for the urban poor, and urban renewal in the form of slum clearance have long been viewed as a failed experiment. As early as 1962, with the Federal program barely fifteen years old, it was noted:

> So far the federal urban renewal program has been a political asset to many local politicians – they could boast of "getting their share of the federal money" and prove their claims of "getting the city moving again" by pointing to bulldozers and cranes busily destroying and rebuilding. Usually, since it was the poor people…who were getting pushed around, many people did not hear much about the program or did not care (Anderson, 1964:17).

Although much of the urban renewal that took place on the mainland during the 1950s and 60s resulted in little low-rent housing (Anderson, 220), this does not seem to be the case here in Hawaii where projects centered on providing it. One criticism of public housing that does fit in Hawaii is that the programs have replaced slums with slums. This was recognized as early as 1961. "Our present urban renewal laws…at best, merely shifts slums from here to there…at worst, destroys neighborhoods where constructive and improving communities exist and where the situation calls for encouragement rather than destruction" (Jacobs, 1992: 270). Also, programs in Hawaii have done little to relieve the chronic problem of finding affordable rentals that has existed at least since World War II.

A number of squalid and destitute situations that low-income families had to endure and that the HHA was convinced new housing construction would address, were pointed out by HHA in the early days of the organization (Annual Report, 1940: 2). The buildings and programs were set up to ameliorate the degraded conditions of low-income housing in Hawaii, but they only did for a relative few people. The lack of housing continued as more and more low income projects went up. Early HHA efforts to correct slum,

tenement, and unsanitary conditions were centered on the idea that new buildings would improve the living conditions of low-income renters (Annual Report, 1940: 2-3). By the early 1960s it was generally understood that problems plaguing low-income renters are not gotten rid of by buildings, but by people working to eliminate them. It required more than just new construction, it needed the efforts of the people who occupied and owned/managed the buildings. As summarized by the well-known, anti-urban renewal writer Jane Jacobs, "We expect too much of new buildings, and too little of ourselves" (Jacobs, 1992: 334).

Perhaps this fact was finally recognized by the HHA in the 1990s when "HHA realized the tremendous value of a comprehensive approach to resident development" (Annual Report, 1996-97: 23). Just months before the July 1998 date when the HHA would merge with other State housing agencies into the Housing and Community Development Corporation of Hawaii, HHA stated, "a public housing agency can no longer only build housing, it must build better communities" (Annual Report, 1996-97: 44). It proposed to do this with "holistic and comprehensive approaches to public housing" that "must include economic self-sufficiency programs, an empowered resident base, and a service-oriented agency that is truly responsive to the needs of residents" (Annual Report, 1996-97: 44).

D. Historic Resource Information and Assessment Summaries

1. Lanakila Homes I

a. Historic Context
During 1950, while the Mayor Wright Homes project was nearing reactivation, the Lanakila Homes project in Hilo (referred to as project TH-1-4 in the 1950s, now called Lanakila 1004 or Lanakila I), was going out for bidding ("Hilo's Lanakila Housing Project Ready For Bidding, HSB). Construction was set to begin in October 1950 and the duplex units were ready for occupancy in October the following year ("October Date Set For Occupancy of Lanakila Homes," HSB). Drawings for the 150 unit project were produced by architect Bruce Price Harden of Hilo and dated August 1950. The administration building at the Lanakila Homes project (1951) has a plaque near the entry dated March 8, 1952 that commemorates the opening of the project.

In the period between 1940 when the Kamehameha Homes Housing Project was opened, and 1951 when Lanakila I was opened, the HHA completed fourteen public housing projects. These included permanent homes (Kamehameha [1940], Kalakaua [1942], Palolo [1951]), temporary war homes, temporary veteran's homes, and emergency homes projects. These original projects have all been demolished, and the 32 buildings in the 1951 section of Lanakila Homes are the oldest extant examples of federally-assisted public housing in the State.

b. Description
Thirty-two of the duplex buildings remain of the original 1951 project. The buildings are mostly single-story with some two-story buildings that have bedrooms on the second floor. The low-rise buildings are arranged with very large open areas of lawn between them which helps to enhance the feeling of community. Due to the low rise buildings with a wide spacing, the Lanakila Homes project, of all the projects examined for this report, most resembles a privately developed neighborhood of homes. The buildings all have concrete slabs and exterior walls of concrete up to about 3'-6" above grade, above which is single-wall construction with vertical tongue and groove boards. Interior walls are also single-wall construction, except for the party wall which is double. The buildings have undergone some renovations; all buildings have been re-roofed with corrugated metal and have added security screens covering the windows. Bathrooms have been renovated, and some of the kitchens have been altered with laminate countertops and stainless steel sinks. These buildings have many original features remaining. Some units have original porcelain farmhouse-type kitchen sinks. Most units have original doors and 2/2 double-hung windows.

A large portion of the Lanakila Homes housing project primarily southwest of Ahe Ahe Street has undergone extensive renovation in 2004 and 2005, with several blocks of buildings being completely rebuilt.

See the following page for the one-page historic assessment and photographs.

c. Historic Assessment: Lanakila Homes I (1951)

Clockwise from top left: typical neighborhood, single-story duplex, kitchen with original sink, countertop and cabinets.

Project	Lanakila Homes I (600 Wailoa St. Hilo)
Date	1951
Significance	Lanakila Homes is associated with public housing in Hawaii and with the social history of Hawaii. The project represents the housing reform movement of the Territory and the State and is also significant as the oldest extant public housing remaining in the state.
Character Defining Features	Gable roof, radiused rafter tails, concrete exterior wall to 3'-6" above grade and single wall construction above that, 2/2 double-hung windows, v-joint canec panel ceilings in a centered pattern, kitchens with farmhouse-type sinks, metal countertops and wood cabinets. Low rise buildings separated by open grassy areas.
Alterations	Security screens, laminate kitchen cabinets with stainless steel sinks, renovated bathrooms, and re-roofed.
Integrity	Building has some alterations. Retains integrity of location, setting, design, feeling, and association. There have been minor changes to materials and workmanship.
National Register Eligibility	**Eligible**

2. Mayor Wright Homes

a. Historic Context

During the time that the Mayor Wright Homes project languished in the 1940s, the area was known as "one of the worst slum areas of the city" (Annual Report, 1952: np). After the war, reactivation of the project was sought from the Federal Public Housing Administration in 1945 and 1948, but as construction materials were still scarce (and perhaps owing to the project's size) the requests were not granted until 1950. During those years many existing housing units were razed at the site; "a number" in 1947, 24 in 1948, and 39 in 1949. The remaining buildings were cleared by June 28, 1951 when construction started (Annual Report, 1952: np). A number of design features were described at the project's opening as being unique, such as reinforced concrete and concrete hollow tile construction, and "steel sash doors, cabinets and shelves" (Annual Report 1952, np). Although these items had been used for years in local construction, they were a first for HHA projects. The steel sash doors at Mayor Wright Housing have mostly been removed during a rehabilitation project which widened the project's doorways (Chu, 2006).

The design for Mayor Wright Homes was done by the architectural firm of Law & Wilson. Plans are dated March 1951. The firm specialized in civil engineering projects, industrial facilities, piers, public and commercial buildings. The $3.5m Mayor Wright Homes project was among its largest projects up until that time. Other Law & Wilson projects include a part in the $17m facilities at Kaneohe Marine Corps Base, the Church of the Holy Nativity, the Waikiki Shell, and the Pearl Harbor Elementary School. The design for Mayor Wright Homes featured significant sections of open area between groups of buildings. Some of these areas were paved for play areas and some were lawn areas planted with grass. The open areas, along with the low-rise construction, would have helped to foster a sense of community among the residents, maximizing the opportunity for interaction.

b. Description

Mayor Wright Homes has undergone several alterations over the years. The original open lawn and paved areas between the buildings have been converted to driveways and parking. The units in perimeter buildings of the housing complex have had their entries changed from the kitchen side of the apartment to the living room (opposite) side. Stairways to the upper floors of the three-story buildings serving the kitchen entries were removed and new stairs were constructed on the living room (opposite) side of the building. The resulting lanai (off the kitchens) were closed with concrete hollow tiles set on their sides to form a grille. The original stairways had metal mesh railings. The new stairs were built with concrete hollow tile half-walls and clay tile roofs. Also, the three-story buildings originally had one entry hall way serving a pair of units. The halls led from the stair landing to the unit entry at the living room. These halls have been sealed at the stair landings and the main entry changed to the kitchen door. Many of the original three-light steel sash hopper windows have been replaced by jalousies and most of the original doorways at Mayor Wright Homes have been widened and the doors replaced.

During the 1950s and 1960s, many ethnically distinct neighborhoods began dissolving into residential areas that were defined primarily by income levels rather than by the ancestry of the residents (Johnson, 1991: 358). This occurrence did not happen in the public housing projects; they merely transitioned from enclaves of one nationality to that of another. Newly arriving immigrants were often forced to the public housing projects by a lack of job opportunities. Early in the history of slum clearance in Hawaii ethnic groups such as Hawaiians, Japanese, Chinese, Filipinos, Portuguese, and Puerto Ricans were the groups noted as inhabiting the low-income communities (Annual Report, 1940: 1). Today the primary ethnic groups found in the Mayor Wright Homes project are Micronesians, Vietnamese, Samoans, and Hawaiians (Chu, 2006). Today income level is no longer the definition of the housing projects as it once was. Families with somewhat higher income levels (and receiving proportionally less subsidy) live in the projects; some families have been in residence for decades (Chu, 2006).

See the facing page for the one-page historic assessment and photographs.

c. Historic Assessment: Mayor Wright Homes (1952)

Clockwise from top left: added stairways at changed entries, lanai sealed with hollow tile, solar collector on two-story building, typical kitchen.

Project	Mayor Wright Homes (521 N. Kukui St.)
Date	1952
Integrity	Buildings have been significantly altered. Retain integrity of location. Integrity of setting, design, materials, workmanship, feeling, and association have been greatly compromised.
Character Defining Features	Flat roofline, multi-light hopper windows, cantilevered canopy, metal shelving, chain link stair railings, exposed exterior stairs and open lanai at 3 story buildings.
Alterations	Doorways widened and doors replaced, entry halls sealed, lanai enclosed, entries switched and new enclosed stairway built in 3 story buildings. Open space between buildings utilized for parking.
Significance	Mayor Wright Homes is associated with public housing in Hawaii and with the social history of Hawaii. The project represents the housing reform movement of the Territory and the State.
National Register Eligibility	**Not eligible**

3. Palolo Valley Homes

a. Historic Context

This HHA housing project, with 118 units in 20 buildings, opened on June 20, 1957 (Annual Report, 1958: 17) adjacent to other Palolo projects which had opened in 1951 and 1953 and totaled 224 units. Edwin L. Bauer was the architect for Palolo Valley Homes, and planning was done by Harland Bartholomew & Associates. Bauer designed a number of notable buildings during the 1950s; the resort hotels Breakers, Hawaiiana Hotel, and Henry J. Kaiser's original Hawaiian Village in Waikiki. He also designed St. Elizabeth's Church on North King Street, and Holy Trinity Church on North School Street. In 1959 Bauer received an honors award from the American Institute of Architects for the Kilauea Catholic Mission Church that he designed on Kauai. The Palolo Valley Homes buildings are placed in informal rows, with the location of some skewed to follow the lot boundaries. There is about 55' of space between the rows of buildings, which, combined with the two-story design gives a community feeling to the neighborhood and maximized the opportunity for contact among the residents.

b. Description

The 2-story, flat-roofed buildings at Palolo Valley Homes are relatively unaltered. Enclosures have been added at the second-floor stair landings. The original vertical T&G laundry enclosures at the rear of the units were removed and concrete hollow tile utility areas with low-slope shed roofs were added. Most of the original 1/1 double-hung windows remain.

See the facing page for the one-page historic assessment and photographs.

c. Historic Assessment: Palolo Valley Homes (1957)

Clockwise from top left: front façade of a typical unit, rear of a typical unit showing the added laundry areas, typical kitchen, added entry enclosure.

Project	Palolo Valley Homes (2107 Ahe St.)
Date	1957
Significance	Palolo Valley Homes is associated with public housing in Hawaii and with the social history of Hawaii. The project represents the housing reform movement of the Territory and the State and is an intact, early example of concrete construction used for this purpose by the Territory.
Character Defining Features	Flat roof line, canopies over doorways and windows, decorative surround at entry doors, 1/1 double-hung windows, single panel interior doors, and wood kitchen cabinets with metal countertops. Low-rise buildings separated by open grassy areas.
Alterations	Second floor entries have been enclosed, wood laundry enclosures replaced with concrete hollow tile enclosures, added concrete hollow tile storage rooms.
Integrity	Buildings have been altered. But still retain sufficient integrity of location, setting, design, feeling, and association.
National Register Eligibility	**Eligible**

4. Kaahumanu Homes

a. Historic Context

Architects Law & Wilson prepared plans for Kaahumanu Homes in August 1957. The initial move-in day was October 26, 1958 (Annual Report, 1958: 19). This 152-unit project along with the Palolo Valley Homes project were undertaken by HHA during a time of an "acute housing shortage" when there was "no increase in the availability of homes at rentals that families in the low income group can afford to pay" (Annual Report, 1958: 18). This housing shortage for low-income renters was reported as early as 1956 ("Shortages in Lower Price Field," HA) and which essentially was a continuation of housing scarcity extending back to World War II. The combined units (270) from the two projects, along with housing at other HHA projects and from Honolulu Redevelopment Agency and military housing from the last half of the 1950s, did little to alleviate the housing situation since Hawaii's population rose along with land and construction costs ("Land Prices Blamed for High Cost," HA).

b. Description

The buildings at Kaahumanu homes are two-story concrete with flat roofs and cantilevered overhanging eaves. The front sides of the buildings have main entries to the first floor apartments and lanai with concrete and metal railings at the second floor apartments. Cantilevered concrete visors extend from lanai to lanai between the first and second floors. The rear sides of the buildings have service entries to the first floor apartments and a second floor walkway which provides access to the main entries of the upper apartments. The original windows in the buildings have been replaced with aluminum frame double-hung sash, and floors covered with vinyl tile.

See the facing page for the one-page historic assessment and photographs.

c. Historic Assessment: Kaahumanu Homes (1958)

Clockwise from top left: typical lanai showing added aluminum frame windows, typical kitchen, rear of a typical building.

Project	Kaahumanu Homes (Alokele & Kaiwiula St.)
Date	1958
Integrity	Buildings have been altered. Retain integrity of location, setting, and feeling. Integrity of design, materials, workmanship, and association have been compromised.
Character Defining Features	Full length walkway at entry side, lanai with square pattern decoration, cantilevered canopies. Low-rise buildings separated by open grassy areas.
Alterations	Metal frame windows added, bathrooms renovated with new tile and fixtures, metal kitchen counters.
Significance	Kaahumanu Homes is associated with public housing in Hawaii and with the social history of Hawaii. The project represents the housing reform movement of the Territory and the State.
National Register Eligibility	**Not eligible**

5. Lanakila Homes III

a. Historic Context

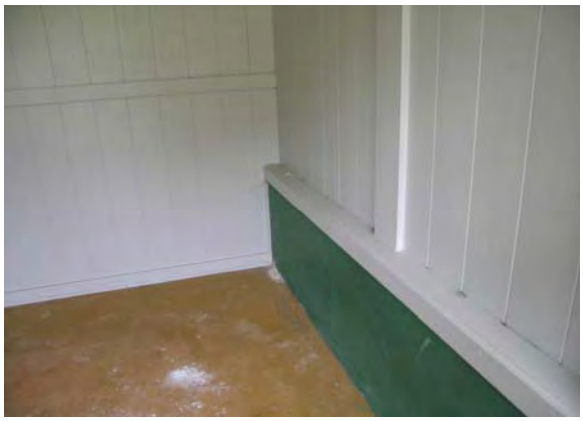
Lanakila Homes III was built in 1962 at the west end of the Lanakila I development, along Ululani Street. Originally referred to as project HA-1-14 in the 1960s, it is now called Lanakila 1014, Lanakila III, or Lanakila Homes III. This development was initiated in response to the tsunami of May 23, 1960 which struck Hilo and left hundreds of people homeless (Annual Report, 1961: 9-10). The houses here were designed by architect Bruce Harden, who was the architect for Lanakila I, and as such are almost identical to the adjacent Lanakila Homes I project.

b. Description

Lanakila Homes III retains all fifteen of its original duplex buildings, which are a combination of both one- and two-story duplex buildings. These structures exhibit the same type of original fixtures, details, and finishes as Lanakila I, and there is no noticeable difference in these two early Lanakila development phases. The buildings all have concrete slabs and exterior walls of concrete up to about 3'-6" above grade, above which is single-wall construction with vertical tongue and groove boards. Interior walls are also single-wall construction, except for the party wall which is double-wall construction. The buildings have undergone some renovations; all buildings have been re-roofed with corrugated metal and have security screens added that cover the windows. Bathrooms have been renovated, and some of the kitchens have been altered with laminate countertops and stainless steel sinks. These buildings have many original features remaining; some units have original porcelain farmhouse-type kitchen sinks, and many retain original doors and 2/2 double-hung windows.

See the facing page for the one-page historic assessment and photographs.

c. Historic Assessment: Lanakila Homes III (1962)



Clockwise from top left: Lanakila III neighborhood, typical wall construction, original kitchen sink.

Project	Lanakila III (600 Wailoa St. Hilo)
Date	1962
Significance	Although Lanakila Homes III is associated with public housing in Hawaii and with the social history of Hawaii, it does not possess the exceptional importance necessary for National Register listing that is required of properties less than 50 years old.
Character Defining Features	Gable roof, radiused rafter tails, concrete exterior wall to 3'-6" above grade and single wall construction above that, 2/2 double-hung windows, v-joint canec panel ceilings in a centered pattern, kitchens with farmhouse-type sinks, metal countertops and wood cabinets. Low rise buildings separated by open grassy areas.
Alterations	Security screens, laminate kitchen cabinets with stainless steel sinks, renovated bathrooms, and re-roofed.
Integrity	Building has some alterations. Retains integrity of location, setting, design, feeling, and association. There have been minor changes to materials and workmanship.
National Register Eligibility	**Not eligible**

6. Kuhio Park Terrace

a. Historic Context

The Kuhio Park Terrace apartment buildings were finished in 1965. These two sixteen-story buildings, with over 500 units combined, did little to alleviate the shortage of housing for low and middle-income families ("Low Cost Needed According to Tom Gill, HSB, and "Senate Passes Bill to Aid Moderate Income Renters, HSB). The architectural firm of Belt, Lemmon, and Lo designed the housing project, (designated project HA-1-10 by the HHA). The firm also designed the Sinclair Library at the University of Hawaii Manoa (1952), Punchbowl Housing Project (1960), Kaheka Street Daiei (1962), and the Hawaii State Capitol (with John Carl Warneke, 1968). Hawaiian Dredging and Construction Co. was the general contractor for the Kuhio Park Terrace project.

The Kuhio Park Terrace project represents Hawaii's first example of a national trend toward housing low-income households in high-rise towers. The high rise tower was seen as a modern example of efficiency, social order, and economic design. High rise buildings with large open courtyards replaced the previous human-scaled buildings and landscaped areas. Public housing was no longer a respite for people trying to improve their situation, but rather a place to stay for the rest of their lives (Robinson Vol II, 58). The two apartment buildings at Kuhio Park Terrace represent a shift in thinking on how to house low-income families, an approach widely viewed today as a failure.

b. Description

The buildings at Kuhio Park Terrace each have three wings radiating from a central elevator area. Each floor has walkways with solid concrete railings which extend along one side of each wing. These walkways provide access to each apartment's entry, at the kitchen side of the apartments. The opposite side of each wing from the walkways has lanai, one for each apartment. These also have solid concrete railings with decorative metal grilles extending from the top of the railings to the lanai ceiling.

See the facing page for the one-page historic assessment and photographs.

c. Historic assessment: Kuhio Park Terrace (1965)

Clockwise from top left: Building A, view of lanai and windows, typical kitchen.

Project	Kuhio Park Terrace (1475 Linapuni St.)
Date	1965
Significance	Although the Kuhio Park Terrace is associated with public housing in Hawaii and with the social history of Hawaii, it does not possess exceptional importance necessary for National Register listing that is required of properties less than 50 years old.
Character Defining Features	Sixteen-story tri-wing design, full length walkways at entry side, open lanai at opposite side, jalousie windows, full height concrete grilles, wood kitchen cabinets with metal countertops,
Alterations	Metal grille at lanai, renovated bathrooms,
Integrity	Building has some minor alterations. Retains integrity of location, setting, feeling, and association. Integrity of design, materials, and workmanship have been somewhat compromised.
National Register Eligibility	**Not eligible**

E. Summary of National Register Findings

1. General

The application of National Register Criterion A is dependent on the property having an important association with an event or historic trend that has made a significant contribution to the development of a community, a State, or the nation (National Park Service, 12). The public housing projects studied in this report have a role in the social history of Hawaii as representative of the efforts of a Territory-wide and State-wide housing reform movement and as a cooperative endeavor between the Federal and Territorial (State) governments to eliminate slums and improve housing for the poor. The early examples represent changing attitudes in the government's responsibility for providing housing for the poor. Changing construction parameters in what was acceptable for public housing are also illustrated by the various projects, from single-wall wood construction in the early examples, to masonry construction used in later work.

The extant historic housing projects have been evaluated. Their potential for National Register eligibility lies under National Register Criterion A, for their association with public housing in Hawaii. They represent the starting point and subsequent evolution of a social movement and way of providing housing for the low-income population. These early examples used low-rise buildings with wide expanses of open space between them to foster a sense of community among the residents, a concept deemed important in the betterment of the low-income population. This conclusion of eligibility applies for the Lanakila I [1951] project that is over fifty years old and for the Palolo Valley Homes [1957] project which will be turning fifty years old within the next two years. The Mayor Wright Homes project [1952] and the Kaahumanu Homes [1958] project are evaluated as ineligible because they lack the integrity necessary for inclusion in the National Register.

2. Eligibility for properties less than 50 years old

Under Criteria Consideration G, properties less than 50 years old are normally not considered for listing in the National Register. They may be listed only if they are of exceptional importance. "A property that has achieved significance within the last fifty years can be evaluated only when sufficient historical perspective exists to determine that the property is exceptionally important" (National Park Service, 1991: 42). Kuhio Park Terrace represents another shift in the way government considered low-income housing. This was in high-density high rise projects, and was often referred to as "warehousing." Although Kuhio Park Terrace [1965] illustrates this shift in public housing theory, it and the other project examined (Lanakila III [1962]) which are less than 50 years old, are evaluated as ineligible because they do not possess the exceptional importance necessary for listing under Criteria Consideration G. Both of these projects should be re-evaluated when they reach the 50-year threshold, to determine their National Register eligibility, prior to any future repairs or rehabilitation.

F. Recommendations (Section 106 adherence)

Prior to embarking on the future repairs and rehabilitation of the housing projects discussed in this report, consultation with the Hawaii State Historic Preservation Division (SHPD) is required. It will be SHPD's role to review the findings of this report and concur on National Register eligibility.

In accordance with Section 106, the "effect" of the project(s) on historic resources must be determined by the federal agency proposing, regulating, or funding the project. SHPD will need to concur with this "effect." There are three possible "effect" findings: "No historic properties affected," "No adverse effect" and "Adverse effect," as described below:

- "No historic properties affected" means that either there are no historic properties present or there are historic properties present but the undertaking will have no effect upon them of any kind (that is, neither harmful nor beneficial). An "effect" means alteration to the characteristics of a historic property qualifying it for inclusion in, or eligibility for, the National Register of Historic Places (NR).

- "No adverse effect" means that there could be an effect, but the effect would not be harmful to those characteristics that qualify the property for inclusion in the NR. In other words, it would not diminish or adversely affect the integrity of the property's location, design, setting, materials, workmanship, feeling, or association.

- An "adverse effect" means an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the NR in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling or association. Consideration is given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for NR. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance, or be cumulative. If an "adverse effect" is determined, an MOA (Memorandum of Agreement) or PA (Programmatic Agreement) between the federal agency and the State Historic Preservation Officer (SHPO) is prepared. Other parties are allowed to be MOA and PA signatories.

Accordingly, if it is determined by the federal agency and SHPD that the nature of the proposed actions (future repairs and rehabilitation work) will result in an "adverse effect" to those properties evaluated in this report as National Register eligible, a Programmatic Agreement or a Memorandum of Agreement will need to be prepared. The PA could include provisions for Historic American Building Surveys (HABS) recordation of the National Register eligible buildings, as well as those that have not yet reached the 50-year threshold, for future planning purposes.

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EXHIBIT D

Comment Letters Received

William P. Kenoi
Mayor

Duane Kanuha
Director

Bobby Command
Deputy Director

West Hawai'i Office
74-5044 Ane Keohokalole Hwy
Kailua-Kona, Hawai'i 96740
Phone (808) 323-4770
Fax (808) 327-3563

County of Hawai'i
PLANNING DEPARTMENT

East Hawai'i Office
101 Pauahi Street, Suite 3
Hilo, Hawai'i 96720
Phone (808) 961-8288
Fax (808) 961-8742

July 16, 2015

Mr. Ronald A. Sato, AICP
Senior Associate, HHF Planners
733 Bishop Street # 2590
Honolulu, HI 96813

Dear Mr. Sato:

SUBJECT: Request for Comments Pursuant to Section 106, National Historic Preservation Act
Project: Hawai'i Public Housing Authority Repair/Rehabilitation to Seven Existing Public Housing Projects on Hawai'i Island
Landowner: Hawai'i Housing Authority
Location: (3) 2-4-028:007, 2-4-025:092 & 2-4-052:022, Waiākea, S. Hilo, Hawai'i

We are in receipt of your letter (COR-15-099639), dated June 26, 2015, requesting comments on a preliminary proposed "no adverse effect" on historic properties determination being considered for the subject proposed project.

The State of Hawai'i Public Housing Authority (HPHA) is proposing to repair and rehabilitate seven housing projects within the County of Hawai'i. Repair and renovation improvements could consist of modernization of buildings (interior and exterior), infrastructure repair and upgrades, utility repair and upgrades, abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation and installation of tank less gas-fired backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. Three of seven properties identified may be eligible for listing on the National Register of Historic Places.

Repair and rehabilitation of the housing projects are proposed to adhere to the Secretary of the Interior's Standards for Rehabilitation and shall retain the character defining features of the structures to the extent practicable. For those repair and rehabilitation projects for which the modifications cannot be completed in accordance with the Secretary of the Interior's Standards for Rehabilitation or for which the character defining features cannot be retained, a Level II Historic American Building Survey (HABS) will be conducted in accordance with the National Park Service standards.

The Department concurs that the project, as proposed in COR-15-099639 and described above, will have "no adverse effect" on historic properties as long as the proposed mitigation measures are followed. The Hawai'i County Cultural Resources Commission would appreciate the opportunity to

review and comment on any HABS generated by the proposed project prior to the document(s)' recordation with the Library of Congress.

Mahalo for allowing us to comment. If you have any questions or require further information, please feel free to contact Lucas Mead of this office at (808) 961-8140.

Sincerely,

DUANE KANUHA
Planning Director

LM:
\\coh33\planning\public\wpwin60\Cultural Resources Commission\Section 106 Consult\HHF Planners - Section 106, Lanakila Housing.doc

cc via email: Mr. Ronald A. Sato <rsato@hhf.com>

Hawai'i County Cultural Resources Commission

PHONE (808) 594-1888

FAX (808) 594-1938

STATE OF HAWAI'I
OFFICE OF HAWAIIAN AFFAIRS
560 N. NIMITZ HWY., SUITE 200
HONOLULU, HAWAI'I 96817

HRD 15-7256

July 20, 2015

Ronald A. Sato, Senior Associate
HHF Planners
Pacific Guardian Center, Makai Tower
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813

Re: Environmental Reviews for Federally Subsidized Public Housing Projects Statewide
Section 106 Consultation – Preliminary No Adverse Effect Determination

Aloha Mr. Sato:

The Office of Hawaiian Affairs (OHA) received your letter dated June 26, 2015, requesting comments on the above-titled project. Given the project descriptions provided, our agency has no comments at this time. Should you have any questions, please contact Everett Ohta at 594-0231 or everetto@oha.org.

'O wau iho nō me ka 'oia 'i'o,

for Kamana'opono M. Crabbe, Ph.D.
Ka Pouhana, Chief Executive Officer

KC: kkk

**Please address replies and similar, future correspondence to our agency:*
Dr. Kamana'opono Crabbe
Attn: OHA Compliance Enforcement
560 N. Nimitz Hwy., Ste. 200
Honolulu, Hawai'i 96817

APPENDIX B

Coastal Zone Management Consistency Determination

Ronald Sato

From: John Nakagawa <JNakagaw@dbedt.hawaii.gov>
Sent: Tuesday, July 28, 2015 6:33 AM
To: Ronald Sato
Subject: Re: HPHA Environmental Reviews - CZM Determination

Follow Up Flag: Follow up
Flag Status: Completed

Ronald:

The Hawaii CZM Program does not review any HUD assistance programs, grants, or loans for federal consistency in accordance with Section 307(d) of the Coastal Zone Management Act and 15 CFR 930. There are no HUD assistance programs identified on the Hawaii CZM Program listing of Federal assistance programs subject to consistency review, pursuant to 15 CFR § 930.95.

John Nakagawa
Hawaii Coastal Zone Management Program
(808) 587-2878

From: Ronald Sato <rsato@hhf.com>
To: John Nakagawa <JNakagaw@dbedt.hawaii.gov>
Cc: "Lisa Izumi (lisa.m.izumi@hawaii.gov)" <lisa.m.izumi@hawaii.gov>, Scott Ezer <sezer@hhf.com>, Joseph Tamburello <jtamburello@hhf.com>
Date: 07/27/2015 05:36 PM
Subject: HPHA Environmental Reviews - CZM Determination

Hello John,

The State of Hawaiʻi, Hawaiʻi Public Housing Authority (HPHA), is again conducting environmental reviews for their existing public housing projects located throughout the State. Environmental reviews are being conducted because U.S. Department of Housing and Urban Development (HUD) funds (grants or loans) will be used to implement repair and rehabilitation improvements to these existing housing projects.

One of the environmental review requirements is to verify that the project complies with the Coastal Zone Management (CZM) Act of 1972 which your department reviews. Previous reviews conducted in 2003, 2005, and 2010 determined that projects receiving federal funds from HUD do not require CZM federal consistency review. The Hawaiʻi CZM program does not review any HUD grants or loans.

This request is to confirm that this condition is still applicable for proposed repair and rehabilitation projects planned for 70 State public housing projects statewide that were included in the 2010 review. Attached is a pdf file with project information to assist your review and confirmation.

Greatly appreciate your response to this confirmation request again. Let me know if you have any questions.

Thanks again.

Ronald A. Sato, AICP
Senior Associate
rsato@hhf.com

733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813
808.457.3172 Direct
808.545.2055 General Office
www.hhf.com

[attachment "HPHA ER Project Infor 7-27-15.pdf" deleted by John Nakagawa/DBEDT]

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State of Hawai‘i, Hawai‘i Public Housing Authority

Environmental Reviews for Federally-Subsidized Public Housing Projects Statewide

Hawai‘i Coastal Zone Management Program Federal Consistency Review

The State of Hawai‘i, Hawai‘i Public Housing Authority (HPHA), is again conducting environmental reviews for their existing public housing projects located throughout the State as identified in Exhibit A. These environmental reviews are being conducted in conformance to the U.S. Department of Housing and Urban Development (HUD) requirements specified under 24 CFR Part 58 because federal funds are being used.

One of the environmental review requirements is to verify that the project complies with the Coastal Zone Management (CZM) Act of 1972, as amended, which the State Office of Planning, Department of Business, Economic Development and Tourism reviews. Previous reviews conducted in 2003, 2005, and 2010 determined that projects receiving federal funds from HUD do not require CZM federal consistency review. The Hawai‘i CZM program does not review any HUD grants or loans. Copies of correspondences documenting this are attached as Exhibit B for your reference.

This request is to confirm that this condition is still applicable for proposed repair and rehabilitation projects planned for 70 State public housing projects statewide that were included in the 2010 review.

Repair and rehabilitation improvements implemented for these existing housing projects would involve one or a combination of several HUD designated categories of actions.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent.
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons.
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland.
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation.

5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls).
7. Interior and exterior renovations and rehabilitation.
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site.
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and rehabilitation improvements programmed to ensure the nature of the work falls within the nine categories described.

EXHIBIT A
LISTING OF HOUSING PROJECTS

HPHA Project No.	Housing Project Name	Street Address	City/Town	Island	Zip Code	Tax Map Key	Year Completed & Occupied
Kaua‘i County (10 Projects)							
1018	Kapaa	4726 Malu Road	Kapa‘a	Kauai	96796	4-5-15:07	1966
	Acreage: 4.33	Land Use: Used as residential housing project					
1019	Hale Hoolulu (Eld)	4264 Ala Muku Place	Kilauea	Kauai	96754	5-2-08:56	1974
	Acreage: 1.00	Land Use: Used as residential housing project					
1020	Eleele Homes	340 Ahe Street	Eleele	Kauai	96705	2-1-01:13 & 42	1966
	Acreage: 2.11	Land Use: Used as residential housing project					
1021	Hui O Hanamaulu	4841 Laukona Street	Hanamaulu	Kauai	96715	3-8-12:30	1966
	Acreage: 3.92	Land Use: Used as residential housing project					
1022	Kalaheo	2625 Pu‘u Road	Kalaheo	Kauai	96741	2-3-12:30	1967
	Acreage: 1.09	Land Use: Used as residential housing project					
1023	Home Nani (Eld)	9791 Laau Rd.	Waimea	Kauai	96796	1-6-07:31	1970
	Acreage: 0.45	Land Use: Used as residential housing project					
1054	Hale Nani Kai O'Kea (Eld)	4850 Kawaihau Rd.	Kapaa	Kauai	96746	4-6-14:105	1977
	Acreage: 3.47	Land Use: Used as residential housing project					
1055	Hale Hoonanea (Eld)	4401 Waialo Road	Eleele	Kauai	96705	2-1-03:17	1976
	Acreage: 2.51	Land Use: Used as residential housing project					
1064	Kekaha Ha'aheo	8238 Iwipolena St.	Kekaha	Kauai	96752	1-3-08:20 & 26	1982
	Acreage: 9.25	Land Use: Used as residential housing project					
1086	Kawailehua (Federal)	5230 Paanau Rd.	Koloa	Kauai	96756	2-6-04:58	1993
	Acreage: 2.10	Land Use: Used as residential housing project					
Maui County (6 Projects)							
1016	David Malo	723 Mill Street	Lahaina	Maui	96761	4-6-10:28	1966
	Acreage: 1.60	Land Use: Used as residential housing project					
1017	Kahekili Terrace (A&B)	2015 Holowai Place	Wailuku	Maui	96793	3-4-33:23	1966
	Acreage: 5.45	Land Use: Used as residential housing project					
1044	Piilani Homes	1028 Wainee St.	Lahaina	Maui	96761	4-5-07:05	1970
	Acreage: 2.62	Land Use: Used as residential housing project					
1088	Kahale Mua (Federal)	P.O. Box 30	Maunaloa	Molokai	96770	5-1-02:39	1993
	Acreage: 1.88	Land Use: Used as residential housing project					
1092	Makani Kai Hale I	35 Koapaka Ln.	Waiehu	Maui	96793	3-3-01:10	1995
	Acreage: 3.45 (Combined with Phase II)	Land Use: Used as residential housing project					
1097	Makani Kai Hale II	35 Koapaka Ln.	Waiehu	Maui	96793	4-6-10:31	1998
	Acreage: 3.45 (Combined with Phase I)	Land Use: Used as residential housing project					

EXHIBIT A (continued)
LISTING OF HOUSING PROJECTS

HPHA Project No.	Housing Project Name	Street Address	City/Town	Island	Zip Code	Tax Map Key	Year Completed & Occupied
Hawai'i County (19 Projects)							
1004	Lanakili I	600 Wailoa Street	Hilo	Hawaii	96720	2-4-28:07	2000
	Acreage: 29.3 (Combined with Phases II, III, IIIA, and IV)	Land Use: Used as residential housing project					
1013	Lanakili II	600 Wailoa Street	Hilo	Hawaii	96720	2-4-28:07	2000
	Acreage: 29.3 (Combined with Phases I, III, IIIA, and IV)	Land Use: Used as residential housing project					
1028	Punahele	5 Lokahi Place	Hilo	Hawaii	96720	2-4-52:22	1967
	Acreage: 3.97	Land Use: Used as residential housing project					
1029	Pomaikai	929 Ululani Street	Hilo	Hawaii	96720	2-4-25:92	1966
	Acreage: 0.96	Land Use: Used as residential housing project					
1031	Hale Hauoli	45-540 Kaniaka Pl.	Honokaa	Hawaii	96727	4-5-10:78	1970
	Acreage: 2.43	Land Use: Used as residential housing project					
1032	Kaimalino	74-5060 Kealakaa St.	Kona	Hawaii	96740	7-4-17:29	1971
	Acreage: 5.53	Land Use: Used as residential housing project					
1045	Pahala (Eld)	96-1169 Holei St.	Pahala	Hawaii	96720	9-6-17:37	1972
	Acreage: 1.44	Land Use: Used as residential housing project					
1051	Hale Aloha O'Puna (Eld)	16-189 Pili Mua St.	Keaau	Hawaii	96749	1-6-143:35	1977
	Acreage: 1.90	Land Use: Used as residential housing project					
1052	Hale Olaloa	144 Kamana St.	Hilo	Hawaii	96720	2-4-56:21	1976
	Acreage: 6.51	Land Use: Used as residential housing project					
1053	Hale Hookipa (Eld)	81-1038 Nani Kupuna Place	Kealakekua	Hawaii	96750	8-1-02:49	1976
	Acreage: 6.11	Land Use: Used as residential housing project					
1061	Ka Hale Kahaluu	78-6725 Makolea St.	Kona	Hawaii	96740	7-8-10:04	1981
	Acreage: 3.37	Land Use: Used as residential housing project					
1063	Nani Olu	81-1011 Nani Kupuna Pl.	Kona	Hawaii	96740	8-1-02:47 & 48	1981
	Acreage: 0.99	Land Use: Used as residential housing project					
1070	Kealakehe	74-991 Manawale'a St.	Kailua-Kona	Hawaii	96740	7-4-17:58	1985
	Acreage: 3.29	Land Use: Used as residential housing project					
1071	Noelani I	65-1191 Opelo Road	Kamuela	Hawaii	96743	6-5-09:29	1983
	Acreage: 0.69	Land Use: Used as residential housing project					
1078	Noelani II	65-1191 Opelo Rd.	Kamuela	Hawaii	96743	6-5-09:25	1983
	Acreage: 0.70	Land Use: Used as residential housing project					

EXHIBIT A (continued)
LISTING OF HOUSING PROJECTS

HPHA Project No.	Housing Project Name	Street Address	City/Town	Island	Zip Code	Tax Map Key	Year Completed & Occupied
Hawai'i County (continued)							
1097	Kauhale O'Hanakahi	19 Pamala St.	Hilo	Hawaii	96720	2-4-51:01	1997
	Acreage: 3.20	Land Use: Used as residential housing project					
1097	Ke Kumu 'Ekolu	68-3385 Ke Kumu Pl.	Waikoloa	Hawaii	96738	6-8-02:43	1997
	Acreage: 6.47	Land Use: Used as residential housing project					
1104	Lanakila IV	600 Wailoa Street	Hilo	Hawaii	96720	2-4-28:07	2005
	Acreage: 29.3 (Combined with Phases I, II, III, and IIIA)	Land Use: Used as residential housing project					
1105	Lanakila IIIA	600 Wailoa Street	Hilo	Hawaii	96720	2-4-28:07	2011
	Acreage: 29.3 (Combined with Phases I, II, III, and IV)	Land Use: Used as residential housing project					
City and County of Honolulu (35 Projects)							
1003	Mayor Wright Homes	521 North Kukui Street	Honolulu	Oahu	96817	1-7-29:03	1952
	Acreage: 14.84	Land Use: Used as residential housing project					
1005	Kalihi Valley Homes	2250 Kalena Drive	Honolulu	Oahu	96819	1-3-22:01	1953
	Acreage: 24.53	Land Use: Used as residential housing project					
1007	Kuhio Homes	1430 Ahonui Street 1449 Ahonui Street	Honolulu	Oahu	96819	1-3-39:03 & 06	1953
	Acreage: 6.45	Land Use: Used as residential housing project					
1008	Palolo Valley Homes	2107 Ahe Street	Honolulu	Oahu	96816	3-4-07:07	1957
	Acreage: 6.62	Land Use: Used as residential housing project					
1009	Kaahumanu Homes	760 McNeill Street	Honolulu	Oahu	96817	1-5-24:01	1958
	Acreage: 7.35	Land Use: Used as residential housing project					
1010	Kuhio Park Terrace Low-Rise	1474 Linapuni Street	Honolulu	Oahu	96819	1-3-39:08	1965
	Acreage: 3.36	Land Use: Used as residential housing project					
1010	Kuhio Park Terrace High-Rise	1485 Linapuni Street 1531 Linapuni Street 1545 Linapuni Street	Honolulu	Oahu	96819	1-3-39:07, 09, & 10	1970
	Acreage: 18.36	Land Use: Used as residential housing project					
1011	Punchbowl Homes	730 Captain Cook Avenue	Honolulu	Oahu	96813	2-1-39:12	1960
	Acreage: 2.94	Land Use: Used as residential housing project					
1012	Makua Ali'i	1541 Kalakaua Avenue	Honolulu	Oahu	96826	2-3-19:04	1967
	Acreage: 2.60	Land Use: Used as residential housing project					
1015	Wahiawa Terrace	337 Palm Street	Wahiawa	Oahu	96786	7-1-01:34	1966
	Acreage: 2.75	Land Use: Used as residential housing project					
1024	Kalanihuia	1220 Aala Street	Honolulu	Oahu	96817	1-7-26:06	1969
	Acreage: 1.88	Land Use: Used as residential housing project					

EXHIBIT A
LISTING OF HOUSING PROJECTS (Continued)

HPHA Project No.	Housing Project Name	Street Address	County	Island	Zip Code	Tax Map Key	Year Completed & Occupied
1025	Waimanalo Homes I	Humuniki St. & Humuna Pl.	Waimanalo	Oahu	96795	4-1-22:100; 4-1-23:050-064, 068; 4-1-28:005-022 and 107-122	1998
	Acreage: 8.34 (Combined with Phase II)	Land Use: Used as residential housing project					
1026	Puuwai Momi	99-132 Kohomua Street	Aiea	Oahu	96701	9-9-03:56, 64	1969
	Acreage: 11.54	Land Use: Used as residential housing project					
1027	Hale Laulima	1184 Waimano Home Road	Pearl City	Oahu	96782	9-7-94:25	1981
	Acreage: 3.96	Land Use: Used as residential housing project					
1030	Koolau Village	45-1027 Kamau Place	Kaneohe	Oahu	96744	4-5-23:08	1969
	Acreage: 14.02	Land Use: Used as residential housing project					
1033	Maili I	87-172 Maliona Street	Waianae	Oahu	96792	8-7-02:11	1969
	Acreage: 2.29	Land Use: Used as residential housing project					
1035	Nanakuli Homes	87-1608 Farrington Highway	Waianae	Oahu	96792	8-7-34:04	1969
	Acreage: 4.24	Land Use: Used as residential housing project					
1036	Paoakalani (Eld)	1583 Kalakaua Ave.	Honolulu	Oahu	96826	2-3-19:4	1970
	Acreage: 1.80	Land Use: Used as residential housing project					
1038	Waipahu I	94-111 Pupuole Pl.	Waipahu	Oahu	96797	9-4-39:19	1970
	Acreage: 0.26	Land Use: Used as residential housing project					
1039	Waipahu II	94-132 Pupupuhi St.	Waipahu	Oahu	96797	9-4-39:76	1970
	Acreage: 0.26	Land Use: Used as residential housing project					
1046	Makamae (Eld)	21 South Kuakini St.	Honolulu	Oahu	96813	2-2-01: 20	1971
	Acreage: 1.08	Land Use: Used as residential housing project					
1047	Pumehana (Eld)	1212 Kinau St.	Honolulu	Oahu	96814	2-4-11:39	1972
	Acreage: 0.46	Land Use: Used as residential housing project					
1050	Kupuna Home O'Waialua (Eld)	67-088 Goodale Ave.	Waialua	Oahu	96791	6-7-16:28	1977
	Acreage: 3.27	Land Use: Used as residential housing project					
1056	Kauhale Nani	310 N. Cane St.	Wahiawa	Oahu	96786	7-4-7:14	1980
	Acreage: 3.46	Land Use: Used as residential housing project					
1057	Waimaha-Sunflower	85-186 McArthur St.	Waianae	Oahu	96792	8-5-10:029, 063, 067	1980
	Acreage: 3.77	Land Use: Used as residential housing project					
1062	Kalakaua Homes	1545 Kalakaua Ave.	Honolulu	Oahu	96826	2-3-19:04	1983
	Acreage: 4.80	Land Use: Used as residential housing project					

EXHIBIT A
LISTING OF HOUSING PROJECTS (Continued)

HPHA Project No.	Housing Project Name	Street Address	County	Island	Zip Code	Tax Map Key	Year Completed & Occupied
1066	Salt Lake Apts.	2907 Ala Ilima St.	Honolulu	Oahu	96818	1-1-62:07	1982
	Acreage: 0.47	Land Use: Used as residential housing project					
1069	Kaneohe Apartments	45-507 & 45-513 Pahia Rd.	Kaneohe	Oahu	96744	4-5-19:26	1984
	Acreage: 0.43	Land Use: Used as residential housing project					
1072	Hookipa Kahaluu	47-330 Ahuimanu Rd.	Kaneohe	Oahu	96744	4-7-37:16	1983
	Acreage: 3.60	Land Use: Used as residential housing project					
1073	Spencer House	1035 Spencer St.	Honolulu	Oahu	96822	2-4-16:08	1968
	Acreage: 0.32	Land Use: Used as residential housing project					
1090	Kauhale Ohana	41-1260 Kalanianaole Hwy.	Waimanalo	Oahu	96795	4-1-9:286	1995
	Acreage: 2.52	Land Use: Used as residential housing project					
1091	Kau'iokalani	85-658 Farrington Hwy.	Waianae	Oahu	96792	8-5-28:044	1995
	Acreage: 4.04	Land Use: Used as residential housing project					
1099	Kamehameha Homes	1541 Haka Dr.	Honolulu	Oahu	96817	1-5-01:01	1996
	Acreage: 16.00	Land Use: Used as residential housing project					
1108	Waimanalo Homes II	Humuniki St. & Humuna Pl.	Waimanalo	Oahu	96795	4-1-22:100; 4-1-23:050-064; 4-1-28:05-22 and 107-122	1998
	Acreage: 8.34 (Combined with Phase I)	Land Use: Used as residential housing project					
1108	Maili II	87-171 Keliikipi St.	Waianae	Oahu	96792	8-7-01:01	1999
	Acreage: 1.73	Land Use: Used as residential housing project					

EXHIBIT B

PREVIOUS COASTAL ZONE MANAGEMENT CONSISTENCY REVIEW DETERMINATIONS

"John Nakagawa" <JNakagaw@dbedt.hawaii.gov>

06/21/2002 08:45 AM

To: eric.sakanashi@hcdch.state.hi.us
cc:
Subject: Re: HUD Environmental Review

Eric:
This confirms that projects receiving federal funds from the U.S. Department of Housing and Urban Development, Public Housing Capital Fund (OMB Catalog No. 14.872) do not require CZM federal consistency review. The Public Housing Capital Fund program is not listed in our federally approved CZM Program for CZM federal consistency review.
John Nakagawa, CZM Hawaii

eric.sakanashi@hcdch.state.hi.us

06/20/2002 09:15 AM

To: jnakagaw@dbedt.hawaii.gov
cc:
Subject: HUD Environmental Review

John,

Thanks for taking the time to explain the CZM Program Federal Consistency Review.

Per our discussion, the Memo dated August 16, 2001 from the Office of Planning is still valid in that the Public Housing Capital Fund program is not listed in the Office of Planning's federally approved CZM Program and therefore any proposed projects do not require CZM federal consistency review.

HUD grants to the counties or the State with no other participation by HUD does not require CZM federal consistency review for the State of Hawaii. However, if there is participation by HUD, aside from grant, then a CZM federal consistency review is required.

Therefore, the Office of Planning or the Housing and Community Development Corporation of Hawaii are not required to perform a CZM federal consistency review for the HUD Environmental Review.

Please respond for the Environmental Review file.

Thanks again,
Eric

EXHIBIT 1

RECEIVED
HSG. & COMMUNITY DEV.
CORPORATION OF HAWAII

DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

LINDA LINGLE
GOVERNOR
THEODORE E. LIU
DIRECTOR
MARK K. ANDERSON
DEPUTY DIRECTOR
LAURA H. THIELEN
DIRECTOR
OFFICE OF PLANNING

2005 JUL 21 A 11:39

OFFICE OF PLANNING
235 South Beretania Street, 6th Floor, Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

Telephone: (808) 587-2846
Fax: (808) 587-2824

Ref. No. P-11029

July 20, 2005

To: Ms. Stephanie Aveiro, Executive Director
Department of Human Services
Housing and Community Development Corporation of Hawaii

From: Ms. Laura H. Thielen, Director *Mary Lou Kobayashi for*
Office of Planning

Attention: Mitchell Kawamura, Project Engineer
Construction Management Unit 1

Subject: Hawaii Coastal Zone Management (CZM) Program Federal Consistency Review for a U.S. Department of Housing and Urban Development (HUD)

The proposal to use federal funds from HUD to assist minor repair and rehabilitation of 39 existing public housing projects as identified in Attachment 1 of your July 13, 2005 letter (Ref. 05:CMS/0355) does not require a review for consistency with Hawaii's CZM Program. The Hawaii CZM Program does not review any HUD grants or loans.

This statement is not an endorsement of the project nor does it convey approval with any other regulations administered by any State or County agency. Thank you for your cooperation in complying with Hawaii's CZM Program. If you have any questions, please call Debra Tom of our CZM Program at 587-2840.

Encl.

c: U.S. Department of Housing and Urban Development, Hawaii State Field Office
Department of Planning and Permitting, City & County of Honolulu
Planning Department, County of Hawaii
Planning Department, County of Kauai
Planning Department, County of Maui

Attachment 1: Project Sites

Property Name	Street Address	City	Island	Zip	TMK Number / Map Adjust.
Big Island					
Lanakila I, II, & III	600 Wailoa St.	Hilo	Hawaii	96720	2-4-28:7
Punahele Homes	Lokahi Pl.	Hilo	Hawaii	96720	2-4-52:22
Pomaikai	929 Ululani St.	Hilo	Hawaii	96720	2-4-25:92
Hale Olaloa	144 Kamana St.	Hilo	Hawaii	96720	2-4-56:21
Kauhale O'Hanakahi	19 Pamala St.	Hilo	Hawaii	96720	2-3-19:4
Hale Hauoli	45-540 Kaniaka Pl.	Honokaa	Hawaii	96727	4-5-10:78
Noelani II	65-1191 Opelo Rd.	Kamuela	Hawaii	96743	6-5-9:25 & 26
Kaimalino V	74-5060 Kealakaa St.	Kona	Hawaii	96740	7-4-17:11 & 14
Ka Hale Kahaluu	78-6725 Makolea St.	Kona	Hawaii	96740	7-8-10:70
Nani Olu	81-1011 Nani Kupuna Pl.	Kona	Hawaii	96740	8-1-02:48
Ke Kumu 'Ekolu	68-3385 Ke Kumu Pl.	Waikoloa	Hawaii	96738	6-8-02:43
Kauai					
Kapaa	4726 Malu Rd.	Kapaa	Kauai	96746	4-5-15:7, 38 & 42
Kekaha Ha'aheo	8238 Iwipolena St.	Kekaha	Kauai	96752	1-3-8: 9, 19, 20, 26
Kawailehua (Federal)	5230 Paanau Rd.	Koloa	Kauai	96756	2-6-4:46
Maui					
Piilani Homes	1028 Wainee St.	Lahaina	Maui	96761	4-5-07:5
Makani Kai Hale I & II	35 Koapaka Ln.	Waiehu	Maui	96793	3-3-01:10
Kahekili Terrace A	2015 Holowai Pl.	Wailuku	Maui	96793	3-4-17:146 3-4-33:23
Kahekili Terrace B	2015 Holowai Pl.	Wailuku	Maui	96793	3-4-17:146
Kahale Mua (Federal)	P.O. Box 30	Maunaloa	Molokai	96770	5-1-02:26
Oahu					
Puuwai Momi	99-132 Kohomua St.	Aiea	Oahu	96701	9-9-03:56 & 64
Mayor Wright Homes	521 N. Kukui St.	Honolulu	Oahu	96817	1-7-29:3 & 4
Palolo Valley Homes V	2107 Ahe St.	Honolulu	Oahu	96816	3-4-07:15 & 17
Kaahumanu Homes	Alokele & Kaiwiula St.	Honolulu	Oahu	96817	1-5-24:1
Kuhio Park Terrace V	1475 Linapuni St.	Honolulu	Oahu	96819	1-3-39:1
Kamehameha Homes	1541 Haka Dr.	Honolulu	Oahu	96817	1-5-01:1
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Maili I	Maliona St.	Maili	Oahu	96792	8-7-02:11 & 14
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Kau'iokalani	85-658 Farrington Hwy.	Waianae	Oahu	96792	8-5-28:44
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Waipahu II	94-132 Pupupuhi St.	Waipahu	Oahu	96797	9-4-39:76

LINDA LINGLE
GOVERNOR

DENISE M. WISE
EXECUTIVE DIRECTOR

BARBARA E. ARASHIRO
EXECUTIVE ASSISTANT

STATE OF HAWAII

DEPARTMENT OF HUMAN SERVICES
HAWAII PUBLIC HOUSING AUTHORITY
1002 NORTH SCHOOL STREET
P.O. BOX 17907
Honolulu, Hawaii 96817

IN REPLY REFER TO:

10:CMS/074

June 22, 2010

RECEIVED
JUN 24 2010
HELBER, HASTERT & FEE
PLANNERS

Mr. Abbey Seth Mayer, Director
Office of Planning
Department of Business, Economic Development & Tourism
State of Hawai'i
P.O. Box 2359
Honolulu, Hawaii 96804

Dear Mr. Seth Mayer:

Subject: Environmental Reviews for Federally-Subsidized Public Housing Projects Statewide
Hawai'i Coastal Zone Management (CZM) Program Federal Consistency Review

The State of Hawai'i, Hawai'i Public Housing Authority (HPHA), is currently conducting environmental reviews for their existing public housing projects located throughout the State. These environmental reviews are being conducted in conformance to the U.S. Department of Housing and Urban Development (HUD) requirements specified under 24 CFR Part 58 because federal funds are being used.

One of the environmental review requirements is to verify that the project complies with the Coastal Zone Management Act of 1972, as amended, which your department reviews. Previous reviews conducted in 2005 and in 2003 determined that projects receiving federal funds from the HUD Public Housing Capital Fund (OMB Catalog No. 14.872) do not require CZM federal consistency review. The Hawaii CZM program does not review any HUD grants or loans. Copies of correspondences documenting this are attached as Exhibit 1 for your reference. This request is to confirm that this condition is still applicable for proposed repair and rehabilitation projects planned for a total of 70 State public housing projects.

The HPHA is proposing to conduct minor repair and rehabilitation projects to 70 existing public housing projects which are identified under the table in Exhibit 2. Improvements would involve one or more or a combination of the following actions:

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent;
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons;

3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland;
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation;
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls);
7. Interior and exterior renovations and rehabilitation;
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site;
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use; and

It is possible that some projects could also include the conversion of cesspool systems by replacing them with septic tanks and seepage pits or leach fields.

We would greatly appreciate your assistance in responding within 15 days from the date of this letter or sooner if possible. Please contact Mr. Mitchell Kawamura, Project Engineer, at 832-5373 or via email at Mitchell.H.Kawamura@hawaii.gov if you have any questions.

Sincerely,

Denise M. Wise
Executive Director

Enclosures

c: Mr. Mitchell H. Kawamura, HPHA
Mr. Ronald A. Sato, Helber Hastert & Fee Planners, Inc.

EXHIBIT 1

RECEIVED
HSG. & COMMUNITY DEV.
CORPORATION OF HAWAII

DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

LINDA LINGLE
GOVERNOR
THEODORE E. LIU
DIRECTOR
MARK K. ANDERSON
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LAURA H. THIELEN
DIRECTOR
OFFICE OF PLANNING

2005 JUL 21 A 11:39

OFFICE OF PLANNING
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Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

Telephone: (808) 587-2846
Fax: (808) 587-2824

Ref. No. P-11029

July 20, 2005

To: Ms. Stephanie Aveiro, Executive Director
Department of Human Services
Housing and Community Development Corporation of Hawaii

From: Ms. Laura H. Thielen, Director *Mary Lou Kobayashi for*
Office of Planning

Attention: Mitchell Kawamura, Project Engineer
Construction Management Unit 1

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"John Nakagawa" <JNakagaw@dbedt.hawaii.gov>

06/21/2002 08:45 AM

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cc:
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John Nakagawa, CZM Hawaii

eric.sakanashi@hcdch.state.hi.us

06/20/2002 09:15 AM

To: jnakagaw@dbedt.hawaii.gov
cc:
Subject: HUD Environmental Review

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Therefore, the Office of Planning or the Housing and Community Development Corporation of Hawaii are not required to perform a CZM federal consistency review for the HUD Environmental Review.

Please respond for the Environmental Review file.

Thanks again,
Eric

EXHIBIT 2
LISTING OF HOUSING PROJECTS

No.	Project Name	Street Address	County	Island	ZIP Code	TMK
1	***Lanakila I***	***600 Wailoa St.***	***Hilo***	***Hawaii***	***96720***	***2-4-028:007***
2	***Lanakila II***	***600 Wailoa St.***	***Hilo***	***Hawaii***	***96720***	***2-4-028:007***
3	***Lanakila III***	***600 Wailoa St.***	***Hilo***	***Hawaii***	***96720***	***2-4-028:007***
4	Lanakila IV	600 Wailoa St.	Hilo	Hawaii	96720	2-4-028:007
5	Lanakila V	600 Wailoa St.	Hilo	Hawaii	96720	2-4-028:007
6	Kalihi Valley Homes	2250 Kalena Drive	Honolulu	Oahu	96819	1-3-022:001
7	Hale Aloha O'Puna (Eld)	16-189 Pili Mua St.	Keaau	Hawaii	96749	1-6-143:035
8	***Pomaikai***	***929 Ululani St.***	***Hilo***	***Hawaii***	***96720***	***2-4-025:092***
9	Kauhale O'Hanakahi (a)	19 Pamala St.	Hilo	Hawaii	96720	2-4-052:001
10	***Punahele Homes***	***Lokahi Pl.***	***Hilo***	***Hawaii***	***96720***	***2-4-052:022***
11	***Hale Olaloa***	***144 Kamana St.***	***Hilo***	***Hawaii***	***96720***	***2-4-056:021***
12	***Hale Hauoli***	***45-540 Kaniaka Pl.***	***Honokaa***	***Hawaii***	***96727***	***4-5-010:078***
13	Noelani I	65-1191 Opelo Road	Kamuela	Hawaii	96743	6-5-009:025
14	***Noelani II***	***65-1191 Opelo Rd.***	***Kamuela***	***Hawaii***	***96743***	***6-5-009:026***
15	***Ke Kumu 'Ekolu (b)***	***68-3385 Ke Kumu Pl.***	***Waikoloa***	***Hawaii***	***96738***	***6-8-002:043***
16	***Kaimalino***	***74-5060 Kealakaa St.***	***Kona***	***Hawaii***	***96740***	***7-4-017:029***
17	Kealakehe	74-991 Manawale'a St.	Kailua-Kona	Hawaii	96740	7-4-017:058
18	***Ka Hale Kahaluu***	***78-6725 Makolea St.***	***Kona***	***Hawaii***	***96740***	***7-8-010:070***
19	Nani Olu	81-1011 Nani Kupuna Pl.	Kona	Hawaii	96740	8-1-002:048
20	Hale Hookipa (Eld)	81-1038 Nani Kupuna Place	Kealakekua	Hawaii	96750	8-1-002:049
21	Pahala (Eld)	96-1169 Holei St.	Pahala	Hawaii	96720	9-6-017:037
22	***Kekaha Ha'aheo***	***8238 Iwipolena St.***	***Kekaha***	***Kauai***	***96752***	***1-3-008:020, 026***
23	Home Nani (Eld)	Moana & Laau Rd.	Waimea	Kauai	96796	1-6-007:031
24	Eleele Homes	Ahe St.	Eleele	Kauai	96705	2-1-001:013, 042
25	Hale Hoonanea (Eld)	4401 Waialo Road	Eleele	Kauai	96705	2-1-003:017
26	Kalaheo Homes	Puu Road	Kalaheo	Kauai	96741	2-3-012:030
27	***Kawailehua (Federal)***	***5230 Paanau Rd.***	***Koloa***	***Kauai***	***96756***	***2-6-004:058***
28	Hui O'Hanamaulu	Laukona St.	Hanamaulu	Kauai	96715	3-8-012:030
29	***Kapaa***	***4726 Malu Rd.***	***Kapaa***	***Kauai***	***96746***	***4-5-015:007, 038, 042***
30	Hale Nani Kai O'Kea (Eld)	4850 Kawaihau Rd.	Kapaa	Kauai	96746	4-6-014:105
31	Hale Hoolulu (Eld)	4264 Ala Muku Place	Kilauea	Kauai	96754	5-2-008:056
32	***Makani Kai Hale I***	***35 Koapaka Ln.***	***Waiehu***	***Maui***	***96793***	***3-3-015:001***
33	***Makani Kai Hale II (c)***	***35 Koapaka Ln.***	***Waiehu***	***Maui***	***96793***	***3-3-015:001***
34	***Kahekili Terrace (A & B)***	***2015 Holowai Pl.***	***Wailuku***	***Maui***	***96793***	***3-4-017:146; 3-4-033:023***
35	***Piilani Homes***	***1028 Wainee St.***	***Lahaina***	***Maui***	***96761***	***4-5-007:005***
36	David Malo Circle	Mill St.	Lahaina	Maui	96761	4-6-010:028
37	***Kahale Mua (Federal)***	***P.O. Box 30***	***Maunaloa***	***Molokai***	***96770***	***5-1-002:039***
38	Salt Lake Apts.	2907 Ala Ilima St.	Honolulu	Oahu	96818	1-1-062:007
39	***Kuhio Park Terrace***	***1475 Linapuni St.***	***Honolulu***	***Oahu***	***96819***	***1-3-039:001***
40	Kuhio Homes	Ahonui St.	Honolulu	Oahu	96819	1-3-039:003,006

Note: Housing projects reviewed in 2005 highlighted in bold/italic

EXHIBIT 2 (Continued)
LISTING OF HOUSING PROJECTS

No.	Project Name	Street Address	County	Island	ZIP Code	TMK
41	***Kamehameha Homes***	***1541 Haka Dr.***	***Honolulu***	***Oahu***	***96817***	***1-5-001:001***
42	***Kaahumanu Homes***	***Alokele & Kaiwiula St.***	***Honolulu***	***Oahu***	***96817***	***1-5-024:001***
43	Kalanihuia (Eld)	1220 Aala St.	Honolulu	Oahu	96817	1-7-026:006
44	***Mayor Wright Homes***	***521 N. Kukui St.***	***Honolulu***	***Oahu***	***96817***	***1-7-029:003***
45	Punchbowl Homes (Eld. & Family)	730 Captain Cooke Ave.	Honolulu	Oahu	96813	2-1-039:012
46	Makamae (Eld)	21 South Kuakini St.	Honolulu	Oahu	96813	2-2-001:020
47	Kalakaua Homes	1545 Kalakaua Ave.	Honolulu	Oahu	96826	2-3-019:004
48	Makua Alii (Eld)	1541 Kalakaua Ave.	Honolulu	Oahu	96826	2-3-019:004
49	Paoakalani (Eld)	1583 Kalakaua Ave.	Honolulu	Oahu	96826	2-3-019:004
50	Pumehana (Eld)	1212 Kinau St.	Honolulu	Oahu	96814	2-4-011:039
51	Spencer House	1035 Spencer St.	Honolulu	Oahu	96822	2-4-016:008
52	***Palolo Valley Homes***	***2107 Ahe St.***	***Honolulu***	***Oahu***	***96816***	***3-4-007:015, 016, 017, 018***
53	Kauhale Ohana	41-1260 Kalanianaole Hwy.	Waimanalo	Oahu	96795	4-1-009:286
54	***Waimanalo Homes I***	***Humuniki St. & Humuna Pl.***	***Waimanalo***	***Oahu***	***96795***	***4-1-022:100; 4-1-023:050-064, 068; 4-1-028:005-022 and 107-122***
55	***Waimanalo Homes II***	***Humuniki St. & Humuna Pl.***	***Waimanalo***	***Oahu***	***96795***	***4-1-022:100; 4-1-023:050-064; 4-1-028:005-022 and 107-122***
56	***Kaneohe Apartments***	***45-507 & 45-513 Pahia Rd.***	***Kaneohe***	***Oahu***	***96744***	***4-5-019:026***
57	***Koolau Village***	***45-1027 Kamau Pl.***	***Kaneohe***	***Oahu***	***96744***	***4-5-023:008***
58	Hookipa Kahaluu	47-330 Ahuimanu Rd.	Kaneohe	Oahu	96744	4-7-037:016
59	Kupuna Home O'Waialua (Eld)	67-088 Goodale Ave.	Waialua	Oahu	96791	6-7-016:028
60	***Wahiawa Terrace***	***300 Palm St.***	***Wahiawa***	***Oahu***	***96786***	***7-1-001:034***
61	***Kauhale Nani***	***310 N. Cane St.***	***Wahiawa***	***Oahu***	***96786***	***7-4-007:014***
62	***Waimaha-Sunflower***	***85-186 McArthur St.***	***Waianae***	***Oahu***	***96792***	***8-5-010:029, 063, 067***
63	***Kau'iokalani***	***85-658 Farrington Hwy.***	***Waianae***	***Oahu***	***96792***	***8-5-028:044***
64	***Maili II***	***Keliikipi St.***	***Maili***	***Oahu***	***96792***	***8-7-001:001, 037***
65	***Maili I***	***Maliona St.***	***Maili***	***Oahu***	***96792***	***8-7-002:011, 014***
66	Nanakuli Homes	Farrington Hwy.	Nanakuli	Oahu	96792	8-7-034:004
67	***Waipahu I***	***94-111 Pupuole Pl.***	***Waipahu***	***Oahu***	***96797***	***9-4-039:019***
68	***Waipahu II***	***94-132 Pupupuhi St.***	***Waipahu***	***Oahu***	***96797***	***9-4-039:076***
69	***Hale Laulima***	***1184 Waimano Home Road***	***Pearl City***	***Oahu***	***96782***	***9-7-094:025***
70	***Puuwai Momi***	***99-132 Kohomua St.***	***Aiea***	***Oahu***	***96701***	***9-9-003:056, 064***

Note: Housing projects reviewed in 2005 highlighted in bold/italic

APPENDIX C

Section 7 Consultation

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Pacific Islands Fish and Wildlife Office
300 Ala Moana Boulevard, Room 3-122
Honolulu, Hawaii 96850

In Reply Refer To:
2015-I-0449

SEP 28 2015

Mr. Hakim Ouansafi
Executive Director
State of Hawaii, Department of Human Services
Hawaii Public Housing Authority
Post Office Box 17907
Honolulu, Hawaii 96817

Subject: Informal Consultation for U.S. Department of Housing and Urban Development-Subsidized Statewide Public Housing Projects, Hawaii

Dear Mr. Ouansafi:

Thank you for your July 24, 2015, letter requesting our concurrence with your determination the rehabilitation projects within 70 statewide housing projects is not likely to adversely affect listed species and critical habitat pursuant to section 7 of the Federal Endangered Species Act of 1973, as amended (16 USC 1531 *et seq.*). The State of Hawaii, Hawaii Public Housing Authority (HPHA) receives funding from the U.S. Department of Housing and Urban Development (HUD) to rehabilitate or replace single-family and multi-unit dwellings in 70 existing housing projects. Pursuant to 24 CFR 58.10; 58.1(b)(10); 58.5 e, HUD has designated HPHA as their non-Federal representative for the purposes of section 7 consultations. You have determined the proposed action is not likely to adversely affect the endangered Hawaiian hoary bat *(Lasiurus cinereus semotus),* Hawaiian hawk (Io, *Buteo solitaries*), the endangered Hawaiian petrel *(Pterodroma sandwichensis),* and threatened Newell's shearwater *(Puffinus newelli)* (collectively referred to as Hawaiian Seabirds), the endangered Hawaiian stilt (*Himantopus mexicanus knudseni*), Hawaiian gallinule (*Gallinula chloropus sandvicensis*), Hawaiian coot (*Fulica alai*), Hawaiian duck (*Anas wyvilliana*) (collectively referred to as Hawaiian waterbirds), the endangered Blackburn's sphinx moth (*Manduca blackburni),* endangered hawksbill turtle (*Eretmochelys imbricate*), or threatened green sea turtle (Green Turtle (*Chelonia mydas*).

Proposed Activities:

Rehabilitation Activities

The Proposed Activities include rehabilitation or demolition and reconstruction of existing single-family and two-dwelling homes roughly within the footprint of developed areas. Dwellings to be rehabilitated are located on the islands of Kauai, Oahu, Molokai, Maui, and Hawaii. The activities may include:

- Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent.
- Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons.
- Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation.
- Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;
- Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls).
- Interior and exterior renovations and rehabilitation.
- An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site.
- Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use
- Modernization of buildings, infrastructure, utilities, abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair.

On August 4, 2015, U.S. Fish and Wildlife Service biologist Dawn Bruns provided State Housing Development Administrator Becky Choy with recommended measures to reduce the likelihood the proposed action would adversely affect listed species and our two agencies' staff met on September 1, 2015, to discuss the details of our recommendations. On September 3, 2015, in an email from your project consultant Ronald A. Sato, Associate, HHF Planners, you finalized the description of the measures you will take during project implementation to minimize potential project impacts to listed species. Because the details of project endangered species avoidance and minimization measures were modified as a result of these discussions, they are provided in detail below.

Proposed Minimization/Avoidance Measures

HPHA proposes to avoid adverse impacts to Hawaii's threatened and endangered species through the following measures.

<u>Invasive Species Minimization Measures</u>

HPHA proposes to minimize threats from invasive species and minimize impacts to Hawaii's threatened and endangered species through the following measures.

Brown Tree Snake

Any materials or equipment moving from Guam to any other island will be thoroughly assessed to ensure the brown tree snake is not transported in the material.

Rats
All workers will be advised to ensure their food scraps, paper wrappers, food containers, cans, bottles, and other trash from the project area are deposited in covered or closed trash containers. The trash containers shall be removed from the project area and disposed of off-site at an approved landsite at the end of each working day to prevent the attraction of non-native pests (i.e., rats). All tools, gear, and construction scrap will be removed upon completion of work in order to prevent the attraction of non-native pests (i.e., rats). No contamination (trash or debris disposal, non-native species introductions, attraction of non-native pests, etc.) of adjacent habitats will result from project-related activities.

Hawaiian hoary bat

The endangered Hawaiian hoary bat may be present within the proposed project area. The Hawaiian hoary bat roosts in both exotic and native woody vegetation and will leave young unattended in "nursery" trees and shrubs when they forage. If trees or shrubs suitable for bat roosting are cleared during the breeding season, there is a risk that young bats could inadvertently be harmed or killed. Additionally, Hawaiian hoary bats forage for insects from as low as three feet to higher than 500 feet above the ground. When barbed wire is used in fencing, Hawaiian hoary bats can become entangled. To minimize impacts to the endangered Hawaiian hoary bat, woody plants greater than 15 feet (4.6 meters) tall will not be disturbed, removed, or trimmed during the bat birthing and pup rearing season (June 1 through September 15). Furthermore, HUD funds will not be used to purchase or install barbed wire fencing.

Hawaiian waterbirds

Hawaiian waterbirds may occur in fresh and brackish water including streams, rivers, marshes, ponds, reservoirs, fish ponds, taro loi, impoundments, or other vegetated water bodies. If repair or rehabilitation improvements are necessary within 100 feet (30 meters) of vegetated streams, rivers, marshes, ponds, reservoirs, fish ponds, taro loi, impoundments or other vegetated water bodies, the following measures will be implemented to avoid and minimize impacts to listed Hawaiian waterbirds:

a. A biological monitor shall conduct Hawaiian waterbird and nest surveys at the proposed project site prior to project initiation using the Service's recommended Hawaiian Waterbird Survey Protocols.
b. A 100-foot (30-meter) buffer shall be established and maintained around all active nests and broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration would occur within this buffer. A biological monitor would be present on the project site during all construction or earth moving activities to ensure that Hawaiian waterbirds and nests are not adversely impacted.
c. If a listed Hawaiian waterbird is observed within the project site, or flies into the site while activities are occurring (within 100 feet (30 meters)), all potentially disruptive activities (including human activity, mechanical or construction disturbance) will be stopped until the animal(s) voluntarily leave the area.

In the event that any earth-disturbing activities are proposed near vegetated water bodies, Best Management Practices for erosion control will be employed to ensure sediments are not delivered to drainages or waterways as a result of the proposed activity.

Hawaiian seabirds

Hawaiian petrels and Newell's shearwaters may traverse the project area at night during the breeding season in areas shown in Figures 1 and 2. Outdoor lighting at the project site could result in seabird disorientation, fallout, and injury or mortality. Seabirds are attracted to lights and after circling the lights they may collide with nearby wires, buildings, or other structures or they may land on the ground due to exhaustion. Downed seabirds are subject to increased mortality due to collision with automobiles, starvation, and predation by dogs, cats, and other predators. Any increase in night-time lighting, particularly during each year's peak fallout period (September 15 through December 15), could result in seabird injury or mortality. Young birds (fledglings) traversing the project area between September 15 and December 15, in their first flights from their mountain nests to the sea, are particularly vulnerable.

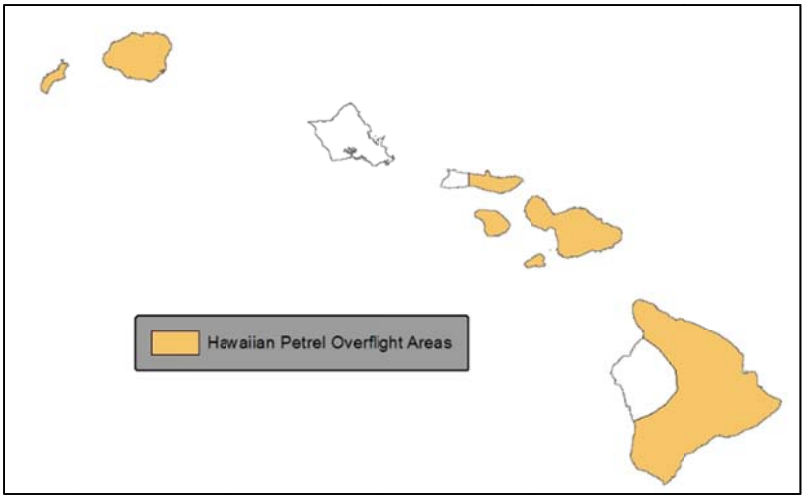

Figure 1. Hawaiian petrel overflight areas.

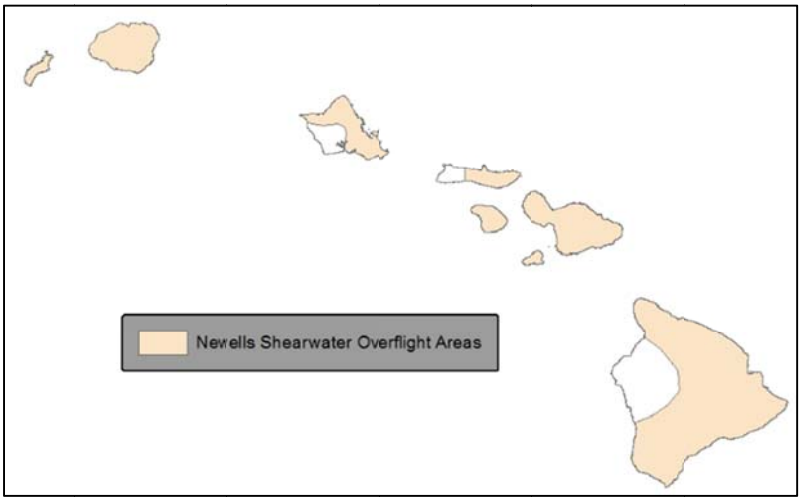

Figure 2. Newell's shearwater overflight areas.

To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15

through December 15. If nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas.

Hawaiian hawk

Where noise greater than 60 dB or vegetation clearing is proposed within the Hawaiian hawk's range on the Island of Hawaii (Figure 3) during the March through September Hawaiian hawk breeding season, survey within 328 feet (100 meters) of the project site and if a hawk nest is found, wait until the nest is no longer occupied to conduct noisy activities.

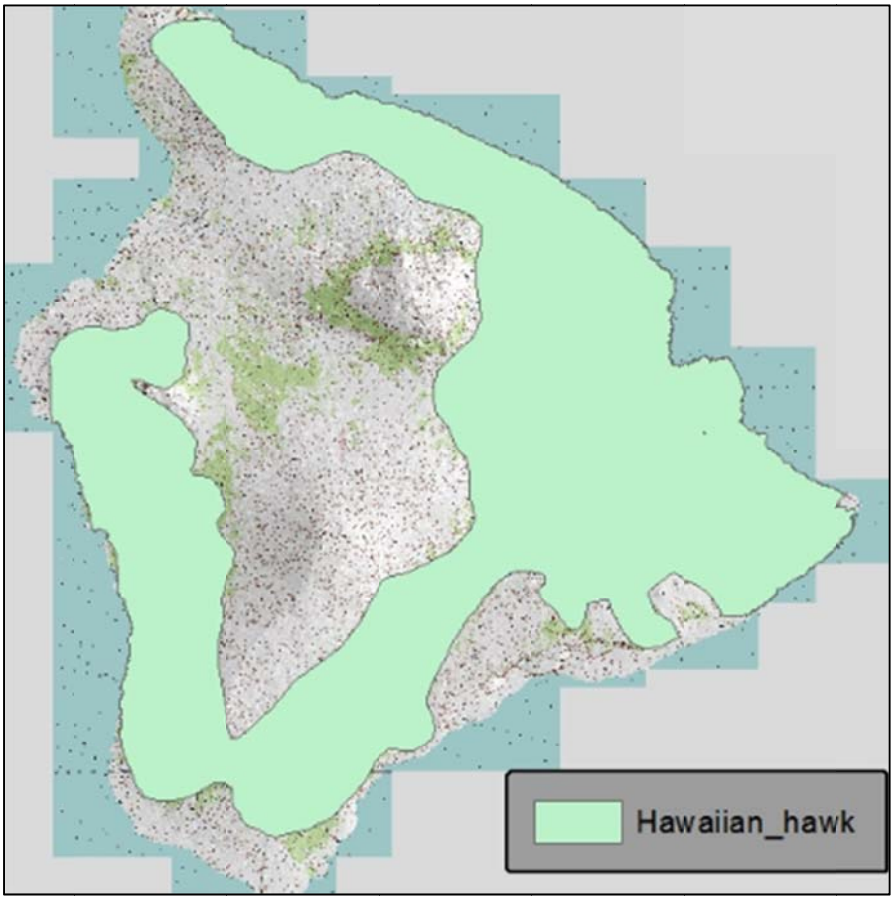

Figure 3. Hawaiian hawk species range map.

Hawaiian goose

Nene have not previously been seen at project sites. However, because Nene populations are increasing, measures to minimize project impacts to Nene have been incorporated into the proposed action. Project noise and disturbance may reduce the reproductive success or survival of Nene. Nene have an extended breeding season with eggs reported from all months except May, June, and July. The majority of birds in the wild nest during the rainy (winter) season between October and March. Nene nest on the ground and are known to occupy various habitat and vegetation types ranging from coastal dune and non-native grasslands (including golf courses, pastures, and developed areas) to mid- and high-elevation native and non-native

shrubland and open alpine areas. To avoid potential adverse impacts to Nene, the following Nene conservation measures will be implemented:

1) Project staff will check with work area vicinity for Nene prior to conducting project-related work. If a Nene is observed within the project site, or a Nene flies into the site while activities are occurring, all activities will halt within 100 feet (30 meters) of the bird(s). Work will not resume until the bird(s) have left the area of their own accord.
2) In areas where Nene have been seen, nest searches will be conducted if the project will occur during the Nene breeding season. A 100-foot (30-meter) buffer will be established and maintained around all active nests and broods until the goslings have fledged. No potentially disruptive activities (i.e., construction or noisy equipment use) will be conducted within this buffer.
3) No manipulation or alteration of known Nene nesting habitat will occur during the breeding season.

Sea Turtles

The proposed activities may be within the vicinity of nesting habitat for sea turtles. Sea turtles come ashore to nest on beaches from May through September, peaking in June and July. Optimal nesting habitat is a dark beach free of barriers that restrict movement. Nesting turtles may be deterred from approaching or laying successful nests on lighted or disturbed beaches. If they do come ashore, they may become disoriented by artificial lighting, leading to exhaustion and placement of a nest in an inappropriate location (such as at or below the high tide line where nests are unlikely to be successful). Hatchlings that emerge from unprotected nests may be disoriented by artificial lighting, move inland instead of toward the ocean, and not make it successfully to the ocean.

To minimize potential impacts to sea turtles that may utilize beaches in the project vicinity, exterior lighting fixtures on structures where maintenance activities are conducted will be retrofitted with fully shielded light fixtures to minimize light impacts to beach areas.

Blackburn’s sphinx moth

The adult moth feeds on nectar from native plants including beach morning glory (*Ipomoea pescaprae*), iliee (*Plumbago zeylanica*), maiapilo (*Capparis sandwichiana*). Blackburn’s sphinx moth larvae feed upon non-native tree tobacco (*Nicotiana glauca*), which occupies disturbed areas such as open fields and roadway margins, and the native aiea (*Nothocestrum sp.*). To pupate, Blackburn's sphinx moth larvae burrow into the soil near host plants and can remain in a state of torpor for up to a year (or more) before emerging from the soil. If any tree removal or brush clearing activities are anticipated in the known range of the Blackburn’s sphinx moth (Figure 4), a qualified biologist will survey the project area for the presence of larval host plants. If host plants are discovered in the area affected by the activity, host plants will not be cut or removed and the soil within 10 meters (33 feet) of the host plants not be disturbed.

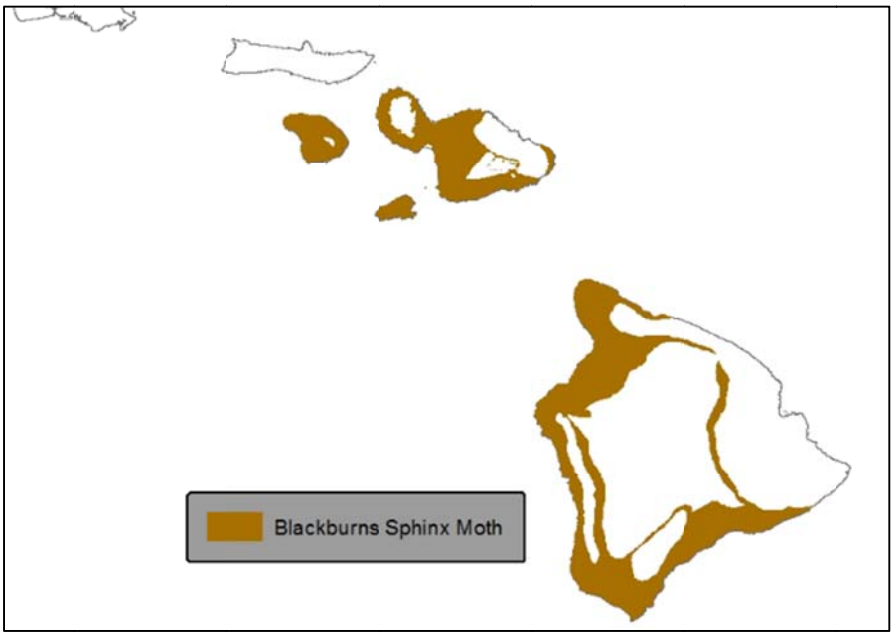

Figure 4. Blackburn's sphinx moth species range map.

Habitat Occupied by Listed Plants

No vegetation or soil disturbance will be conducted outside project footprint that has previously been disturbed within the 70 housing project sites. Vegetation within project sites is managed to minimize the threat of a wildfire spreading into the adjacent vegetation.

Effects of the Proposed Action

Invasive Species

The proposed action has the potential to adversely affect threatened and endangered species and critical habitat. Increased food sources can result in increased population of feral animals and non-native pests such as rats and movement of seeds from non-native invasive plants and soil can result in increased spread of non-native plants and animals. These non-native plants and animals can disrupt the reproduction and survival of native plants and animals. The project's adoption of sanitation measures will assure native habitats in the vicinity of project sites will not be adversely affected by non-native pests as a result of the proposed action.

Hawaiian hoary bat

Because no woody plants will be cut during the June 1 through September 15 bat breeding season and no barbed wire will be used on project sites, the Hawaiian hoary bat is not likely to be adversely affected by the proposed action.

Hawaiian waterbirds

Breeding success of Hawaiian waterbirds may be reduced if noise or other project-related disturbances result in reduced parental nest attendance, reduced bird awareness of predators, or increased nestling stress and metabolism. Because no noise or other potentially disruptive

activities will be conducted within 100 feet (30 meters) of a waterbird nest, the proposed action is not likely to adversely affect Hawaiian waterbirds.

Hawaiian seabirds

Hawaiian petrels and Newell's shearwaters may traverse the project area at night during the breeding season. Outdoor lighting at the project site could result in seabird disorientation, fallout, and injury or mortality. To minimize potential project impacts to seabirds during their breeding season, all outdoor lights on any building or structure where work related to the proposed action is conducted will be retrofitted to be fully shielded so the bulb can only be seen from below bulb height and only used when necessary. Automatic motion sensor switches and controls will be installed on all outdoor lights. Nighttime construction will be avoided during the seabird fledging period, September 15 through December 15. If nighttime construction occurs during other times of year, all lighting will be shielded and directed toward the ground to avoid attracting adult seabirds as they travel from the ocean to their breeding areas. Because the use of outdoor lighting will be limited by motion sensors and fully shielded, light attraction of a Hawaiian seabird is not likely to result from the proposed action.

Hawaiian hawk

Breeding success of the Hawaiian hawk may be reduced if noise or other project-related disturbances result in reduced parental nest attendance or increased nestling stress. Because project-related noise on the Island of Hawaii within the Hawaiian hawk's range will either be scheduled for periods outside the hawk's breeding season or hawk nest surveys will be conducted to assure no hawks are nesting near project sites, the proposed action is not likely to adversely affect the Hawaiian hawk.

Hawaiian goose

Nene have not previously been seen at project sites, but proposed measures to avoid avoid disruptive activities within 100 feet (30 meters) of Nene assure adverse effects to this species are not likely to result from the proposed action.

Sea Turtles

The proposed activities may be within the vicinity of nesting habitat for sea turtles which may become disoriented by artificial lighting. Because exterior lighting fixtures on project-related structures will be fully shielded and on motion sensors, light impacts to project-area beaches are not likely to result in disorientation of sea turtles.

Blackburn's sphinx moth

Because surveys for Blackburn's sphinx moth host plants will be conducted when vegetation disturbance is proposed within the Blackburn's sphinx moth's potential range, no host plants will be cut or removed, and no soil within 33 feet (10 meters) of a host plants not be disturbed, the proposed action will not adversely affect the Blackburn's sphinx moth.

Habitat Occupied by Listed Plants

No vegetation or soil disturbance will be conducted outside project footprint that has previously been disturbed within the 70 housing project sites. Vegetation within project sites is managed to minimize the threat of a wildfire spreading into the adjacent vegetation. Therefore, the project is not expected to result in any direct or indirect adverse effects to listed plants or native ecosystems upon which they rely.

Summary

Based on the information you provided and our assessment of potential project impacts, we concur with your determination that this project may affect but is not likely to adversely affect listed species. Unless the project description changes, or new information reveals that the proposed project may affect listed species in a manner or to an extent not considered, or a new species or critical habitat is designated that may be affected by the proposed action, no further action pursuant to section 7 of the Act is necessary.

We appreciate your efforts to conserve listed species and native ecosystems. If you have any questions or concerns regarding this consultation, please contact Dawn Bruns, Programmatic Section 7 and HCP Specialist (phone: 808-792-9400, email: dawn_bruns@fws.gov).

Sincerely,

for Lorena Wada
Programmatic Deputy Field Supervisor

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DAVID Y. IGE
GOVERNOR

HAKIM OUANSAFI
EXECUTIVE DIRECTOR

BARBARA E. ARASHIRO
EXECUTIVE ASSISTANT

STATE OF HAWAII
DEPARTMENT OF HUMAN SERVICES
HAWAII PUBLIC HOUSING AUTHORITY
1002 NORTH SCHOOL STREET
POST OFFICE BOX 17907
HONOLULU, HAWAII 96817

IN REPLY PLEASE REFER TO:

15:CMS/117

July 24, 2015

Dr. Loyal Mehrhoff, Field Supervisor
Fish and Wildlife Services
U.S. Department of the Interior
300 Ala Moana Boulevard, Room 3-122
Honolulu, Hawaii 96813

Dear Dr. Mehrhoff:

Subject: Environmental Reviews for Federally-Subsidized Public Housing Projects Statewide, Section 7 Consultation and Determination, Endangered Species Act

The State of Hawai'i, Hawai'i Public Housing Authority (HPHA) is proposing that it may conduct repair and rehabilitation improvement projects to 70 existing public housing projects located throughout the State over the next five (5) years (2015-2020). The State HPHA is therefore conducting environmental reviews for these existing public housing projects in conformance with U.S. Department of Housing and Urban Development (HUD) requirements specified under 24 CFR Part 58 should Federal funds be used.

These improvements are considered a Federal "action" but are not considered a "major construction activity;" therefore, "informal consultation" is being conducted with the U.S. Fish and Wildlife Service (FWS) under Section 7 of the Endangered Species Act (ESA). Prior Section 7 consultations were conducted with the FWS in 2005 and 2010 as part of previous environmental reviews completed for these existing housing projects. Based upon the 2010 consultation effort with the FWS, the following listed species may occur in the vicinity of some existing housing projects:

1. Endangered Hawaiian hoary bat (*Lasiurus cinereus semotus*);
2. Threatened Newell's shearwater (*Puffinus auricularis newelli*) and endangered Hawaiian petrel (*Pterodroma phaeopygia sandwichensis*) (collectively referred to as "seabirds"); and
3. Endangered Blackburn's sphinx moth (*Manduca blackburni*).

Those housing projects that may be affected were identified, and HPHA agreed to incorporate various measures into repair and renovation improvements to minimize potential impacts to these species. HPHA plans to continue implementing these agreed upon measures with these same housing projects.

Based upon those consultations and current evaluation, HPHA has determined that repair and rehabilitation improvements to the 70 existing housing projects State wide should continue to have no likelihood of effect on any listed endangered or threatened species or proposed species, or existing or proposed designated critical habitat. Improvements would not jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat. We are again seeking your input and concurrence with this determination as part of this consultation, and HPHA will continue to implement the previously agreed upon mitigative measures for repair and rehabilitation projects implemented. We have included various information to assist your review.

Project Description

Funding for these housing projects is being expended through Federal funds from HUD under Capital Fund Program Grants, the Economic Development Initiative (EDI) Special Project Grant, or other available grants. Repair and rehabilitation improvements implemented for housing projects are not considered a "major construction activity" and would involve one or a combination of several HUD designated categories of actions.

1. Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and utilities that would not increase the capacity or size of existing facilities by more than 20 percent.
2. Interior and exterior improvements directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons.
3. Rehabilitation of buildings and improvements when the density is not increased beyond four units, the land use is not changed, and the building footprint is not increased in a floodplain or wetland.
4. Rehabilitation of multi-family residential buildings that would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) the cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation.
5. Rehabilitation of non-residential structures that would not: 1) result in a change in size or capacity by more than 20 percent; and 2) involve changes in land use;

6. Structural repairs to buildings and other existing structures (e.g., roofing, exterior walls).
7. Interior and exterior renovations and rehabilitation.
8. An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units: 1) can be four one-unit buildings or one four-unit building or any combination; or 2) an individual action of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site.
9. Acquisition or disposition of, or equity loans on an existing structure, or acquisition of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

These types of repair and renovation improvements could consist of site and dwelling improvements that may include modernization of buildings (interior and exterior), infrastructure repair and upgrades (sewer, water, drainage), utility repair and upgrades (mechanical, electrical, gas), abatement of hazardous materials, accessibility improvements, concrete repair, solar hot water installation with installation of tank less gas-fired instantaneous backup, site lighting, tree trimming, resurfacing or paving of parking lots and sidewalks, and wall repair. For projects with elevators, improvements could consist of elevator upgrades. In addition, HPHA will evaluate repair and renovation improvements programmed to ensure the nature of the work falls within the nine categories described.

General information for the 70 housing projects included under this consultation is provided in Exhibit A.

Prior Section 7 Consultations

Similar environmental reviews that included Section 7 consultation with the FWS were conducted by HPHA for several existing public housing sites in 2005 and again in 2010. A summary of those consultations is provided.

1. 2005 Consultation Section 7 consultation was conducted for 39 housing projects in July 2005, and a copy of a letter from the State Housing and Community Development Corporation of Hawaii (now HPHA) with a listing of projects is included in Exhibit B. FWS responded on August 11, 2005 and concurred that no federally listed species or critical habitat will be affected by repair and renovation improvements to those housing projects.
2. 2010 Consultation Section 7 consultation was conducted for 70 housing projects in 2010 which included an initial May 17, 2010 letter for six housing projects. After FWS discussion with HPHA, a June 21, 2010 response letter

was submitted by FWS that concurred the improvements was not likely to adversely affect listed species or critical habitat subject to some mitigative measures addressing the federally endangered Hawaiian hoary bat (Exhibit B).

A May 21, 2010 letter from HPHA was sent to FWS for consultation regarding the remaining 64 housing projects. After a meeting was held with FWS staff on June 24, 2010 to discuss mitigative measures, a July 13, 2010 letter was submitted to FWS documenting the consultation results, mitigative measures, and proposed "not likely to adversely affect" determination. No objection to this determination was received from the FWS (Exhibit B).

HPHA proposes to continue implementing the following mitigative measures for their 70 housing projects that were agreed to from prior Section 7 consultations.

Hawaiian Hoary Bat

To avoid impacts to the endangered Hawaiian hoary bat, woody plants greater than 15 feet (4.6 meters) tall would not be removed or trimmed during the bat birthing and pup rearing season (June 1st through September 15th). However, if trimming or removal of applicable plants is required during the birthing and pup rearing season, a qualified biologist will first conduct a survey of applicable plants to determine if Hawaiian hoary bats are present prior to starting such work. Plant trimming or removal would be allowed to occur if no bats are present. These measures would be applicable to the following list of housing projects under Table 1.

TABLE 1
LISTING OF HOUSING PROJECTS FOR HAWAIIAN HOARY BAT

No.	Project Name	Street Address	County	Island	ZIP Code	TMK
1	Hale Aloha O'Puna (Eld)	16-189 Pili Mua St.	Keaau	Hawaii	96749	1-6-143:035
2	Pomaikai	929 Ululani St.	Hilo	Hawaii	96720	2-4-025:092
3	Kauhale O'Hanakahi (a)	19 Pamala St.	Hilo	Hawaii	96720	2-4-052:001
4	Punahele Homes	Lokahi Pl.	Hilo	Hawaii	96720	2-4-052:022
5	Hale Olaloa	144 Kamana St.	Hilo	Hawaii	96720	2-4-056:021
6	Lanakila (I, II, III, IIIA, IV) *(Note: Phases reconfigured from I-V)*	600 Wailoa Street	Hilo	Hawaii	96720	2-4-028:007
7	Hale Hauoli	45-540 Kaniaka Pl.	Honokaa	Hawaii	96727	4-5-010:078
8	Noelani I	65-1191 Opelo Road	Kamuela	Hawaii	96743	6-5-009:025
9	Noelani II	65-1191 Opelo Rd.	Kamuela	Hawaii	96743	6-5-009:026
10	Ke Kumu 'Ekolu (b)	68-3385 Ke Kumu Pl.	Waikoloa	Hawaii	96738	6-8-002:043

11	Kaimalino	74-5060 Kealakaa St.	Kona	Hawaii	96740	7-4-017:029
12	Kealakehe	74-991 Manawale'a St.	Kailua-Kona	Hawaii	96740	7-4-017:058
13	Ka Hale Kahaluu	78-6725 Makolea St.	Kona	Hawaii	96740	7-8-010:070
14	Nani Olu	81-1011 Nani Kupuna Pl.	Kona	Hawaii	96740	8-1-002:048
15	Hale Hookipa (Eld)	81-1038 Nani Kupuna Place	Kealakekua	Hawaii	96750	8-1-002:049
16	Pahala (Eld)	96-1169 Holei St.	Pahala	Hawaii	96720	9-6-017:037
17	Kekaha Ha'aheo	8238 Iwipolena St.	Kekaha	Kauai	96752	1-3-008:020, 026
18	Home Nani (Eld)	Moana & Laau Rd.	Waimea	Kauai	96796	1-6-007:031
19	Eleele Homes	Ahe St.	Eleele	Kauai	96705	2-1-001:013, 042
20	Hale Hoonanea (Eld)	4401 Waialo Road	Eleele	Kauai	96705	2-1-003:017
21	Kalaheo Homes	Puu Road	Kalaheo	Kauai	96741	2-3-012:030
22	Kawailehua (Federal)	5230 Paanau Rd.	Koloa	Kauai	96756	2-6-004:058
23	Hui O'Hanamaulu	Laukona St.	Hanamaulu	Kauai	96715	3-8-012:030
24	Kapaa	4726 Malu Rd.	Kapaa	Kauai	96746	4-5-015:007, 038, 042
25	Hale Nani Kai O'Kea (Eld)	4850 Kawaihau Rd.	Kapaa	Kauai	96746	4-6-014:105
26	Hale Hoolulu (Eld)	4264 Ala Muku Place	Kilauea	Kauai	96754	5-2-008:056
27	Makani Kai Hale I	35 Koapaka Ln.	Waiehu	Maui	96793	3-3-015:001
28	Makani Kai Hale II (c)	35 Koapaka Ln.	Waiehu	Maui	96793	3-3-015:001
29	Piilani Homes	1028 Wainee St.	Lahaina	Maui	96761	4-5-007:005
30	David Malo Circle	Mill St.	Lahaina	Maui	96761	4-6-010:028
31	Kauhale Ohana	41-1260 Kalanianaole Hwy.	Waimanalo	Oahu	96795	4-1-009:286
32	Waimanalo Homes I	Humuniki St. & Humuna Pl.	Waimanalo	Oahu	96795	4-1-022:100; 4-1-023:050-064, 068; 4-1-028:005-022 and 107-122
33	Waimanalo Homes II	Humuniki St. & Humuna Pl.	Waimanalo	Oahu	96795	4-1-022:100; 4-1-023:050-064; 4-1-028:005-022 and 107-122
34	Kaneohe Apartments	45-507 & 45-513 Pahia Rd.	Kaneohe	Oahu	96744	4-5-019:026
35	Koolau Village	45-1027 Kamau Pl.	Kaneohe	Oahu	96744	4-5-023:008
36	Hookipa Kahaluu	47-330 Ahuimanu Rd.	Kaneohe	Oahu	96744	4-7-037:016
37	Kupuna Home O'Waialua (Eld)	67-088 Goodale Ave.	Waialua	Oahu	96791	6-7-016:028
38	Wahiawa Terrace	300 Palm St.	Wahiawa	Oahu	96786	7-1-001:034
39	Kauhale Nani	310 N. Cane St.	Wahiawa	Oahu	96786	7-4-007:014
40	Waimaha-Sunflower	85-186 McArthur St.	Waianae	Oahu	96792	8-5-010:029, 063, 067
41	Kau'iokalani	85-658 Farrington Hwy.	Waianae	Oahu	96792	8-5-028:044
42	Maili II	Keliikipi St.	Maili	Oahu	96792	8-7-001:001, 037
43	Maili I	Maliona St.	Maili	Oahu	96792	8-7-002:011, 014
44	Nanakuli Homes	Farrington Hwy.	Nanakuli	Oahu	96792	8-7-034:004

Newell's Shearwater and Hawaiian Petrel

Seabirds protected by the Migratory Bird Treaty Act (MBTA) may traverse certain project areas at night during the breeding season (February 1 through December 15). Any outdoor lighting, particularly when used during each year's peak fledging period (September 15 through December 15), could result in seabird disorientation, fallout, and

injury or mortality. Potential impacts to seabirds will be minimized by shielding outdoor lights associated with project renovation or rehabilitation improvements and by avoiding night-time construction. Project lights will be shielded so the bulb can be seen only from below following guidelines specified by the State Department of Land and Natural Resources, Division of Forestry and Wildlife. These measures would be applicable to the following list of housing projects under Table 2, should new outdoor lighting be included as part of the project actions.

TABLE 2
LISTING OF HOUSING PROJECTS FOR SHEARWATER AND PETREL

No.	Project Name	Street Address	County	Island	ZIP Code	TMK
1	Hale Aloha O'Puna (Eld)	16-189 Pili Mua St.	Keaau	Hawaii	96749	1-6-143:035
2	Pomaikai	929 Ululani St.	Hilo	Hawaii	96720	2-4-025:092
3	Kauhale O'Hanakahi (a)	19 Pamala St.	Hilo	Hawaii	96720	2-4-052:001
4	Punahele Homes	Lokahi Pl.	Hilo	Hawaii	96720	2-4-052:022
5	Hale Olaloa	144 Kamana St.	Hilo	Hawaii	96720	2-4-056:021
6	Lanakila (I, II, III, IIIA, IV) *(Note: Phases reconfigured from I-V)*	600 Wailoa Street	Hilo	Hawaii	96720	2-4-028:007
7	Hale Hauoli	45-540 Kaniaka Pl.	Honokaa	Hawaii	96727	4-5-010:078
8	Noelani I	65-1191 Opelo Road	Kamuela	Hawaii	96743	6-5-009:025
9	Noelani II	65-1191 Opelo Rd.	Kamuela	Hawaii	96743	6-5-009:026
10	Ke Kumu 'Ekolu (b)	68-3385 Ke Kumu Pl.	Waikoloa	Hawaii	96738	6-8-002:043
11	Kaimalino	74-5060 Kealakaa St.	Kona	Hawaii	96740	7-4-017:029
12	Kealakehe	74-991 Manawale'a St.	Kailua-Kona	Hawaii	96740	7-4-017:058
13	Ka Hale Kahaluu	78-6725 Makolea St.	Kona	Hawaii	96740	7-8-010:070
14	Nani Olu	81-1011 Nani Kupuna Pl.	Kona	Hawaii	96740	8-1-002:048
15	Hale Hookipa (Eld)	81-1038 Nani Kupuna Place	Kealakekua	Hawaii	96750	8-1-002:049
16	Pahala (Eld)	96-1169 Holei St.	Pahala	Hawaii	96720	9-6-017:037
17	Kekaha Ha'aheo	8238 Iwipolena St.	Kekaha	Kauai	96752	1-3-008:020, 026
18	Home Nani (Eld)	Moana & Laau Rd.	Waimea	Kauai	96796	1-6-007:031
19	Eleele Homes	Ahe St.	Eleele	Kauai	96705	2-1-001:013, 042
20	Hale Hoonanea (Eld)	4401 Waialo Road	Eleele	Kauai	96705	2-1-003:017
21	Kalaheo Homes	Puu Road	Kalaheo	Kauai	96741	2-3-012:030
22	Kawailehua (Federal)	5230 Paanau Rd.	Koloa	Kauai	96756	2-6-004:058
23	Hui O'Hanamaulu	Laukona St.	Hanamaulu	Kauai	96715	3-8-012:030
24	Kapaa	4726 Malu Rd.	Kapaa	Kauai	96746	4-5-015:007, 038, 042
25	Hale Nani Kai O'Kea (Eld)	4850 Kawaihau Rd.	Kapaa	Kauai	96746	4-6-014:105
26	Hale Hoolulu (Eld)	4264 Ala Muku Place	Kilauea	Kauai	96754	5-2-008:056
27	Makani Kai Hale I	35 Koapaka Ln.	Waiehu	Maui	96793	3-3-015:001

TABLE 3
LISTING OF HOUSING PROJECTS FOR SPHINX MOTH

No.	Project Name	Street Address	County	Island	ZIP Code	TMK
1	Hale Aloha O'Puna (Eld)	16-189 Pili Mua St.	Keaau	Hawaii	96749	1-6-143:035
2	Pomaikai	929 Ululani St.	Hilo	Hawaii	96720	2-4-025:092
3	Kauhale O'Hanakahi (a)	19 Pamala St.	Hilo	Hawaii	96720	2-4-052:001
4	Punahele Homes	Lokahi Pl.	Hilo	Hawaii	96720	2-4-052:022
5	Hale Olaloa	144 Kamana St.	Hilo	Hawaii	96720	2-4-056:021
6	Lanakila (I, II, III, IIIA, IV) *(Note: Phases reconfigured from I-V)*	600 Wailoa Street	Hilo	Hawaii	96720	2-4-028:007
7	Hale Hauoli	45-540 Kaniaka Pl.	Honokaa	Hawaii	96727	4-5-010:078
8	Noelani I	65-1191 Opelo Road	Kamuela	Hawaii	96743	6-5-009:025
9	Noelani II	65-1191 Opelo Rd.	Kamuela	Hawaii	96743	6-5-009:026
10	Ke Kumu 'Ekolu (b)	68-3385 Ke Kumu Pl.	Waikoloa	Hawaii	96738	6-8-002:043
11	Kaimalino	74-5060 Kealakaa St.	Kona	Hawaii	96740	7-4-017:029
12	Kealakehe	74-991 Manawale'a St.	Kailua-Kona	Hawaii	96740	7-4-017:058
13	Ka Hale Kahaluu	78-6725 Makolea St.	Kona	Hawaii	96740	7-8-010:070
14	Nani Olu	81-1011 Nani Kupuna Pl.	Kona	Hawaii	96740	8-1-002:048
15	Hale Hookipa (Eld)	81-1038 Nani Kupuna Place	Kealakekua	Hawaii	96750	8-1-002:049
16	Pahala (Eld)	96-1169 Holei St.	Pahala	Hawaii	96720	9-6-017:037
17	Makani Kai Hale I	35 Koapaka Ln.	Waiehu	Maui	96793	3-3-015:001
18	Makani Kai Hale II (c)	35 Koapaka Ln.	Waiehu	Maui	96793	3-3-015:001
19	Piilani Homes	1028 Wainee St.	Lahaina	Maui	96761	4-5-007:005
20	David Malo Circle	Mill St.	Lahaina	Maui	96761	4-6-010:028

Determination

The HPHA has determined that repair and rehabilitation improvements to the 70 existing housing projects State wide are not likely to adversely affect listed species or critical habitat subject to the same mitigative measures agreed to in 2010. The 70 housing sites have already received this determination based upon consultation efforts completed in 2010, and in 2005 for 39 housing sites. Improvements would not impact designated critical habitat areas based upon review of the State Geographic Information System (GIS) data because existing housing sites are not situated within or in the immediate vicinity of such areas. Continued implementation of mitigative measures for identified housing projects would further support minimizing effects on listed species. We are writing to request your concurrence with this determination.

We would greatly appreciate your assistance in responding within 30 days from the date of this letter or sooner if possible. Please contact Ms. Becky L. Choi, State Housing Development Administrator, at 832-6020 or via email at becky.l.choi@hawaii.gov if you have any questions.

Sincerely,

Hakim Ouansafi
Executive Director

Attachments – Exhibit A
Exhibits B-1 through B-4

cc: Becky L. Choi, State Housing Development Administrator, HPHA
Ronald Sato, HHF Planners

EXHIBIT A
LISTING OF HOUSING PROJECTS

HPHA Project No.	Housing Project Name	Street Address	City/Town	Island	Zip Code	Tax Map Key	Year Completed & Occupied
Kaua'i County							
1018	Kapaa	4726 Malu Road	Kapa'a	Kauai	96796	4-5-15:07	1966
	Acreage: 4.33	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1019	Hale Hoolulu (Eld)	4264 Ala Muku Place	Kilauea	Kauai	96754	5-2-08:56	1974
	Acreage: 1.00	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1020	Eleele Homes	340 Ahe Street	Eleele	Kauai	96705	2-1-01:13 & 42	1966
	Acreage: 2.11	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1021	Hui O Hanamaulu	4841 Laukona Street	Hanamaulu	Kauai	96715	3-8-12:30	1966
	Acreage: 3.92	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1022	Kalaheo	2625 Pu'u Road	Kalaheo	Kauai	96741	2-3-12:30	1967
	Acreage: 1.09	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1023	Home Nani (Eld)	9791 Laau Rd.	Waimea	Kauai	96796	1-6-07:31	1970
	Acreage: 0.45	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1054	Hale Nani Kai O'Kea (Eld)	4850 Kawaihau Rd.	Kapaa	Kauai	96746	4-6-14:105	1977
	Acreage: 3.47	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1055	Hale Hoonanea (Eld)	4401 Waialo Road	Eleele	Kauai	96705	2-1-03:17	1976
	Acreage: 2.51	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1064	Kekaha Ha'aheo	8238 Iwipolena St.	Kekaha	Kauai	96752	1-3-08:20 & 26	1982
	Acreage: 9.25	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1086	Kawailehua (Federal)	5230 Paanau Rd.	Koloa	Kauai	96756	2-6-04:58	1993
	Acreage: 2.10	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
Maui County							
1016	David Malo	723 Mill Street	Lahaina	Maui	96761	4-6-10:28	1966
	Acreage: 1.60	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1017	Kahekili Terrace (A&B)	2015 Holowai Place	Wailuku	Maui	96793	3-4-33:23	1966
	Acreage: 5.45	Land Use: Used as residential housing project			Mitigative Measures Needed: No		
1044	Piilani Homes	1028 Wainee St.	Lahaina	Maui	96761	4-5-07:05	1970
	Acreage: 2.62	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1088	Kahale Mua (Federal)	P.O. Box 30	Maunaloa	Molokai	96770	5-1-02:39	1993
	Acreage: 1.88	Land Use: Used as residential housing project			Mitigative Measures Needed: No		
1092	Makani Kai Hale I	35 Koapaka Ln.	Waiehu	Maui	96793	3-3-01:10	1995
	Acreage: 3.45 (Combined with Phase II)	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1097	Makani Kai Hale II	35 Koapaka Ln.	Waiehu	Maui	96793	4-6-10:31	1998
	Acreage: 3.45 (Combined with Phase I)	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		

EXHIBIT A (continued)
LISTING OF HOUSING PROJECTS

HPHA Project No.	Housing Project Name	Street Address	City/Town	Island	Zip Code	Tax Map Key	Year Completed & Occupied
Hawai'i County							
1004	Lanakili I	600 Wailoa Street	Hilo	Hawaii	96720	2-4-28:07	2000
	Acreage: 29.3 (Combined with Phases II, III, IIIA, and IV)	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1013	Lanakili II	600 Wailoa Street	Hilo	Hawaii	96720	2-4-28:07	2000
	Acreage: 29.3 (Combined with Phases I, III, IIIA, and IV)	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1014	Lanakila III	600 Wailoa Street	Hilo	Hawaii	96720	2-4-28:07	1962
	Acreage: 29.3 (Combined with Phases I, II, IIIA, and IV)	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1028	Punahele	5 Lokahi Place	Hilo	Hawaii	96720	2-4-52:22	1967
	Acreage: 3.97	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1029	Pomaikai	929 Ululani Street	Hilo	Hawaii	96720	2-4-25:92	1966
	Acreage: 0.96	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1031	Hale Hauoli	45-540 Kaniaka Pl.	Honokaa	Hawaii	96727	4-5-10:78	1970
	Acreage: 2.43	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1032	Kaimalino	74-5060 Kealakaa St.	Kona	Hawaii	96740	7-4-17:29	1971
	Acreage: 5.53	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1045	Pahala (Eld)	96-1169 Holei St.	Pahala	Hawaii	96720	9-6-17:37	1972
	Acreage: 1.44	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1051	Hale Aloha O'Puna (Eld)	16-189 Pili Mua St.	Keaau	Hawaii	96749	1-6-143:35	1977
	Acreage: 1.90	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1052	Hale Olaloa	144 Kamana St.	Hilo	Hawaii	96720	2-4-56:21	1976
	Acreage: 6.51	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1053	Hale Hookipa (Eld)	81-1038 Nani Kupuna Place	Kealakekua	Hawaii	96750	8-1-02:49	1976
	Acreage: 6.11	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1061	Ka Hale Kahaluu	78-6725 Makolea St.	Kona	Hawaii	96740	7-8-10:04	1981
	Acreage: 3.37	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1063	Nani Olu	81-1011 Nani Kupuna Pl.	Kona	Hawaii	96740	8-1-02:47 & 48	1981
	Acreage: 0.99	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1070	Kealakehe	74-991 Manawale'a St.	Kailua-Kona	Hawaii	96740	7-4-17:58	1985
	Acreage: 3.29	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1071	Noelani I	65-1191 Opelo Road	Kamuela	Hawaii	96743	6-5-09:29	1983
	Acreage: 0.69	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1078	Noelani II	65-1191 Opelo Rd.	Kamuela	Hawaii	96743	6-5-09:25	1983
	Acreage: 0.70	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		

EXHIBIT A (continued)
LISTING OF HOUSING PROJECTS

HPHA Project No.	Housing Project Name	Street Address	City/Town	Island	Zip Code	Tax Map Key	Year Completed & Occupied
Hawai'i County (continued)							
1097	Kauhale O'Hanakahi	19 Pamala St.	Hilo	Hawaii	96720	2-4-51:01	1997
	Acreage: 3.20	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1097	Ke Kumu 'Ekolu	68-3385 Ke Kumu Pl.	Waikoloa	Hawaii	96738	6-8-02:43	1997
	Acreage: 6.47	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1104	Lanakila IV	600 Wailoa Street	Hilo	Hawaii	96720	2-4-28:07	2005
	Acreage: 29.3 (Combined with Phases I, II, III, and IIIA)	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1105	Lanakila IIIA	600 Wailoa Street	Hilo	Hawaii	96720	2-4-28:07	2011
	Acreage: 29.3 (Combined with Phases I, II, III, and IV)	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
City and County of Honolulu							
1003	Mayor Wright Homes	521 North Kukui Street	Honolulu	Oahu	96817	1-7-29:03	1952
	Acreage: 14.84	Land Use: Used as residential housing project			Mitigative Measures Needed: No		
1005	Kalihi Valley Homes	2250 Kalena Drive	Honolulu	Oahu	96819	1-3-22:01	1953
	Acreage: 24.53	Land Use: Used as residential housing project			Mitigative Measures Needed: No		
1007	Kuhio Homes	1430 Ahonui Street 1449 Ahonui Street	Honolulu	Oahu	96819	1-3-39:03 & 06	1953
	Acreage: 6.45	Land Use: Used as residential housing project			Mitigative Measures Needed: No		
1008	Palolo Valley Homes	2107 Ahe Street	Honolulu	Oahu	96816	3-4-07:07	1957
	Acreage: 6.62	Land Use: Used as residential housing project			Mitigative Measures Needed: No		
1009	Kaahumanu Homes	760 McNeill Street	Honolulu	Oahu	96817	1-5-24:01	1958
	Acreage: 7.35	Land Use: Used as residential housing project			Mitigative Measures Needed: No		
1010	Kuhio Park Terrace Low-Rise	1474 Linapuni Street	Honolulu	Oahu	96819	1-3-39:08	1965
	Acreage: 3.36	Land Use: Used as residential housing project			Mitigative Measures Needed: No		
1010	Kuhio Park Terrace High-Rise	1485 Linapuni Street 1531 Linapuni Street 1545 Linapuni Street	Honolulu	Oahu	96819	1-3-39:07, 09, & 10	1970
	Acreage: 18.36	Land Use: Used as residential housing project			Mitigative Measures Needed: No		
1011	Punchbowl Homes	730 Captain Cook Avenue	Honolulu	Oahu	96813	2-1-39:12	1960
	Acreage: 2.94	Land Use: Used as residential housing project			Mitigative Measures Needed: No		
1012	Makua Ali'i	1541 Kalakaua Avenue	Honolulu	Oahu	96826	2-3-19:04	1967
	Acreage: 2.60	Land Use: Used as residential housing project			Mitigative Measures Needed: No		
1015	Wahiawa Terrace	337 Palm Street	Wahiawa	Oahu	96786	7-1-01:34	1966
	Acreage: 2.75	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1024	Kalanihuia	1220 Aala Street	Honolulu	Oahu	96817	1-7-26:06	1969
	Acreage: 1.88	Land Use: Used as residential housing project			Mitigative Measures Needed: No		

EXHIBIT A
LISTING OF HOUSING PROJECTS (Continued)

HPHA Project No.	Housing Project Name	Street Address	County	Island	Zip Code	Tax Map Key	Year Completed & Occupied
1025	Waimanalo Homes I	Humuniki St. & Humuna Pl.	Waimanalo	Oahu	96795	4-1-22:100; 4-1-23:050-064, 068; 4-1-28:005-022 and 107-122	1998
	Acreage: 8.34 (Combined with Phase II)	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1026	Puuwai Momi	99-132 Kohomua Street	Aiea	Oahu	96701	9-9-03:56, 64	1969
	Acreage: 11.54	Land Use: Used as residential housing project			Mitigative Measures Needed: No		
1027	Hale Laulima	1184 Waimano Home Road	Pearl City	Oahu	96782	9-7-94:25	1981
	Acreage: 3.96	Land Use: Used as residential housing project			Mitigative Measures Needed: No		
1030	Koolau Village	45-1027 Kamau Place	Kaneohe	Oahu	96744	4-5-23:08	1969
	Acreage: 14.02	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1033	Maili I	87-172 Maliona Street	Waianae	Oahu	96792	8-7-02:11	1969
	Acreage: 2.29	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1035	Nanakuli Homes	87-1608 Farrington Highway	Waianae	Oahu	96792	8-7-34:04	1969
	Acreage: 4.24	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1036	Paoakalani (Eld)	1583 Kalakaua Ave.	Honolulu	Oahu	96826	2-3-19:4	1970
	Acreage: 1.80	Land Use: Used as residential housing project			Mitigative Measures Needed: No		
1038	Waipahu I	94-111 Pupuole Pl.	Waipahu	Oahu	96797	9-4-39:19	1970
	Acreage: 0.26	Land Use: Used as residential housing project			Mitigative Measures Needed: No		
1039	Waipahu II	94-132 Pupupuhi St.	Waipahu	Oahu	96797	9-4-39:76	1970
	Acreage: 0.26	Land Use: Used as residential housing project			Mitigative Measures Needed: No		
1046	Makamae (Eld)	21 South Kuakini St.	Honolulu	Oahu	96813	2-2-01: 20	1971
	Acreage: 1.08	Land Use: Used as residential housing project			Mitigative Measures Needed: No		
1047	Pumehana (Eld)	1212 Kinau St.	Honolulu	Oahu	96814	2-4-11:39	1972
	Acreage: 0.46	Land Use: Used as residential housing project			Mitigative Measures Needed: No		
1050	Kupuna Home O'Waialua (Eld)	67-088 Goodale Ave.	Waialua	Oahu	96791	6-7-16:28	1977
	Acreage: 3.27	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1056	Kauhale Nani	310 N. Cane St.	Wahiawa	Oahu	96786	7-4-7:14	1980
	Acreage: 3.46	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1057	Waimaha-Sunflower	85-186 McArthur St.	Waianae	Oahu	96792	8-5-10:029, 063, 067	1980
	Acreage: 3.77	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1062	Kalakaua Homes	1545 Kalakaua Ave.	Honolulu	Oahu	96826	2-3-19:04	1983
	Acreage: 4.80	Land Use: Used as residential housing project			Mitigative Measures Needed: No		

EXHIBIT A
LISTING OF HOUSING PROJECTS (Continued)

HPHA Project No.	Housing Project Name	Street Address	County	Island	Zip Code	Tax Map Key	Year Completed & Occupied
1066	Salt Lake Apts.	2907 Ala Ilima St.	Honolulu	Oahu	96818	1-1-62:07	1982
	Acreage: 0.47	Land Use: Used as residential housing project			Mitigative Measures Needed: No		
1069	Kaneohe Apartments	45-507 & 45-513 Pahia Rd.	Kaneohe	Oahu	96744	4-5-19:26	1984
	Acreage: 0.43	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1072	Hookipa Kahaluu	47-330 Ahuimanu Rd.	Kaneohe	Oahu	96744	4-7-37:16	1983
	Acreage: 3.60	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1073	Spencer House	1035 Spencer St.	Honolulu	Oahu	96822	2-4-16:08	1968
	Acreage: 0.32	Land Use: Used as residential housing project			Mitigative Measures Needed: No		
1090	Kauhale Ohana	41-1260 Kalanianaole Hwy.	Waimanalo	Oahu	96795	4-1-9:286	1995
	Acreage: 2.52	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1091	Kau'iokalani	85-658 Farrington Hwy.	Waianae	Oahu	96792	8-5-28:044	1995
	Acreage: 4.04	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1099	Kamehameha Homes	1541 Haka Dr.	Honolulu	Oahu	96817	1-5-01:01	1996
	Acreage: 16.00	Land Use: Used as residential housing project			Mitigative Measures Needed: No		
1108	Waimanalo Homes II	Humuniki St. & Humuna Pl.	Waimanalo	Oahu	96795	4-1-22:100; 4-1-23:050-064; 4-1-28:05-22 and 107-122	1998
	Acreage: 8.34 (Combined with Phase I)	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		
1108	Maili II	87-171 Keliikipi St.	Waianae	Oahu	96792	8-7-01:01	1999
	Acreage: 1.73	Land Use: Used as residential housing project			Mitigative Measures Needed: Yes		

EXHIBIT B-1

LINDA LINGLE
GOVERNOR

STEPHANIE AVEIRO
EXECUTIVE DIRECTOR

PAMELA Y. DODSON
EXECUTIVE ASSISTANT

STATE OF HAWAII
DEPARTMENT OF HUMAN SERVICES
HOUSING AND COMMUNITY DEVELOPMENT CORPORATION OF HAWAII
677 QUEEN STREET, SUITE 300
Honolulu, Hawaii 96813
FAX: (808) 587-0600

05:CMS/0357

July 15, 2005

Paul Henson, Ph.D., Field Supervisor
Ecological Services
U.S. Department of the Interior
Fish and Wildlife Service
Pacific Islands Fish and Wildlife Office
Box 50088
Honolulu, HI 96850

Dear Dr. Henson:

Subject: Housing and Urban Development Environmental Review

Under the provisions of 24 CFR Part 58, the U.S. Department of Housing and Urban Development (HUD) requires that the Housing and Community Development Corporation of Hawaii (HCDCH) conduct Environmental Reviews (ERs) of all projects that use federal funding. One of the requirements is to ensure that the project does not impact any wetlands per Executive Orders 11990 and 11988. Another requirement is to ensure that the project does not impact any endangered species per the Endangered Species Act.

The HCDCH proposes to conduct minor repair and rehabilitation projects to the 39 existing public housing projects listed in Attachment 1. These projects would involve one or more of the following actions: interior and exterior rehabilitation and improvements to provide handicap accessibility and/or accommodation of the hearing/visually impaired; structural repairs (e.g., roofing, exterior walls); interior renovation and rehabilitation; on site utility improvements or upgrades; and improvements to parking, vehicular circulation or pedestrian circulation. It is possible that some projects could include the conversion of cesspool systems by replacing them with septic tanks and seepage pits or leach fields. Rehabilitation of multi-family residential buildings would not: (1) result in a change in density by more than 20 percent, (2) involve changes in land use from residential to non-residential, and (3) cost more than 75 percent of the total estimated replacement cost. Utility and public facility improvements would not increase capacity or size of existing facilities by more than 20 percent.

The HCDCH requests your assistance in determining if the proposed actions, described above, would have impact on wetlands and Federal listed endangered, threatened, or proposed threatened or endangered species or proposed or designated critical habitat. Since all the repair and rehabilitation actions would occur on lands currently developed for residential use,

we do not believe the proposed actions would impact any wetland, endangered species or critical habitat, and request your concurrence by August 21, 2005.

Site plans of the projects are also enclosed. Please contact Mitchell Kawamura, Project Engineer, Construction Management Unit 1 at 587-0563 if you have any questions.

Thank you for your assistance on this matter.

Sincerely,

Mitchell H. Kawamura

Enclosure

Attachment 1: Project Sites

Property Name	Street Address	City	Island	Zip	TMK Number / Map Adjust.
Big Island					
Lanakila I, II, & III	600 Wailoa St.	Hilo	Hawaii	96720	2-4-28:7
Punahele Homes	Lokahi Pl.	Hilo	Hawaii	96720	2-4-52:22
Pomaikai	929 Ululani St.	Hilo	Hawaii	96720	2-4-25:92
Hale Olaloa	144 Kamana St.	Hilo	Hawaii	96720	2-4-56:21
Kauhale O'Hanakahi	19 Pamala St.	Hilo	Hawaii	96720	2-3-19:4
Hale Hauoli	45-540 Kaniaka Pl.	Honokaa	Hawaii	96727	4-5-10:78
Noelani II	65-1191 Opelo Rd.	Kamuela	Hawaii	96743	6-5-9:25 & 26
Kaimalino V	74-5060 Kealakaa St.	Kona	Hawaii	96740	7-4-17:11 & 14
Ka Hale Kahaluu	78-6725 Makolea St.	Kona	Hawaii	96740	7-8-10:70
Nani Olu	81-1011 Nani Kupuna Pl.	Kona	Hawaii	96740	8-1-02:48
Ke Kumu 'Ekolu	68-3385 Ke Kumu Pl.	Waikoloa	Hawaii	96738	6-8-02:43
Kauai					
Kapaa	4726 Malu Rd.	Kapaa	Kauai	96746	4-5-15:7, 38 & 42
Kekaha Ha'aheo	8238 Iwipolena St.	Kekaha	Kauai	96752	1-3-8: 9, 19, 20, 26
Kawailehua (Federal)	5230 Paanau Rd.	Koloa	Kauai	96756	2-6-4:46
Maui					
Piilani Homes	1028 Wainee St.	Lahaina	Maui	96761	4-5-07:5
Makani Kai Hale I & II	35 Koapaka Ln.	Waiehu	Maui	96793	3-3-01:10
Kahekili Terrace A	2015 Holowai Pl.	Wailuku	Maui	96793	3-4-17:146 3-4-33:23
Kahekili Terrace B	2015 Holowai Pl.	Wailuku	Maui	96793	3-4-17:146
Kahale Mua (Federal)	P.O. Box 30	Maunaloa	Molokai	96770	5-1-02:26
Oahu					
Puuwai Momi	99-132 Kohomua St.	Aiea	Oahu	96701	9-9-03:56 & 64
Mayor Wright Homes	521 N. Kukui St.	Honolulu	Oahu	96817	1-7-29:3 & 4
Palolo Valley Homes V	2107 Ahe St.	Honolulu	Oahu	96816	3-4-07:15 & 17
Kaahumanu Homes	Alokele & Kaiwiula St.	Honolulu	Oahu	96817	1-5-24:1
Kuhio Park Terrace V	1475 Linapuni St.	Honolulu	Oahu	96819	1-3-39:1
Kamehameha Homes	1541 Haka Dr.	Honolulu	Oahu	96817	1-5-01:1
Koolau Village	45-1027 Kamau Pl.	Kaneohe	Oahu	96744	4-5-23:8
Kaneohe Apartments	45-507 & 45-513 Pahia Rd.	Kaneohe	Oahu	96744	4-5-19:26
Maili I	Maliona St.	Maili	Oahu	96792	8-7-02:11 & 14
Maili II	Keliikipi St.	Maili	Oahu	96792	8-7-01:1 & 37
Hale Laulima	1184 Waimano Home Rd	Pearl City	Oahu	96782	9-7-94:25
Wahiawa Terrace	300 Palm St.	Wahiawa	Oahu	96786	7-1-01:34
Kauhale Nani	310 N. Cane St.	Wahiawa	Oahu	96786	7-4-07:14
Waimaha-Sunflower	85-186 McArthur St.	Waianae	Oahu	96792	8-5-10:29, 63 & 67
Kau'iokalani	85-658 Farrington Hwy.	Waianae	Oahu	96792	8-5-28:44
Waimanalo Homes A & B	Humuniki St. & Humuna Pl.	Waimanalo	Oahu	96795	4-1-22:100; 4-1-23:50 through 64; 4-1-28:5 through 22 4-1-28:5 107 through 122
Waipahu I	94-111 Pupuole Pl.	Waipahu	Oahu	96797	9-4-39:19
Waipahu II	94-132 Pupupuhi St.	Waipahu	Oahu	96797	9-4-39:76

EXHIBIT 2

United States Department of the Interior

RECEIVED
HOUSING AND COMMUNITY DEV
CORPORATION OF HAWAII
2005 AUG 12 A 11: 19

FISH AND WILDLIFE SERVICE
Pacific Islands Fish and Wildlife Office
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawaii 96850

In Reply Refer To:
1-2-2005-I-332

AUG 11 2005

Mitchell H. Kawamura, Project Engineer
State of Hawaii Department of Human Services
Housing and Community Development Corporation of Hawaii
677 Queen Street, Suite 300
Honolulu, Hawaii 96813

Dear Mr. Kawamura:

Thank you for your letter dated July 15, 2005, received July 19, 2005, in which you request information concerning potential impacts of Housing and Community Development Corporation of Hawaii (HCDCH)'s proposed minor repair and rehabilitation of 39 existing public housing projects in the State of Hawaii. We understand the proposed projects involve funding from the U.S. Department of Housing and Urban Development.

We reviewed the information you provided and pertinent information in our files. To the best of our knowledge, no wetlands, federally listed or proposed species, nor proposed or designated critical habitat, occur on the proposed project sites. Under Section 7 of the Endangered Species Act, it is the federal action agency's responsibility to determine if their project will affect any listed species or proposed species, or proposed or designated critical habitat. This determination includes an evaluation of effects that may be beneficial, insignificant, or discountable. HCDCH has determined (via HUD requirements) that the proposed action has no likelihood of effect, and our concurrence is not required under the Act. However, at your request, we have reviewed the proposed project and concur that no federally listed species or critical habitat will be affected by the proposed projects.

Thank you for your efforts to conserve wetlands and endangered species. If you have questions, please contact Vertebrate Conservation Program Leader Marilet A. Zablan by telephone at (808) 792-9400.

Sincerely,

Gina M Shultz

for Patrick Leonard
Field Supervisor

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AUG 19 2005
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PLANNERS

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EXHIBIT B-2

LINDA LINGLE
GOVERNOR

DENISE M. WISE
EXECUTIVE DIRECTOR

BARBARA E. ARASHIRO
EXECUTIVE ASSISTANT

STATE OF HAWAII

DEPARTMENT OF HUMAN SERVICES
HAWAII PUBLIC HOUSING AUTHORITY
1002 NORTH SCHOOL STREET
P.O. BOX 17907
Honolulu, Hawaii 96817

IN REPLY REFER TO:

10:CMS/052

May 17, 2010

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MAY 19 2010
HELBER, HASTERT & FEE
PLANNERS

Mr. Loyal Mehrhoff, Field Supervisor
Pacific Islands Administrator
Fish and Wildlife Services
U.S. Department of the Interior
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawaii 96813

Dear Mr. Mehrhoff:

Subject: Environmental Reviews for Federally-Subsidized Public Housing Projects
Section 7, Consultation, Endangered Species Act

The State of Hawai'i, Hawai'i Public Housing Authority (HPHA), is currently conducting environmental reviews for their existing public housing projects located throughout the State. These environmental reviews are being conducted in conformance with the U.S. Department of Housing and Urban Development (HUD) requirements specified under 24 CFR Part 58 because federal funds are being used.

The HPHA proposes immediate implementation of minor repair and rehabilitation projects for the following existing public housing projects: 1) Kalihi Valley Homes (O'ahu) and 2) Lanakila Homes, Phases I to V (Hawai'i). Funding for these housing projects is being expended through Federal funds under the Economic Development Initiative (EDI) Special Project Grant. These improvements are considered a Federal "action" and are thus subject to Section 7 consultation under the Endangered Species Act (ESA), as amended. The improvements are not considered a "major construction activity" and therefore "informal consultation" is being conducted with the U.S. Fish and Wildlife Service (FWS) under these requirements.

The HPHA has determined that this proposed action has no likelihood of effect on any listed species or proposed species, or existing or proposed designated critical habitat. Therefore, improvements planned would not jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat. Although not required under the ESA based upon this determination, we are seeking your input and concurrence as part of this consultation.

Description of Proposed Action

The HPHA is proposing to conduct minor repair and rehabilitation projects for the existing public housing projects which are identified in the attached Exhibit 1. Improvements would involve one or more of the following actions:

1. Interior and exterior rehabilitation and improvements to provide handicap accessibility and/or accommodation of the hearing/visually impaired;
2. Structural repairs to buildings (e.g., roofing, exterior walls);
3. Interior renovations and rehabilitation;
4. On-site utility or infrastructure improvements or upgrades; and
5. Improvements to parking, vehicular circulation, or pedestrian circulation.

It is possible that some projects could include the conversion of cesspool systems by replacing them with septic tanks and seepage pits or leach fields. Rehabilitation of multi-family residential buildings would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) cost more than 75 percent of the total estimated replacement cost. Utility and public facility improvements would not increase the capacity or size of existing facilities by more than 20 percent.

Determination

Proposed improvements would consist of repair, renovation, and rehabilitation work on existing State public housing sites, and would not significantly increase unit density or the capacity of existing infrastructure and utilities, or result in land use changes. There are no known wetlands within these housing sites or immediately adjacent to sites that would be adversely affected by improvements. Proposed actions would not impact designated critical habitat areas based upon review of the State Geographic Information System (GIS) data because existing housing sites are not situated within or in the immediate vicinity of such areas. Therefore, improvements implemented would not affect any listed species, proposed species, or proposed or designated critical habitat.

A similar environmental review was previously conducted for several public housing sites in July 2005 of which those findings were consistent with this present determination. Under that review, the Lanakila Homes, Phases I, II, and III were included. Exhibit 2 includes a copy of a concurrence letter from your agency dated August 11, 2005 for your reference.

Your agency's input and concurrence with this determination is being requested. We would greatly appreciate receiving your response by June 14, 2010 or sooner, if possible, due to the use of EDI funds for these housing projects. Please contact Mr. Mitchell Kawamura, Project Engineer, at 832-5373 or via email at Mitchel.H.Kawamura@hawaii.gov if you have any questions.

Sincerely,

Denise M. Wise
Executive Director

Enclosures

c: Mr. Mitchell H. Kawamura, Project Engineer, HPHA
Mr. Ronald A. Sato, Helber Hastert & Fee Planners, Inc.

EXHIBIT 1

ENVIRONMENTAL REVIEW PROJECT LIST

No.	HA #	Project Name	Address	City	Island	ZIP	TMK	Year Built	No. of Exist. Bldgs	No. of Exist. Units
1	1004	Lanakila I	600 Wailoa St.	Hilo	Hawaii	96720	2-4-028:007	1951	21	60
2	1013	Lanakila II	600 Wailoa St.	Hilo	Hawaii	96720	2-4-028:007	1961	25	50
3	1014	Lanakila III	600 Wailoa St.	Hilo	Hawaii	96720	2-4-028:007	1962	10	20
4	1104	Lanakila IV	600 Wailoa St.	Hilo	Hawaii	96720	2-4-028:007	2005	12	48
5	1105	Lanakila V	600 Wailoa St.	Hilo	Hawaii	96720	2-4-028:007	1951 & 2009	14	38
6	1005	Kalihi Valley Homes	2250 Kalena Drive	Honolulu	Oahu	96819	1-3-022:001	1953	42	373

EXHIBIT 2

United States Department of the Interior

RECEIVED
COMMUNITY DEV
CORPORATION OF HAWAI
2005 AUG 12 A 11: 19

FISH AND WILDLIFE SERVICE
Pacific Islands Fish and Wildlife Office
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawaii 96850

In Reply Refer To:
1-2-2005-I-332

AUG 11 2005

Mitchell H. Kawamura, Project Engineer
State of Hawaii Department of Human Services
Housing and Community Development Corporation of Hawaii
677 Queen Street, Suite 300
Honolulu, Hawaii 96813

Dear Mr. Kawamura:

Thank you for your letter dated July 15, 2005, received July 19, 2005, in which you request information concerning potential impacts of Housing and Community Development Corporation of Hawaii (HCDCH)'s proposed minor repair and rehabilitation of 39 existing public housing projects in the State of Hawaii. We understand the proposed projects involve funding from the U.S. Department of Housing and Urban Development.

We reviewed the information you provided and pertinent information in our files. To the best of our knowledge, no wetlands, federally listed or proposed species, nor proposed or designated critical habitat, occur on the proposed project sites. Under Section 7 of the Endangered Species Act, it is the federal action agency's responsibility to determine if their project will affect any listed species or proposed species, or proposed or designated critical habitat. This determination includes an evaluation of effects that may be beneficial, insignificant, or discountable. HCDCH has determined (via HUD requirements) that the proposed action has no likelihood of effect, and our concurrence is not required under the Act. However, at your request, we have reviewed the proposed project and concur that no federally listed species or critical habitat will be affected by the proposed projects.

Thank you for your efforts to conserve wetlands and endangered species. If you have questions, please contact Vertebrate Conservation Program Leader Marilet A. Zablan by telephone at (808) 792-9400.

Sincerely,

Gina M Shultz

for Patrick Leonard
Field Supervisor

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AUG 19 2005
HELBER, HASTERT & FEE PLANNERS

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United States Department of the Interior

FISH AND WILDLIFE SERVICE
Pacific Islands Fish and Wildlife Office
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawaii 96850

In Reply Refer To:
2010-TA-0308

JUN 21 2010
RECEIVED
HAWAII PUBLIC
HOUSING AUTHORITY
'10 JUN 23 A9:21

Ms. Denise M. Wise
Executive Director
State of Hawaii, Department of Human Services
Hawaii Public Housing Authority
1002 North School Street
P. O. Box 17907
Honolulu, Hawaii 96817

Subject: Public Housing Projects on the Islands of Oahu and Hawaii

Dear Ms. Wise:

Thank you for your letter dated May 17, 2010, received May 18, 2010. You are requesting our concurrence that minor repairs and building rehabilitation activities at public housing project for Kalihi Valley Homes on the island of Oahu [TMK: (1) 1-3-022:001] and Lanikila Homes, Phases I and V, on the island of Hawaii [TMK: (3) 2-4-028:007], are not likely to adversely affect listed species or critical habitat. This response is accordance with section 7 of the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq.*).

Based on information in our files, including data compiled by the Hawaii Biodiversity and Mapping Program, and the Hawaii GAP Program, to the best of our knowledge, no federally listed species or designated critical habitat occur in the vicinity of the proposed Kalihi Valley Homes project. Therefore, we concur this project is not likely to adversely affect listed species or critical habitat.

The federally endangered Hawaiian hoary bat (*Lasiurus cinereus semotus*) has been observed in the vicinity of the proposed Lanikila Homes, Phases I and V project. There is no federally designated critical habitat in the vicinity of this project. Hawaiian hoary bats roost in both exotic and native woody vegetation and leave their young unattended in "nursery" trees and shrubs when they forage. If trees or shrubs suitable for bat roosting are cleared during the bat breeding season (May to August), there is a risk that young bats could inadvertently be harmed or killed. In a telephone call on June 8, 2010, between Dr. Jeff Zimpfer of my staff and Mr. Mitchell Kawamura, Mr. Kawamura agreed to avoid removing or cutting woody plants greater than 15 feet (4.6 meters) tall during the bat birthing and pup rearing season (May 15 through August 15). Because you have incorporated these measures into your project, we concur the repair and rehabilitation of Lanikila Homes will not adversely affect the Hawaiian hoary bat.

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If you have any questions regarding this letter, please contact Dr. Jeff Zimpfer, Fish and Wildlife Biologist, Consultation and Technical Assistance Program (phone: 808-792-9431; email: jeff_zimpfer@fws.gov).

Sincerely,

Chuck Russell

for Loyal Mehrhoff
Field Supervisor

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EXHIBIT B-3

LINDA LINGLE
GOVERNOR

DENISE M. WISE
EXECUTIVE DIRECTOR

BARBARA E. ARASHIRO
EXECUTIVE ASSISTANT

STATE OF HAWAII
DEPARTMENT OF HUMAN SERVICES
HAWAII PUBLIC HOUSING AUTHORITY
1002 NORTH SCHOOL STREET
POST OFFICE BOX 17907
Honolulu, Hawaii 96817

IN REPLY PLEASE REFER TO:

10:CMS/056

May 21, 2010

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HELBER, HASTERT & FEE PLANNERS

Mr. Loyal Mehrhoff, Field Supervisor
Pacific Islands Administrator
Fish and Wildlife Services
U.S. Department of the Interior
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawaii 96813

Dear Mr. Mehrhoff:

Subject: Environmental Reviews for Federally-Subsidized Public Housing Projects Statewide Section 7 Consultation, Endangered Species Act

The State of Hawai'i, Hawai'i Public Housing Authority (HPHA), is currently conducting environmental reviews for their existing public housing projects located throughout the State. These environmental reviews are being conducted in conformance to the U.S. Department of Housing and Urban Development (HUD) requirements specified under 24 CFR Part 58 because federal funds are being used.

The HPHA proposes to implement minor repair and rehabilitation projects for 64 existing public housing projects. These improvements are considered a Federal "action" and are thus subject to Section 7 consultation under the Endangered Species Act (ESA), as amended. The improvements are not considered a "major construction activity" and therefore "informal consultation" is being conducted with the U.S. Fish and Wildlife Service (FWS) under these requirements.

The HPHA has determined that this proposed action has no likelihood of effect on any listed species or proposed species, or existing or proposed designated critical habitat. Therefore, improvements planned would not jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat. Although not required under the ESA based upon this determination, we are seeking your input and concurrence as part of this consultation.

Description of Proposed Action

The HPHA is proposing to conduct minor repair and rehabilitation projects to 64 existing public housing projects which are identified under the table in Exhibit 1. Improvements would involve one or more of the following actions:

1. Interior and exterior rehabilitation and improvements to provide handicap accessibility and/or accommodation of the hearing/visually impaired;
2. Structural repairs to buildings (e.g., roofing, exterior walls);
3. Interior renovations and rehabilitation;
4. On-site utility or infrastructure improvements or upgrades; and
5. Improvements to parking, vehicular circulation, or pedestrian circulation.

It is possible that some projects could include the conversion of cesspool systems by replacing them with septic tanks and seepage pits or leach fields. Rehabilitation of multi-family residential buildings would not: 1) result in a change in density by more than 20 percent; 2) involve changes in land use from residential to non-residential; and 3) cost more than 75 percent of the total estimated replacement cost. Utility and public facility improvements would not increase the capacity or size of existing facilities by more than 20 percent.

Determination

Proposed improvements would consist of repair, renovation, and rehabilitation work on existing State public housing sites, and would not significantly increase unit density or the capacity of existing infrastructure and utilities, or result in land use changes. There are no known wetlands within these housing sites or immediately adjacent to sites that would be adversely affected by improvements. Proposed actions would not impact designated critical habitat areas based upon review of the State Geographic Information System (GIS) data because existing housing sites are not situated within or in the immediate vicinity of such areas. Therefore, improvements implemented would not affect any listed species, proposed species, or proposed or designated critical habitat.

A similar environmental review was previously conducted for several public housing sites in July 2005 of which those findings were consistent with this present determination. The table in Exhibit 1 identifies those housing sites previously reviewed in 2005. Exhibit 2 includes a copy of a concurrence letter from your agency dated August 11, 2005 for your reference.

Your agency's input and concurrence with this determination is being requested. We would greatly appreciate your assistance in responding within 30 days from the date of this letter or sooner if possible. Please contact Mr. Mitchell Kawamura, Project Engineer at 832-5373 or via email at Mitchel.H.Kawamura@hawaii.gov if you have any questions.

Sincerely,

Denise M. Wise
Executive Director

Enclosures

cc: Mitchell H. Kawamura, Project Engineer, HPHA
Ronald A. Sato, Helber Hastert & Fee Planners, Inc.

EXHIBIT 1
LISTING OF HOUSING PROJECTS

No.	Project Name	Street Address	County	Island	ZIP Code	TMK
1	Hale Aloha O'Puna (Eld)	16-189 Pili Mua St.	Keaau	Hawaii	96749	1-6-143:035
2	***Pomaikai***	***929 Ululani St.***	***Hilo***	***Hawaii***	***96720***	***2-4-025:092***
3	Kauhale O'Hanakahi (a)	19 Pamala St.	Hilo	Hawaii	96720	2-4-052:001
4	***Punahele Homes***	***Lokahi Pl.***	***Hilo***	***Hawaii***	***96720***	***2-4-052:022***
5	***Hale Olaloa***	***144 Kamana St.***	***Hilo***	***Hawaii***	***96720***	***2-4-056:021***
6	***Hale Hauoli***	***45-540 Kaniaka Pl.***	***Honokaa***	***Hawaii***	***96727***	***4-5-010:078***
7	Noelani I	65-1191 Opelo Road	Kamuela	Hawaii	96743	6-5-009:025
8	***Noelani II***	***65-1191 Opelo Rd.***	***Kamuela***	***Hawaii***	***96743***	***6-5-009:026***
9	***Ke Kumu 'Ekolu (b)***	***68-3385 Ke Kumu Pl.***	***Waikoloa***	***Hawaii***	***96738***	***6-8-002:043***
10	***Kaimalino***	***74-5060 Kealakaa St.***	***Kona***	***Hawaii***	***96740***	***7-4-017:029***
11	Kealakehe	74-991 Manawale'a St.	Kailua-Kona	Hawaii	96740	7-4-017:058
12	***Ka Hale Kahaluu***	***78-6725 Makolea St.***	***Kona***	***Hawaii***	***96740***	***7-8-010:070***
13	Nani Olu	81-1011 Nani Kupuna Pl.	Kona	Hawaii	96740	8-1-002:048
14	Hale Hookipa (Eld)	81-1038 Nani Kupuna Place	Kealakekua	Hawaii	96750	8-1-002:049
15	Pahala (Eld)	96-1169 Holei St.	Pahala	Hawaii	96720	9-6-017:037
16	***Kekaha Ha'aheo***	***8238 Iwipolena St.***	***Kekaha***	***Kauai***	***96752***	***1-3-008:020, 026***
17	Home Nani (Eld)	Moana & Laau Rd.	Waimea	Kauai	96796	1-6-007:031
18	Eleele Homes	Ahe St.	Eleele	Kauai	96705	2-1-001:013, 042
19	Hale Hoonanea (Eld)	4401 Waialo Road	Eleele	Kauai	96705	2-1-003:017
20	Kalaheo Homes	Puu Road	Kalaheo	Kauai	96741	2-3-012:030
21	***Kawailehua (Federal)***	***5230 Paanau Rd.***	***Koloa***	***Kauai***	***96756***	***2-6-004:058***
22	Hui O'Hanamaulu	Laukona St.	Hanamaulu	Kauai	96715	3-8-012:030
23	***Kapaa***	***4726 Malu Rd.***	***Kapaa***	***Kauai***	***96746***	***4-5-015:007, 038, 042***
24	Hale Nani Kai O'Kea (Eld)	4850 Kawaihau Rd.	Kapaa	Kauai	96746	4-6-014:105
25	Hale Hoolulu (Eld)	4264 Ala Muku Place	Kilauea	Kauai	96754	5-2-008:056
26	***Makani Kai Hale I***	***35 Koapaka Ln.***	***Waiehu***	***Maui***	***96793***	***3-3-015:001***
27	***Makani Kai Hale II (c)***	***35 Koapaka Ln.***	***Waiehu***	***Maui***	***96793***	***3-3-015:001***
28	***Kahekili Terrace (A & B)***	***2015 Holowai Pl.***	***Wailuku***	***Maui***	***96793***	***3-4-017:146; 3-4-033:023***
29	***Piilani Homes***	***1028 Wainee St.***	***Lahaina***	***Maui***	***96761***	***4-5-007:005***
30	David Malo Circle	Mill St.	Lahaina	Maui	96761	4-6-010:028
31	***Kahale Mua (Federal)***	***P.O. Box 30***	***Maunaloa***	***Molokai***	***96770***	***5-1-002:039***
32	Salt Lake Apts.	2907 Ala Ilima St.	Honolulu	Oahu	96818	1-1-062:007
33	***Kuhio Park Terrace***	***1475 Linapuni St.***	***Honolulu***	***Oahu***	***96819***	***1-3-039:001***
34	Kuhio Homes	Ahonui St.	Honolulu	Oahu	96819	1-3-039:003,006
35	***Kamehameha Homes***	***1541 Haka Dr.***	***Honolulu***	***Oahu***	***96817***	***1-5-001:001***
36	***Kaahumanu Homes***	***Alokele & Kaiwiula St.***	***Honolulu***	***Oahu***	***96817***	***1-5-024:001***
37	Kalanihuia (Eld)	1220 Aala St.	Honolulu	Oahu	96817	1-7-026:006
38	***Mayor Wright Homes***	***521 N. Kukui St.***	***Honolulu***	***Oahu***	***96817***	***1-7-029:003***
39	Punchbowl Homes (Eld. & Family)	730 Captain Cooke Ave.	Honolulu	Oahu	96813	2-1-039:012
40	Makamae (Eld)	21 South Kuakini St.	Honolulu	Oahu	96813	2-2-001:020

Note: Housing projects reviewed in 2005 highlighted in bold/italic

EXHIBIT 1 (Continued)
LISTING OF HOUSING PROJECTS

No.	Project Name	Street Address	County	Island	ZIP Code	TMK
41	Kalakaua Homes	1545 Kalakaua Ave.	Honolulu	Oahu	96826	2-3-019:004
42	Makua Alii (Eld)	1541 Kalakaua Ave.	Honolulu	Oahu	96826	2-3-019:004
43	Paoakalani (Eld)	1583 Kalakaua Ave.	Honolulu	Oahu	96826	2-3-019:004
44	Pumehana (Eld)	1212 Kinau St.	Honolulu	Oahu	96814	2-4-011:039
45	Spencer House	1035 Spencer St.	Honolulu	Oahu	96822	2-4-016:008
46	***Palolo Valley Homes***	***2107 Ahe St.***	***Honolulu***	***Oahu***	***96816***	***3-4-007:015, 016, 017, 018***
47	Kauhale Ohana	41-1260 Kalanianaole Hwy.	Waimanalo	Oahu	96795	4-1-009:286
48	***Waimanalo Homes I***	***Humuniki St. & Humuna Pl.***	***Waimanalo***	***Oahu***	***96795***	***4-1-022:100; 4-1-023:050-064, 068; 4-1-028:005-022 and 107-122***
49	***Waimanalo Homes II***	***Humuniki St. & Humuna Pl.***	***Waimanalo***	***Oahu***	***96795***	***4-1-022:100; 4-1-023:050-064; 4-1-028:005-022 and 107-122***
50	***Kaneohe Apartments***	***45-507 & 45-513 Pahia Rd.***	***Kaneohe***	***Oahu***	***96744***	***4-5-019:026***
51	***Koolau Village***	***45-1027 Kamau Pl.***	***Kaneohe***	***Oahu***	***96744***	***4-5-023:008***
52	Hookipa Kahaluu	47-330 Ahuimanu Rd.	Kaneohe	Oahu	96744	4-7-037:016
53	Kupuna Home O'Waialua (Eld)	67-088 Goodale Ave.	Waialua	Oahu	96791	6-7-016:028
54	***Wahiawa Terrace***	***300 Palm St.***	***Wahiawa***	***Oahu***	***96786***	***7-1-001:034***
55	***Kauhale Nani***	***310 N. Cane St.***	***Wahiawa***	***Oahu***	***96786***	***7-4-007:014***
56	***Waimaha-Sunflower***	***85-186 McArthur St.***	***Waianae***	***Oahu***	***96792***	***8-5-010:029, 063, 067***
57	***Kau'iokalani***	***85-658 Farrington Hwy.***	***Waianae***	***Oahu***	***96792***	***8-5-028:044***
58	***Maili II***	***Keliikipi St.***	***Maili***	***Oahu***	***96792***	***8-7-001:001, 037***
59	***Maili I***	***Maliona St.***	***Maili***	***Oahu***	***96792***	***8-7-002:011, 014***
60	Nanakuli Homes	Farrington Hwy.	Nanakuli	Oahu	96792	8-7-034:004
61	***Waipahu I***	***94-111 Pupuole Pl.***	***Waipahu***	***Oahu***	***96797***	***9-4-039:019***
62	***Waipahu II***	***94-132 Pupupuhi St.***	***Waipahu***	***Oahu***	***96797***	***9-4-039:076***
63	***Hale Laulima***	***1184 Waimano Home Road***	***Pearl City***	***Oahu***	***96782***	***9-7-094:025***
64	***Puuwai Momi***	***99-132 Kohomua St.***	***Aiea***	***Oahu***	***96701***	***9-9-003:056, 064***

Note: Housing projects reviewed in 2005 highlighted in bold/italic

EXHIBIT 2

United States Department of the Interior

RECEIVED
HOUSING AND COMMUNITY DEV
CORPORATION OF HAWAII
2005 AUG 12 A 11: 19

FISH AND WILDLIFE SERVICE

Pacific Islands Fish and Wildlife Office
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawaii 96850

In Reply Refer To:
1-2-2005-I-332

AUG 11 2005

Mitchell H. Kawamura, Project Engineer
State of Hawaii Department of Human Services
Housing and Community Development Corporation of Hawaii
677 Queen Street, Suite 300
Honolulu, Hawaii 96813

Dear Mr. Kawamura:

Thank you for your letter dated July 15, 2005, received July 19, 2005, in which you request information concerning potential impacts of Housing and Community Development Corporation of Hawaii (HCDCH)'s proposed minor repair and rehabilitation of 39 existing public housing projects in the State of Hawaii. We understand the proposed projects involve funding from the U.S. Department of Housing and Urban Development.

We reviewed the information you provided and pertinent information in our files. To the best of our knowledge, no wetlands, federally listed or proposed species, nor proposed or designated critical habitat, occur on the proposed project sites. Under Section 7 of the Endangered Species Act, it is the federal action agency's responsibility to determine if their project will affect any listed species or proposed species, or proposed or designated critical habitat. This determination includes an evaluation of effects that may be beneficial, insignificant, or discountable. HCDCH has determined (via HUD requirements) that the proposed action has no likelihood of effect, and our concurrence is not required under the Act. However, at your request, we have reviewed the proposed project and concur that no federally listed species or critical habitat will be affected by the proposed projects.

Thank you for your efforts to conserve wetlands and endangered species. If you have questions, please contact Vertebrate Conservation Program Leader Marilet A. Zablan by telephone at (808) 792-9400.

Sincerely,

Gina M Shultz

for Patrick Leonard
Field Supervisor

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TAKE PRIDE® IN AMERICA

LINDA LINGLE
GOVERNOR

DENISE M. WISE
EXECUTIVE DIRECTOR

BARBARA E. ARASHIRO
EXECUTIVE ASSISTANT

STATE OF HAWAII
DEPARTMENT OF HUMAN SERVICES
HAWAII PUBLIC HOUSING AUTHORITY
1002 NORTH SCHOOL STREET
POST OFFICE BOX 17907
Honolulu, Hawaii 96817

IN REPLY PLEASE REFER TO:

10:CMS/087

July 13, 2010

Ms. Dawn Greenlee
Fish and Wildlife Services
U.S. Department of the Interior
300 Ala Moana Boulevard, Room 3-122
Box 50088
Honolulu, Hawaii 96813

Dear Ms. Greenlee:

Subject: Environmental Reviews for Federally-Subsidized Public Housing Projects Statewide Section 7 Consultation and Determination, Endangered Species Act

This letter is a follow up to our previous letter dated May 21, 2010 concerning 64 existing public housing projects for which the State of Hawai'i, Hawai'i Public Housing Authority (HPHA), is proposing to implement minor repair and rehabilitation improvements. These improvements are considered a Federal "action" due to the use of federal funds from the U.S. Department of Housing and Urban Development (HUD). The improvements are not considered a "major construction activity" and therefore "informal consultation" is being conducted with the U.S. Fish and Wildlife Service (FWS) under Section 7 of the Endangered Species Act (ESA).

Based upon consultation efforts and a meeting held with the FWS on June 24, 2010, HPHA has determined that the majority of existing housing projects for which improvements are planned would have no likelihood of effect on any listed species or proposed species, or existing or proposed designated critical habitat. However, the following listed species may occur in the vicinity of some of the proposed projects:

1. Endangered Hawaiian hoary bat (*Lasiurus cinereus semotus*);
2. Threatened Newell's shearwater (*Puffinus auricularis newelli*) and endangered Hawaiian petrel (*Pterodroma phaeopygia sandwichensis*) (collectively referred to as "seabirds"); and
3. Endangered Blackburn's sphinx moth (*Manduca blackburni*).

Those housing projects that may be affected are identified, and we will incorporate the following measures into the project to minimize potential impacts to these species.

Hawaiian Hoary Bat

To avoid impacts to the endangered Hawaiian hoary bat, woody plants greater than 15 feet (4.6 meters) tall would not be removed or trimmed during the bat birthing and pup rearing season (May 15 through August 15). However, if trimming or removal of applicable plants is required during the birthing and pup rearing season, a qualified biologist will first conduct a survey of applicable plants to determine if Hawaiian hoary bats are present prior to starting such work. Plant trimming or removal would be allowed to occur if no bats are present. These measures would be applicable to the following list of housing projects under Table 1.

TABLE 1
LISTING OF HOUSING PROJECTS

No.	Project Name	Street Address	County	Island	ZIP Code	TMK
1	Hale Aloha O'Puna (Eld)	16-189 Pili Mua St.	Keaau	Hawaii	96749	1-6-143:035
2	Pomaikai	929 Ululani St.	Hilo	Hawaii	96720	2-4-025:092
3	Kauhale O'Hanakahi (a)	19 Pamala St.	Hilo	Hawaii	96720	2-4-052:001
4	Punahele Homes	Lokahi Pl.	Hilo	Hawaii	96720	2-4-052:022
5	Hale Olaloa	144 Kamana St.	Hilo	Hawaii	96720	2-4-056:021
6	Hale Hauoli	45-540 Kaniaka Pl.	Honokaa	Hawaii	96727	4-5-010:078
7	Noelani I	65-1191 Opelo Road	Kamuela	Hawaii	96743	6-5-009:025
8	Noelani II	65-1191 Opelo Rd.	Kamuela	Hawaii	96743	6-5-009:026
9	Ke Kumu 'Ekolu (b)	68-3385 Ke Kumu Pl.	Waikoloa	Hawaii	96738	6-8-002:043
10	Kaimalino	74-5060 Kealakaa St.	Kona	Hawaii	96740	7-4-017:029
11	Kealakehe	74-991 Manawale'a St.	Kailua-Kona	Hawaii	96740	7-4-017:058
12	Ka Hale Kahaluu	78-6725 Makolea St.	Kona	Hawaii	96740	7-8-010:070
13	Nani Olu	81-1011 Nani Kupuna Pl.	Kona	Hawaii	96740	8-1-002:048
14	Hale Hookipa (Eld)	81-1038 Nani Kupuna Place	Kealakekua	Hawaii	96750	8-1-002:049
15	Pahala (Eld)	96-1169 Holei St.	Pahala	Hawaii	96720	9-6-017:037
16	Kekaha Ha'aheo	8238 Iwipolena St.	Kekaha	Kauai	96752	1-3-008:020, 026
17	Home Nani (Eld)	Moana & Laau Rd.	Waimea	Kauai	96796	1-6-007:031
18	Eleele Homes	Ahe St.	Eleele	Kauai	96705	2-1-001:013, 042
19	Hale Hoonanea (Eld)	4401 Waialo Road	Eleele	Kauai	96705	2-1-003:017
20	Kalaheo Homes	Puu Road	Kalaheo	Kauai	96741	2-3-012:030
21	Kawailehua (Federal)	5230 Paanau Rd.	Koloa	Kauai	96756	2-6-004:058
22	Hui O'Hanamaulu	Laukona St.	Hanamaulu	Kauai	96715	3-8-012:030
23	Kapaa	4726 Malu Rd.	Kapaa	Kauai	96746	4-5-015:007, 038, 042
24	Hale Nani Kai O'Kea (Eld)	4850 Kawaihau Rd.	Kapaa	Kauai	96746	4-6-014:105
25	Hale Hoolulu (Eld)	4264 Ala Muku Place	Kilauea	Kauai	96754	5-2-008:056
26	Makani Kai Hale I	35 Koapaka Ln.	Waiehu	Maui	96793	3-3-015:001
27	Makani Kai Hale II (c)	35 Koapaka Ln.	Waiehu	Maui	96793	3-3-015:001
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30	David Malo Circle	Mill St.	Lahaina	Maui	96761	4-6-010:028
31	Kauhale Ohana	41-1260 Kalanianaole Hwy.	Waimanalo	Oahu	96795	4-1-009:286
32	Waimanalo Homes I	Humuniki St. & Humuna Pl.	Waimanalo	Oahu	96795	4-1-022:100; 4-1-023:050-064, 068; 4-1-028:005-022 and 107-122
33	Waimanalo Homes II	Humuniki St. & Humuna Pl.	Waimanalo	Oahu	96795	4-1-022:100; 4-1-023:050-064; 4-1-028:005-022 and 107-122
34	Kaneohe Apartments	45-507 & 45-513 Pahia Rd.	Kaneohe	Oahu	96744	4-5-019:026
35	Koolau Village	45-1027 Kamau Pl.	Kaneohe	Oahu	96744	4-5-023:008
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40	Waimaha-Sunflower	85-186 McArthur St.	Waianae	Oahu	96792	8-5-010:029, 063, 067
41	Kau'iokalani	85-658 Farrington Hwy.	Waianae	Oahu	96792	8-5-028:044
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44	Nanakuli Homes	Farrington Hwy.	Nanakuli	Oahu	96792	8-7-034:004

Newell's Shearwater And Hawaiian Petrel

Seabirds protected by the Migratory Bird Treaty Act (MBTA) may traverse certain project areas at night during the breeding season (February 1 through December 15). Any outdoor lighting, particularly when used during each year's peak fledging period (September 15 through December 15), could result in seabird disorientation, fallout, and injury or mortality. Potential impacts to seabirds will be minimized by shielding outdoor lights associated with project renovation or rehabilitation improvements and by avoiding night-time construction. Project lights will be shielded so the bulb can be seen only from below following guidelines specified by the State Department of Land and Natural Resources, Division of Forestry and Wildlife. These measures would be applicable to the following list of housing projects under Table 2, should new outdoor lighting be included as part of the project actions.

TABLE 2
LISTING OF HOUSING PROJECTS

No.	Project Name	Street Address	County	Island	ZIP Code	TMK
1	Hale Aloha O'Puna (Eld)	16-189 Pili Mua St.	Keaau	Hawaii	96749	1-6-143:035
2	Pomaikai	929 Ululani St.	Hilo	Hawaii	96720	2-4-025:092
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13	Nani Olu	81-1011 Nani Kupuna Pl.	Kona	Hawaii	96740	8-1-002:048
14	Hale Hookipa (Eld)	81-1038 Nani Kupuna Place	Kealakekua	Hawaii	96750	8-1-002:049
15	Pahala (Eld)	96-1169 Holei St.	Pahala	Hawaii	96720	9-6-017:037
16	Kekaha Ha'aheo	8238 Iwipolena St.	Kekaha	Kauai	96752	1-3-008:020, 026
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31	Kauhale Ohana	41-1260 Kalanianaole Hwy.	Waimanalo	Oahu	96795	4-1-009:286
32	Waimanalo Homes I	Humuniki St. & Humuna Pl.	Waimanalo	Oahu	96795	4-1-022:100; 4-1-023:050-064, 068; 4-1-028:005-022 and 107-122
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40	Waimaha-Sunflower	85-186 McArthur St.	Waianae	Oahu	96792	8-5-010:029, 063, 067
41	Kau'iokalani	85-658 Farrington Hwy.	Waianae	Oahu	96792	8-5-028:044
42	Maili II	Keliikipi St.	Maili	Oahu	96792	8-7-001:001, 037
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44	Nanakuli Homes	Farrington Hwy.	Nanakuli	Oahu	96792	8-7-034:004

Blackburn's Sphinx Moth

The endangered Blackburn's sphinx moth occurs in the vicinity of some project areas. The adult moth feeds on nectar from native plants including beach morning glory (*Ipomoea pes-caprae*), iliee (*Plumbago zeylanica*), maiapilo (*Capparis sandwichiana*), and the larvae feed upon non-native tree tobacco (*Nicotiana glauca*) and the native aiea (*Nothocestrum latifolium*). Other host plants in the Solanaceae family include non-native *Nicotiana tabacum* (commercial tobacco), *Solanum melongena* (eggplant), *Lycopersicon esculentum* (tomato), and possibly *Datura stramonium* (Jimson weed). Blackburn's sphinx moth larvae may feed on additional plants in the Solanaceae family.

To avoid impacts to this moth, construction areas utilized for renovation or rehabilitation improvements that are not entirely within landscaped, paved, or developed areas will be surveyed by a qualified biologist for the presence of the Blackburn's sphinx moth and its host plants. No Blackburn's sphinx moth host plant will be removed or trimmed, and the soil within 33 feet (10 meters) of the host plant will be protected from disturbance, throughout implementation of this project. If trimming or removal of host plants is required, consultation with the FWS will first be conducted. These measures would be applicable to the following list of housing projects under Table 3.

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No.	Project Name	Street Address	County	Island	ZIP Code	TMK
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2	Pomaikai	929 Ululani St.	Hilo	Hawaii	96720	2-4-025:092
3	Kauhale O'Hanakahi (a)	19 Pamala St.	Hilo	Hawaii	96720	2-4-052:001
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5	Hale Olaloa	144 Kamana St.	Hilo	Hawaii	96720	2-4-056:021
6	Hale Hauoli	45-540 Kaniaka Pl.	Honokaa	Hawaii	96727	4-5-010:078
7	Noelani I	65-1191 Opelo Road	Kamuela	Hawaii	96743	6-5-009:025
8	Noelani II	65-1191 Opelo Rd.	Kamuela	Hawaii	96743	6-5-009:026
9	Ke Kumu 'Ekolu (b)	68-3385 Ke Kumu Pl.	Waikoloa	Hawaii	96738	6-8-002:043
10	Kaimalino	74-5060 Kealakaa St.	Kona	Hawaii	96740	7-4-017:029
11	Kealakehe	74-991 Manawale'a St.	Kailua-Kona	Hawaii	96740	7-4-017:058
12	Ka Hale Kahaluu	78-6725 Makolea St.	Kona	Hawaii	96740	7-8-010:070
13	Nani Olu	81-1011 Nani Kupuna Pl.	Kona	Hawaii	96740	8-1-002:048
14	Hale Hookipa (Eld)	81-1038 Nani Kupuna Place	Kealakekua	Hawaii	96750	8-1-002:049
15	Pahala (Eld)	96-1169 Holei St.	Pahala	Hawaii	96720	9-6-017:037
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19	David Malo Circle	Mill St.	Lahaina	Maui	96761	4-6-010:028

Determination

Based upon the measures identified for certain housing projects, we have determined that implementation of the improvements is not likely to adversely affect the four listed species identified. We are writing to request your concurrence with this determination.

We would greatly appreciate your assistance in responding within 30 days from the date of this letter or sooner if possible. Please contact Mr. Mitchell Kawamura, Project Engineer at 832-5373 or via email at Mitchel.H.Kawamura@hawaii.gov if you have any questions.

Sincerely,

Denise M. Wise
Executive Director

cc: Mitchell H. Kawamura, Project Engineer
Ronald A. Sato, HHF

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EXHIBIT B-4

LINDA LINGLE
GOVERNOR

DENISE M. WISE
EXECUTIVE DIRECTOR

BARBARA E. ARASHIRO
EXECUTIVE ASSISTANT

STATE OF HAWAII
DEPARTMENT OF HUMAN SERVICES
HAWAII PUBLIC HOUSING AUTHORITY
1002 NORTH SCHOOL STREET
POST OFFICE BOX 17907
Honolulu, Hawaii 96817

IN REPLY PLEASE REFER TO:

10:CMS/087

July 13, 2010

Ms. Dawn Greenlee
Fish and Wildlife Services
U.S. Department of the Interior
300 Ala Moana Boulevard, Room 3-122
Box 50088
Honolulu, Hawaii 96813

Dear Ms. Greenlee:

Subject: Environmental Reviews for Federally-Subsidized Public Housing Projects Statewide Section 7 Consultation and Determination, Endangered Species Act

This letter is a follow up to our previous letter dated May 21, 2010 concerning 64 existing public housing projects for which the State of Hawai'i, Hawai'i Public Housing Authority (HPHA), is proposing to implement minor repair and rehabilitation improvements. These improvements are considered a Federal "action" due to the use of federal funds from the U.S. Department of Housing and Urban Development (HUD). The improvements are not considered a "major construction activity" and therefore "informal consultation" is being conducted with the U.S. Fish and Wildlife Service (FWS) under Section 7 of the Endangered Species Act (ESA).

Based upon consultation efforts and a meeting held with the FWS on June 24, 2010, HPHA has determined that the majority of existing housing projects for which improvements are planned would have no likelihood of effect on any listed species or proposed species, or existing or proposed designated critical habitat. However, the following listed species may occur in the vicinity of some of the proposed projects:

1. Endangered Hawaiian hoary bat (*Lasiurus cinereus semotus*);
2. Threatened Newell's shearwater (*Puffinus auricularis newelli*) and endangered Hawaiian petrel (*Pterodroma phaeopygia sandwichensis*) (collectively referred to as "seabirds"); and
3. Endangered Blackburn's sphinx moth (*Manduca blackburni*).

Those housing projects that may be affected are identified, and we will incorporate the following measures into the project to minimize potential impacts to these species.

Hawaiian Hoary Bat

To avoid impacts to the endangered Hawaiian hoary bat, woody plants greater than 15 feet (4.6 meters) tall would not be removed or trimmed during the bat birthing and pup rearing season (May 15 through August 15). However, if trimming or removal of applicable plants is required during the birthing and pup rearing season, a qualified biologist will first conduct a survey of applicable plants to determine if Hawaiian hoary bats are present prior to starting such work. Plant trimming or removal would be allowed to occur if no bats are present. These measures would be applicable to the following list of housing projects under Table 1.

TABLE 1
LISTING OF HOUSING PROJECTS

No.	Project Name	Street Address	County	Island	ZIP Code	TMK
1	Hale Aloha O'Puna (Eld)	16-189 Pili Mua St.	Keaau	Hawaii	96749	1-6-143:035
2	Pomaikai	929 Ululani St.	Hilo	Hawaii	96720	2-4-025:092
3	Kauhale O'Hanakahi (a)	19 Pamala St.	Hilo	Hawaii	96720	2-4-052:001
4	Punahele Homes	Lokahi Pl.	Hilo	Hawaii	96720	2-4-052:022
5	Hale Olaloa	144 Kamana St.	Hilo	Hawaii	96720	2-4-056:021
6	Hale Hauoli	45-540 Kaniaka Pl.	Honokaa	Hawaii	96727	4-5-010:078
7	Noelani I	65-1191 Opelo Road	Kamuela	Hawaii	96743	6-5-009:025
8	Noelani II	65-1191 Opelo Rd.	Kamuela	Hawaii	96743	6-5-009:026
9	Ke Kumu 'Ekolu (b)	68-3385 Ke Kumu Pl.	Waikoloa	Hawaii	96738	6-8-002:043
10	Kaimalino	74-5060 Kealakaa St.	Kona	Hawaii	96740	7-4-017:029
11	Kealakehe	74-991 Manawale'a St.	Kailua-Kona	Hawaii	96740	7-4-017:058
12	Ka Hale Kahaluu	78-6725 Makolea St.	Kona	Hawaii	96740	7-8-010:070
13	Nani Olu	81-1011 Nani Kupuna Pl.	Kona	Hawaii	96740	8-1-002:048
14	Hale Hookipa (Eld)	81-1038 Nani Kupuna Place	Kealakekua	Hawaii	96750	8-1-002:049
15	Pahala (Eld)	96-1169 Holei St.	Pahala	Hawaii	96720	9-6-017:037
16	Kekaha Ha'aheo	8238 Iwipolena St.	Kekaha	Kauai	96752	1-3-008:020, 026
17	Home Nani (Eld)	Moana & Laau Rd.	Waimea	Kauai	96796	1-6-007:031
18	Eleele Homes	Ahe St.	Eleele	Kauai	96705	2-1-001:013, 042
19	Hale Hoonanea (Eld)	4401 Waialo Road	Eleele	Kauai	96705	2-1-003:017
20	Kalaheo Homes	Puu Road	Kalaheo	Kauai	96741	2-3-012:030
21	Kawailehua (Federal)	5230 Paanau Rd.	Koloa	Kauai	96756	2-6-004:058
22	Hui O'Hanamaulu	Laukona St.	Hanamaulu	Kauai	96715	3-8-012:030
23	Kapaa	4726 Malu Rd.	Kapaa	Kauai	96746	4-5-015:007, 038, 042
24	Hale Nani Kai O'Kea (Eld)	4850 Kawaihau Rd.	Kapaa	Kauai	96746	4-6-014:105
25	Hale Hoolulu (Eld)	4264 Ala Muku Place	Kilauea	Kauai	96754	5-2-008:056
26	Makani Kai Hale I	35 Koapaka Ln.	Waiehu	Maui	96793	3-3-015:001
27	Makani Kai Hale II (c)	35 Koapaka Ln.	Waiehu	Maui	96793	3-3-015:001
29	Piilani Homes	1028 Wainee St.	Lahaina	Maui	96761	4-5-007:005

30	David Malo Circle	Mill St.	Lahaina	Maui	96761	4-6-010:028
31	Kauhale Ohana	41-1260 Kalanianaole Hwy.	Waimanalo	Oahu	96795	4-1-009:286
32	Waimanalo Homes I	Humuniki St. & Humuna Pl.	Waimanalo	Oahu	96795	4-1-022:100; 4-1-023:050-064, 068; 4-1-028:005-022 and 107-122
33	Waimanalo Homes II	Humuniki St. & Humuna Pl.	Waimanalo	Oahu	96795	4-1-022:100; 4-1-023:050-064; 4-1-028:005-022 and 107-122
34	Kaneohe Apartments	45-507 & 45-513 Pahia Rd.	Kaneohe	Oahu	96744	4-5-019:026
35	Koolau Village	45-1027 Kamau Pl.	Kaneohe	Oahu	96744	4-5-023:008
36	Hookipa Kahaluu	47-330 Ahuimanu Rd.	Kaneohe	Oahu	96744	4-7-037:016
37	Kupuna Home O'Waialua (Eld)	67-088 Goodale Ave.	Waialua	Oahu	96791	6-7-016:028
38	Wahiawa Terrace	300 Palm St.	Wahiawa	Oahu	96786	7-1-001:034
39	Kauhale Nani	310 N. Cane St.	Wahiawa	Oahu	96786	7-4-007:014
40	Waimaha-Sunflower	85-186 McArthur St.	Waianae	Oahu	96792	8-5-010:029, 063, 067
41	Kau'iokalani	85-658 Farrington Hwy.	Waianae	Oahu	96792	8-5-028:044
42	Maili II	Keliikipi St.	Maili	Oahu	96792	8-7-001:001, 037
43	Maili I	Maliona St.	Maili	Oahu	96792	8-7-002:011, 014
44	Nanakuli Homes	Farrington Hwy.	Nanakuli	Oahu	96792	8-7-034:004

Newell's Shearwater And Hawaiian Petrel

Seabirds protected by the Migratory Bird Treaty Act (MBTA) may traverse certain project areas at night during the breeding season (February 1 through December 15). Any outdoor lighting, particularly when used during each year's peak fledging period (September 15 through December 15), could result in seabird disorientation, fallout, and injury or mortality. Potential impacts to seabirds will be minimized by shielding outdoor lights associated with project renovation or rehabilitation improvements and by avoiding night-time construction. Project lights will be shielded so the bulb can be seen only from below following guidelines specified by the State Department of Land and Natural Resources, Division of Forestry and Wildlife. These measures would be applicable to the following list of housing projects under Table 2, should new outdoor lighting be included as part of the project actions.

TABLE 2
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No.	Project Name	Street Address	County	Island	ZIP Code	TMK
1	Hale Aloha O'Puna (Eld)	16-189 Pili Mua St.	Keaau	Hawaii	96749	1-6-143:035
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4	Punahele Homes	Lokahi Pl.	Hilo	Hawaii	96720	2-4-052:022
5	Hale Olaloa	144 Kamana St.	Hilo	Hawaii	96720	2-4-056:021
6	Hale Hauoli	45-540 Kaniaka Pl.	Honokaa	Hawaii	96727	4-5-010:078

7	Noelani I	65-1191 Opelo Road	Kamuela	Hawaii	96743	6-5-009:025
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13	Nani Olu	81-1011 Nani Kupuna Pl.	Kona	Hawaii	96740	8-1-002:048
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Sincerely,

Denise M. Wise
Executive Director

cc: Mitchell H. Kawamura, Project Engineer
Ronald A. Sato, HHF

35TH Anniversary
1980-2015

HHF PLANNERS
places for people