DEPARTMENT OF ENVIRONMENTAL SERVICES
KA ʻOIHANA LAWELAWE KAIĀPUNI
CITY AND COUNTY OF HONOLULU

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IN REPLY REFER TO:
WEC.PE 25-025

September 16, 2025

Ms. Mary Alice Evans, Director
Office of Planning and Sustainability Development
State of Hawaiʻi
235 South Beretania Street, 6th Floor
Honolulu, Hawaiʻi 96813

Dear Ms. Evans:

SUBJECT: Lualualei Wastewater Pump Station - Fuel Storage Tank Improvement
TMK 8-7-007: 067
Waiʻanae, Oʻahu

The City and County of Honolulu, Department of Environmental Services is transmitting the subject Draft Environmental Assessment and Anticipated Finding of No Significant Impact (DEA-AFONSI) for the subject project. The DEA-AFONSI has been prepared pursuant to Chapter 343, Hawaiʻi Revised Statues, and Chapter 11-200.1, Hawaiʻi Administrative Rules.

We respectfully request that the DEA-AFONSI be published in the next available issue of the Environmental Notice. Materials required for the publication are being provided via the Environmental Review Program's online form.

Should you have any questions, please contact Audrey Uyema Pak from our Division of Wastewater Engineering and Construction at (808) 768-8766.

Sincerely,

Digitally signed by Babcock, Roger W
Date: 2025.09.17 11:59:20 -10'00'

Roger Babcock, Jr., Ph.D., P.E.
Director

Enclosure

cc: ENV/OAS

From: dbedt.opsd.erp@hawaii.gov
To: DBEDT OPSD Environmental Review Program
Subject: New online submission for The Environmental Notice
Date: Wednesday, October 1, 2025 4:04:29 PM

Action Name

Fuel Storage Tank Improvements Lualualei Wastewater Pump Station

Type of Document/Determination

Draft environmental assessment and anticipated finding of no significant impact (DEA-AFNSI)

HRS §343-5(a) Trigger(s)

- (1) Propose the use of state or county lands or the use of state or county funds
- (3) Propose any use within a shoreline area

Judicial district

Waiʻanae, Oʻahu

Tax Map Key(s) (TMK(s))

(1)8-7-007:067

Action type

Agency

Other required permits and approvals

SMA, SSV

Proposing/determining agency

Department of Environmental Services

Agency jurisdiction

City and County of Honolulu

Agency contact name

Audrey Uyema Pak

Agency contact email (for info about the action)

audrey.uyemapak@honolulu.gov

Email address for receiving comments

comments@townscapeinc.com

Agency contact phone

(808) 768-8766

Agency address

1000 Uluohia Street, Suite 308
Kapolei, HI 96707
United States
Map It

Is there a consultant for this action?

Yes

Consultant

Townscape, Inc.

Consultant contact name

Gabrielle Sham

Consultant contact email

gabrielle@townscapeinc.com

Consultant contact phone

(808) 536-6999

Consultant address

900 Fort Street Mall, Suite 1160
Honolulu, HI 96813
United States
Map It

Action summary

The Lualualei Wastewater Pump Station has an underground storage tank that supplies fuel to a standby generator. The generator automatically activates during a power outage and provides electricity for the entire pump station, including the sewage pump, support equipment, and lighting. To comply with current fuel storage regulations and strengthen environmental protection, the City Department of Environmental Services, Division of Wastewater Engineering and Construction, is proposing to replace the existing 2,000-gallon underground fuel storage tank with a new 2,000-gallon aboveground tank. The project also includes replacing the underground fuel piping, fuel monitoring panel, associated sensors, and connecting the new fuel monitoring panel to the supervisory control and data acquisition (SCADA) system.

Reasons supporting determination

Refer to Section 6.

Attached documents (signed agency letter & EA/EIS)

- WEC.PE-25-025_Lualualei_ADA.pdf
- Lualualei-WWPS-Draft-EA-2025-09-30_to-ERP_ADA.pdf

ADA Compliance certification (HRS §368-1.5):

The authorized individual listed below certifies that documents submitted are unlocked, searchable, and ADA compliant. Audio files include transcripts, captions, or alternative descriptions.

Action location map

- Project-Site-Lualualei-WWPS.zip

Authorized individual

Gabrielle Sham

Authorized individual email

gabrielle@townscapeinc.com

Authorized individual phone

(808) 536-6999

Authorization

- The above named authorized individual hereby certifies that he/she has the authority to make this submission.

Draft Environmental Assessment
for the
Fuel Storage Tank Improvements
Lualualei Wastewater Pump Station
in Lualualei, Island of O‘ahu, Hawai‘i

Prepared For:
City and County of Honolulu
Department of Environmental Services

CITY AND COUNTY OF HONOLULU

ENV Community. Commitment. Continuity.

Prepared By:

TOWNSCAPE, INC.
Environmental & Community Planning

September 2025

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Draft Environmental Assessment
Fuel Storage Tank Improvements
Lualualei Wastewater Pump Station
in Lualualei,
Island of O‘ahu, Hawai‘i

Tax Map Key (1) 8-7-007:067

This environmental document has been prepared pursuant to
Chapter 343, Hawai‘i Revised Statutes.

Prepared For:

City and County of Honolulu
Department of Environmental Services
1000 Ulu‘ōhi‘a Street Suite 308
Kapolei, Hawai‘i 96707

Prepared By:

Townscape, Inc.
900 Fort Street Mall, Suite 1160
Honolulu, Hawai‘i 96813

September 2025

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LIST OF ABBREVIATIONS

Abbreviation	Definition
AST	Aboveground Storage Tank
ATS	Automatic Transfer Switch
BFE	Base Flood Elevation
BMPs	Best Management Practices
CRB	Coconut Rhinoceros Beetle
CSH	Cultural Surveys Hawai‘i, Inc.
CMU	Concrete Masonry Unit
DLNR	Department of Land and Natural Resources
DOFAW	Division of Forestry and Wildlife
DPP	Department of Planning and Permitting
DPR	Department of Parks and Recreation
EA	Environmental Assessment
FONSI	Finding of No Significant Impact
HAR	Hawai‘i Administrative Rules
HECO	Hawaiian Electric Company, Inc.
HFD	Honolulu Fire Department
HPD	Honolulu Police Department
HRS	Hawai‘i Revised Statutes
LBSP	Land-Based Sources of Pollution
LUO	Land Use Ordinance
MGD	Million gallons per day
NFPA	National Fire Protection Association
ROH	Revised Ordinances of Honolulu
SCADA	Supervisory Control and Data Acquisition
SCP	Sustainable Communities Plan
SHPD	State Historic Preservation Division
SLR	Sea level rise
SMA	Special Management Area
SSV	Shoreline Setback Variance
UST	Underground Storage Tank
WWPS	Wastewater Pump Station
WWTP	Wastewater Treatment Plant

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PROJECT SUMMARY

Project Name:	Fuel Storage Tanks Improvements Lualualei Wastewater Pump Station
Proposing and Determining Agency:	City & County of Honolulu Department of Environmental Services 1000 Ulu‘ōhi‘a Street Suite 308 Kapolei, Hawai‘i 96707
HRS, Chapter 343 Trigger	Use of County lands; Within shoreline area.
Location:	Lualualei, O‘ahu, Hawai‘i
Tax Map Key:	(1) 8-7-007:067
Project Address:	87-1681 Farrington Hwy Wai‘anae, Hawai‘i 96792
Land Area:	0.2311 acres (or 10,065 square feet) parcel area
Recorded Fee Owner:	State of Hawai‘i (Fee Owner) City & County of Honolulu (Lessee)
Existing Use:	Wastewater Pump Station
Proposed Use:	Wastewater Pump Station
Community Plan Region:	Wai‘anae Sustainable Communities Plan
Land Use Designations:	
State Land Use	Urban
County Zoning	P-2 General Preservation
Special Management Area:	In Special Management Area
Proposed Action:	The proposed project involves replacing the existing 2,000-gallon underground fuel storage tank with a new 2,000-gallon aboveground fuel storage tank, replacing the underground fuel piping, fuel monitoring panel, and all associated sensors, as well as connecting the new fuel monitoring panel to the supervisory control and data acquisition (SCADA) system.
Agency Determination:	Anticipated Finding of No Significant Impact

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1. SETTING AND PROJECT DESCRIPTION

1.1. Background and Need

The Lualualei Wastewater Pump Station (WWPS), owned and operated by the City and County of Honolulu, has been in service since 1983. It serves an area of approximately 631 acres, which primarily includes schools, residential and commercial lots, as well as the upstream Nānākuli WWPS facility. The Lualualei WWPS contains an underground storage tank (UST) that stores fuel for a standby generator, which automatically activates during a power outage. The generator provides power to the entire pump station, including the sewage pump, support equipment, and lighting.

To comply with current fuel storage regulations and to strengthen environmental protection efforts, the City Department of Environmental Services Division of Wastewater Engineering and Construction is proposing to upgrade the existing UST along with making other related improvements. Pursuant to Hawai‘i Administrative Rules (HAR) 11-280.1, all USTs and piping must have secondary containment and use interstitial monitoring to detect releases from tanks and piping by July 15, 2028. The rules are designed to regulate the release of fluids from outdated tanks due to structural failure, corrosion, or spills and overfills.

Without the emergency backup power system, the WWPS could experience system downtime and sewage backups, both of which are costly and environmentally harmful. In addition to improving the existing UST, upgrades to the fuel monitoring panels are needed. The fuel monitoring panels detect fuel levels and inform the City when fuel is low. Monitoring fuel levels allows for timely refueling, which helps to ensure the generator is ready to use. The new panel will include sensors that provide real-time data on fuel levels within the storage tanks.

Environmental review of this project is required by Hawai‘i Revised Statutes (HRS) Chapter 343. The statutory triggers for the preparation of this Environmental Assessment (EA) are:

1. Use of State and County funds and lands
2. Use within the shoreline area

Given the parcel’s proximity to the shoreline, the proposed project must comply with Revised Ordinances of Honolulu (ROH) Chapter 25 (Special Management Areas) and Chapter 26 (Shoreline Setbacks).

1.2. Proposed Action

Improvements to the WWPS include replacing the existing UST system and piping with a new 2,000-gallon aboveground storage tank (AST). Additionally, the project will replace the underground fuel piping, fuel monitoring panel, and all associated sensors, and will connect the new fuel monitoring panel to the supervisory control and data acquisition (SCADA) system. A six-foot-high wave wall will be installed on the seaward facing side of the AST to minimize impact from storm surges.

1.3. Site Location and Description

The Lualualei WWPS facility is located at 87-1581 Farrington Highway in the ahupua‘a of Lualualei, district of Wai‘anae, on the island of O‘ahu in the state of Hawai‘i. It is surrounded by Ulehawa Beach Park, on the makai side of Farrington Highway (State Route 93). Residential homes are located across Farrington Highway, to the north of the project area (see Figure 1). Currently, houseless encampments are present around the perimeter of the WWPS site.

Surrounded by a concrete masonry unit (CMU) wall along Farrington Highway and a CMU wall with chain-link fencing on the remaining sides, the WWPS parcel is approximately 0.23 acres (10,065 square feet). Vehicular access to the project site is via Farrington Highway.

The State land use designation for the project site is Urban (see Figure 2), which is characterized by city-like concentrations of people, structures and services. Urban land uses are subject to the City’s land use policies and controls. The City’s Land Use Ordinance (LUO) classifies the project site as P-2 General Preservation (see Figure 3). P-2 is the General Preservation District and according to LUO §21-3.40, are “lands designated urban by the State, but well-suited to the functions of providing visual relief and contrast to the City’s built environment, or serving as outdoor space for the public’s use and enjoyment” and for “areas unsuitable for other uses because of topographical considerations related to public health, safety, and welfare concerns.”

1.4. Existing Facility

1.4.1. Pump Station Description

This section is based on information described in the Lualualei WWPS Operations Manual (2013) prepared by Fukunaga & Associates, Inc. and updated by Wilson Okamoto Corp, and the Preliminary Engineering Report prepared by Okahara and Associates, Inc. in August 2025. An existing site plan of the WWPS facility is provided in Figure 4.

With an average design flow of 1.53 million gallons per day (mgd) and a peak flow of 5.91 mgd, the Lualualei WWPS collects wastewater from a low point in its service area and pumps it to a higher elevation along Farrington Highway through a 20-inch force main. This force main extends 3,470 linear feet to manhole #19987, where the wastewater then flows by gravity to the Waiʻanae Wastewater Treatment Plant (WWTP). In 2013, a parallel 20-inch dry force main was constructed along Farrington Highway to serve as a backup to the original force main.

The pump station building is a three-story structure, consisting of a ground floor and a substructure made up of an intermediate floor, a pump room floor, and a wet well. The ground floor, which includes the Motor Room and a 303-square foot Generator Room, has a finished floor elevation of 14.15 feet above mean sea level. The intermediate and pump room floors have a finished floor elevation above mean sea level of 2.90 feet and -15.85 feet, respectively. The Generator Room houses the generator, day tank, and fuel monitoring panel.

1.4.2. Fuel System

The Lualualei WWPS facility is powered by Hawaiian Electric Company, Inc. (HECO). However, when normal service fails, a backup power system, consisting of two major components (the standby generator and the automatic transfer controller), is used. The fuel system for the existing 230kW diesel standby generator includes a day tank installed within the Generator Room of the WWPS and a 2,000-gallon, double-walled, fiberglass UST located east of the Generator Room. Based on site visits in May 2025, the existing generator has been undergoing repair and a temporary generator was connected to the system.

The UST, which is approximately 4.0 feet above mean sea level at its invert and contains a sump leak sensor and a fuel inventory sensor, feeds the 50-gallon day tank (Simplex, Model SST 50). The supply and return fuel piping runs underground from the UST to the outside of the Generator Room. From there, the fuel piping runs

aboveground to the day tank. Existing aboveground fuel oil piping is black steel, while the underground fuel oil piping is fiberglass with double containment.

In the event of the loss of commercial power, the Automatic Transfer Switch (ATS) which is the switching mechanism that allows the power for the pump station to be switched between the normal power source and the emergency power source, switches the entire station to operate on the emergency generator. The ATS monitors when power from HECO is restored and transfers the station back to normal service.

1.4.3. Electrical and Monitoring Systems

The facility is powered by a motor control center (MCC), which is located on the first floor of the Motor Room. The MCC serves sewage pumps, exhaust fans, compressors, and a 15kVA dry-type transformer. The transformer feeds Power Panel “A” at 208Y/120V three-phase, 4 wire. A fuel monitoring panel (Veeder Root, Model TLS-300C) monitors the sensors inside the fuel storage tank to gauge fuel levels and to detect leaks. The SCADA cabinet monitors signals for various equipment including the fuel monitoring panel and the day tank. It has an existing conduit path and wiring for the day tank and fuel monitoring control panel.

1.5. Project Details

The proposed project includes the following actions (see Figures 5 to 9):

Civil

- Excavate area to remove the existing 2,000-gallon UST, including associated fuel lines, conduit, and vent line. Backfill to the bottom of the surface restoration layer. The slab of concrete beneath the UST will be abandoned in place.
- Restore disturbed area affected by the removal of the existing UST and associated lines.

Architectural

- Paint existing exterior masonry walls and miscellaneous surface incidental to scope using existing colors.
- Paint a minimum of one prime coat and two finish coats on all interior surfaces incidental to scope, conforming to existing standard color palette.

Structural

- Install concrete pads for the new AST and the new day tank in the Generator Room.
- Install a six-foot high, one-foot thick, 12-foot wide reinforced concrete wall along the makai side of the AST to deflect wave forces. The wall will be designed to withstand a wave breaking three feet above the existing grade with a force of 1,500 pounds per linear foot of wall, or a hydrostatic pressure of 550 pounds per square foot.

Mechanical

- Replace the existing 2,000-gallon UST with a new 2,000-gallon ConVault AST (double wall steel tank encased in concrete measuring 11 feet three inches long, five feet six inches high, and eight inches wide, weighing 45,918 pounds with a full tank.
- Remove existing underground fuel supply and fuel return piping and install new fuel supply and return piping (one-inch Type 316 Stainless Steel) from the AST to the day tank aboveground. Existing pipe penetrations will be reused where feasible, otherwise, a new penetration will be made.
- Install a SCADA compatible fuel monitoring panel. Fuel monitoring points will be mapped to the station's existing SCADA system and be compliant with City SCADA Standards for WWPS.
- Install interstitial monitoring and inventory sensors on the AST and integrate with the fuel monitoring panel.
- Replace the existing 50-gallon fuel oil day tank and associated piping/wiring and conduit in the generator room with a new 60-gallon day tank with two supply pumps, one return pump, and one hand pump.

Figure 1. Location and Vicinity Map

Figure 2. State Land Use Map

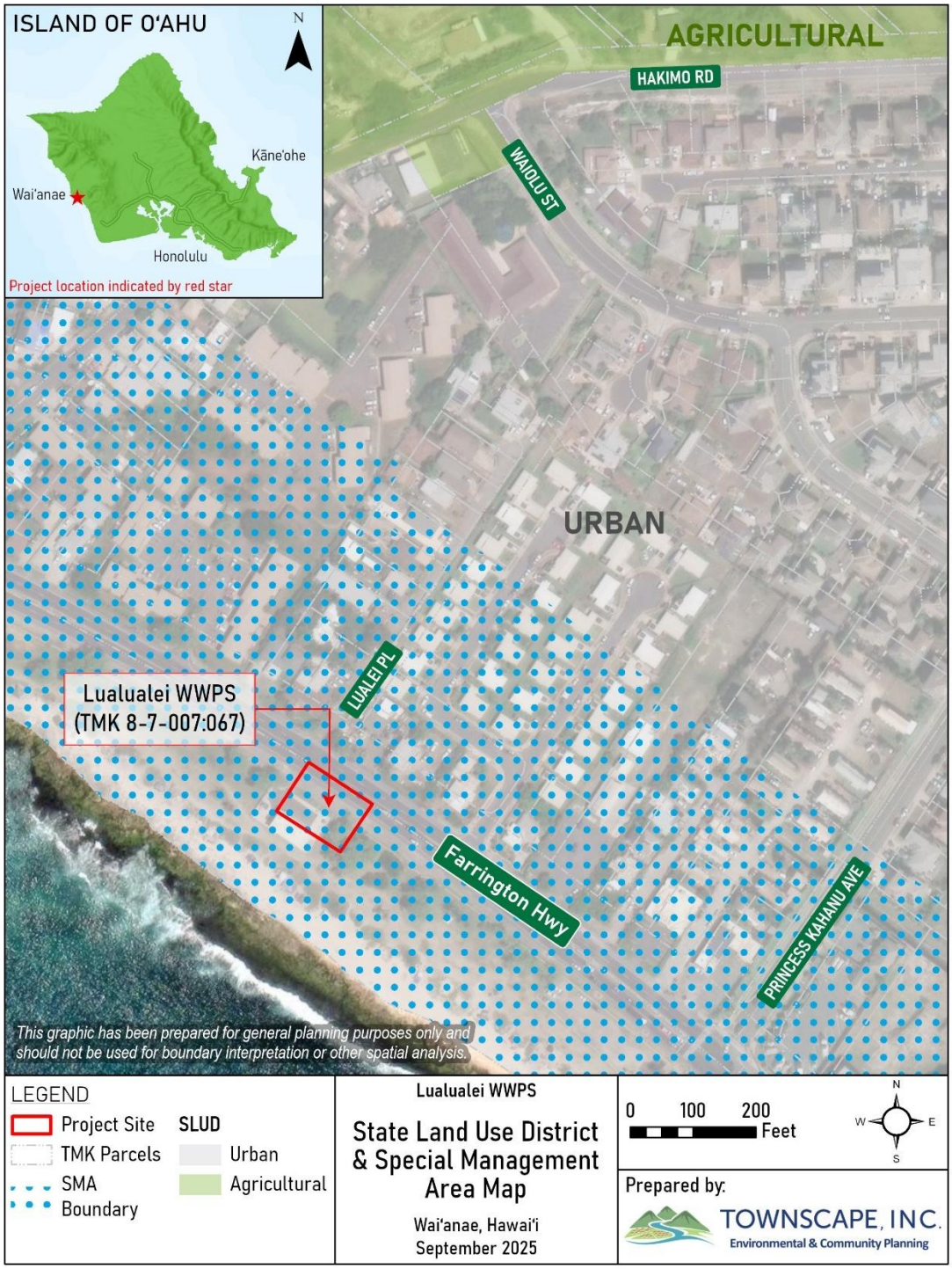


Figure 3. City Zoning Map

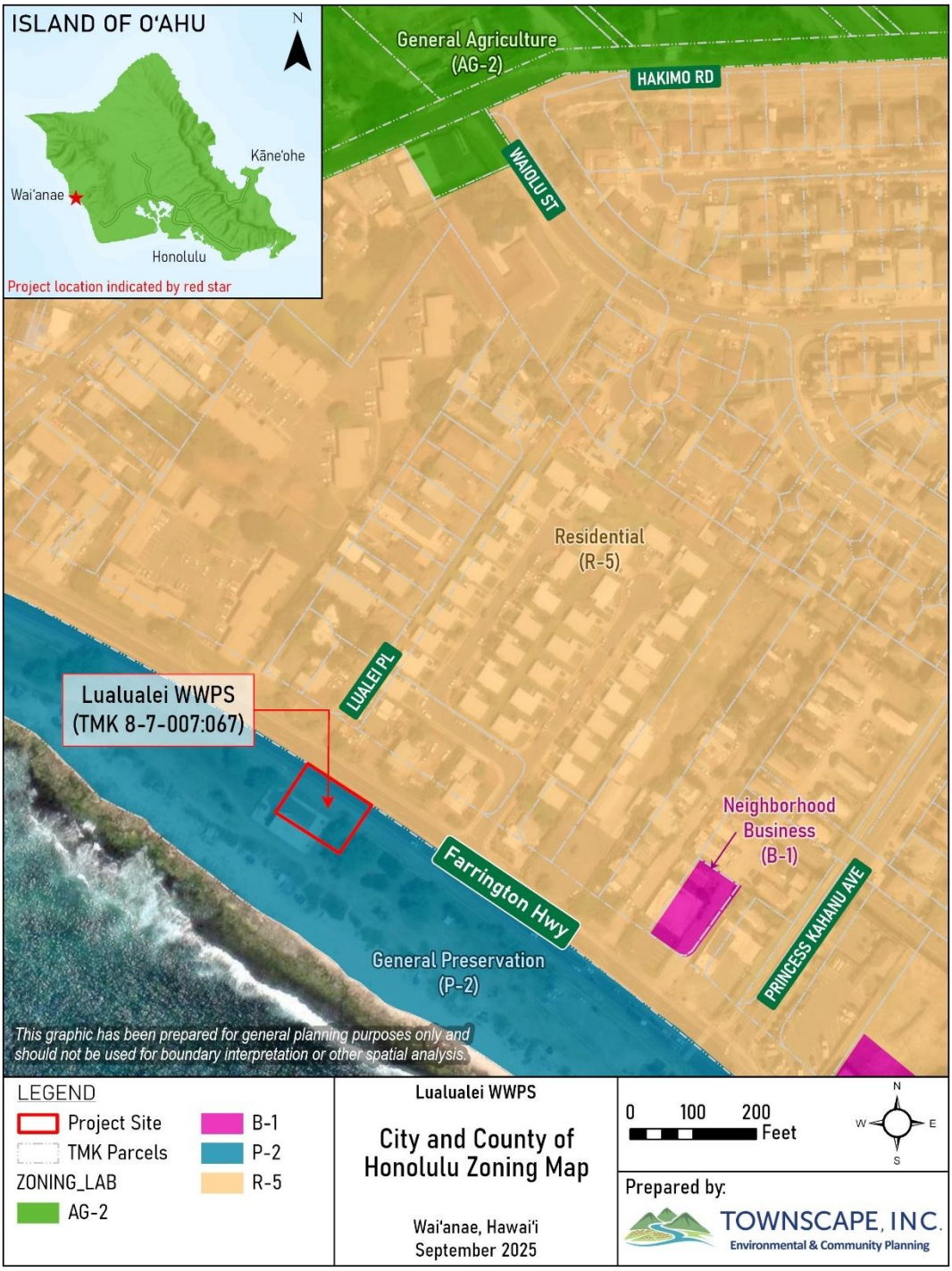


Figure 4. Existing Site Plan (Source: Fukunaga and Associates, Inc., 2012)

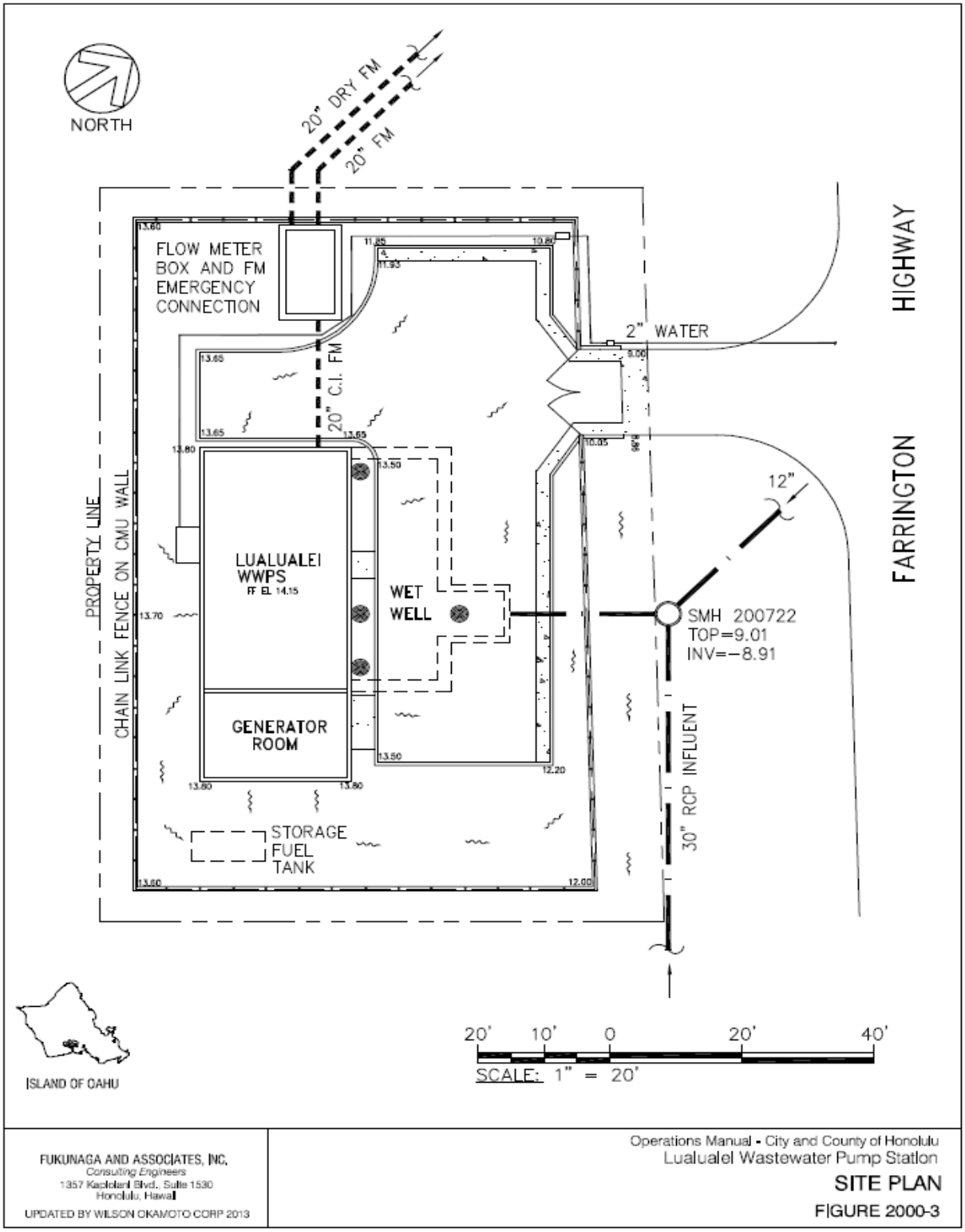


Figure 5. Mechanical Demolition Plan

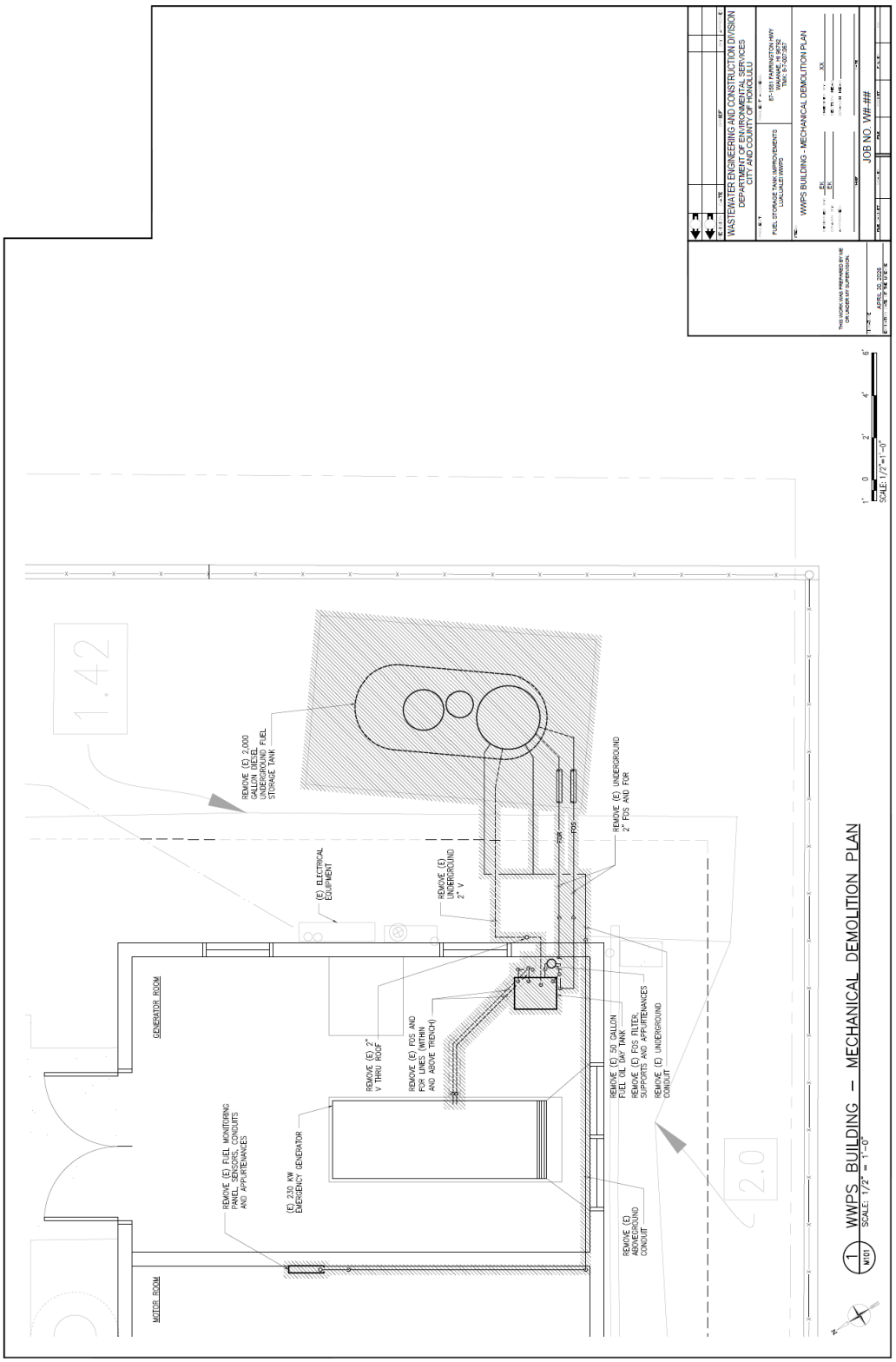


Figure 6. Demolition Floor Plan

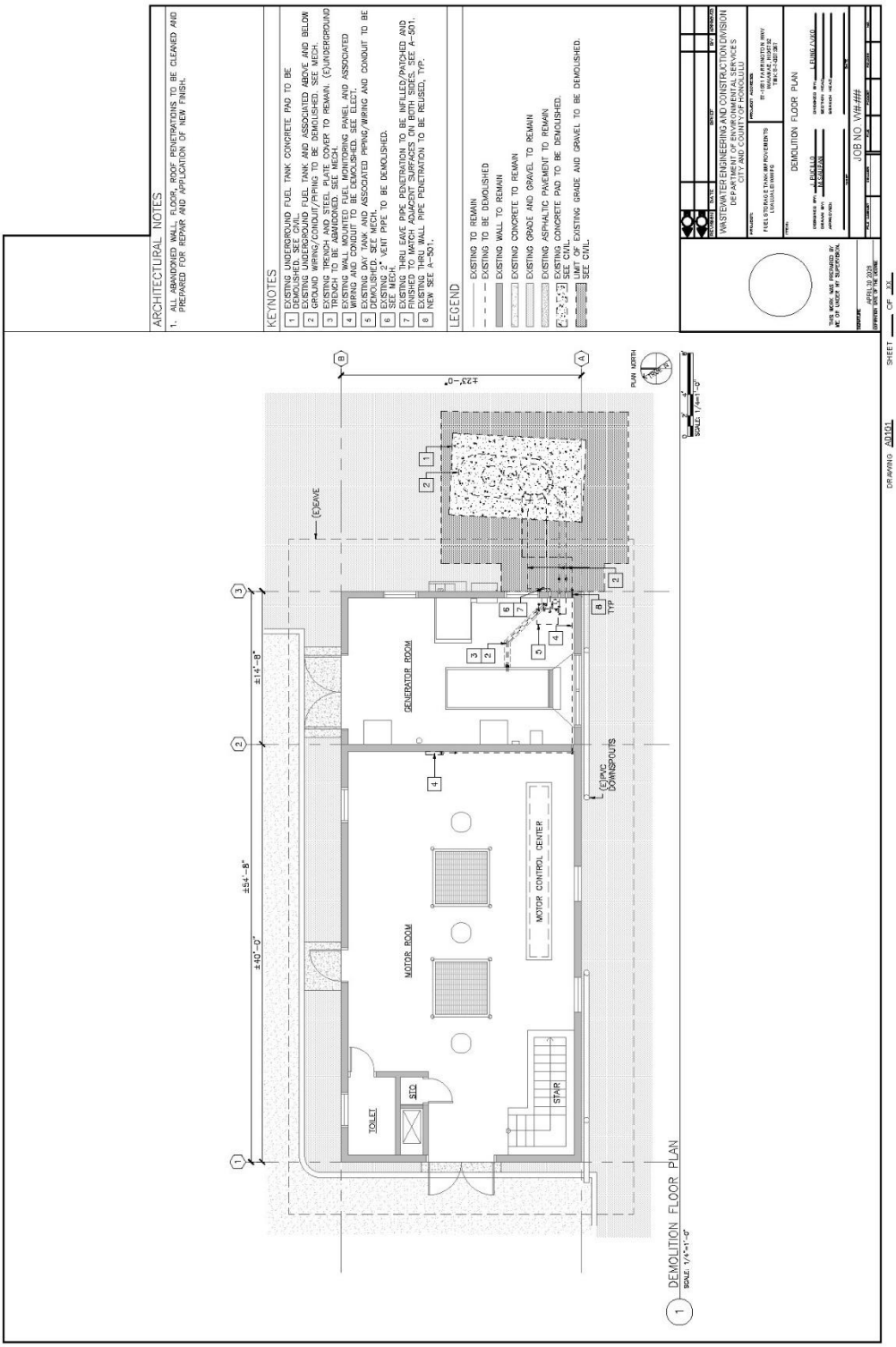


Figure 7. Mechanical Plan

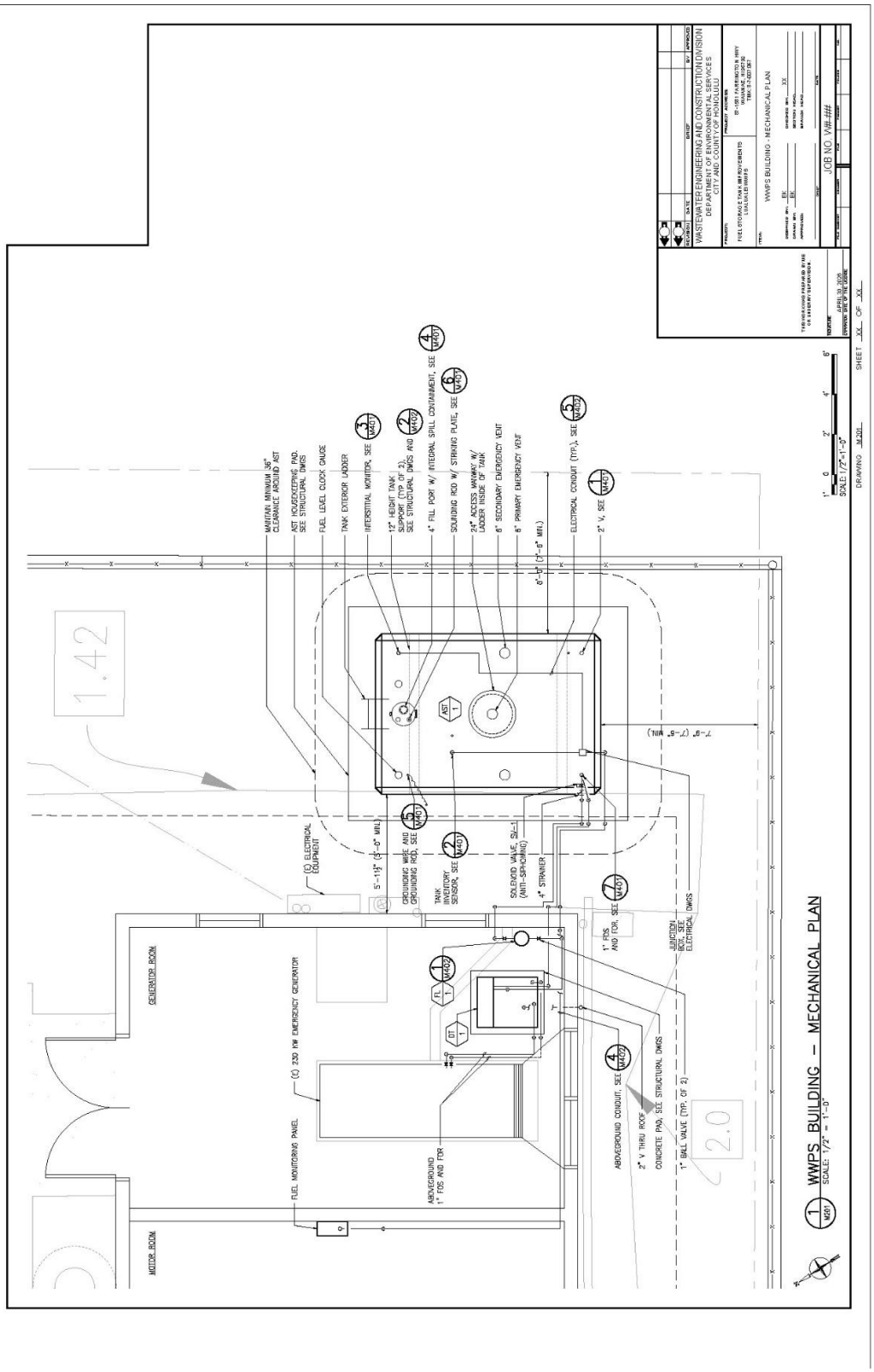


Figure 8. Floor Plan

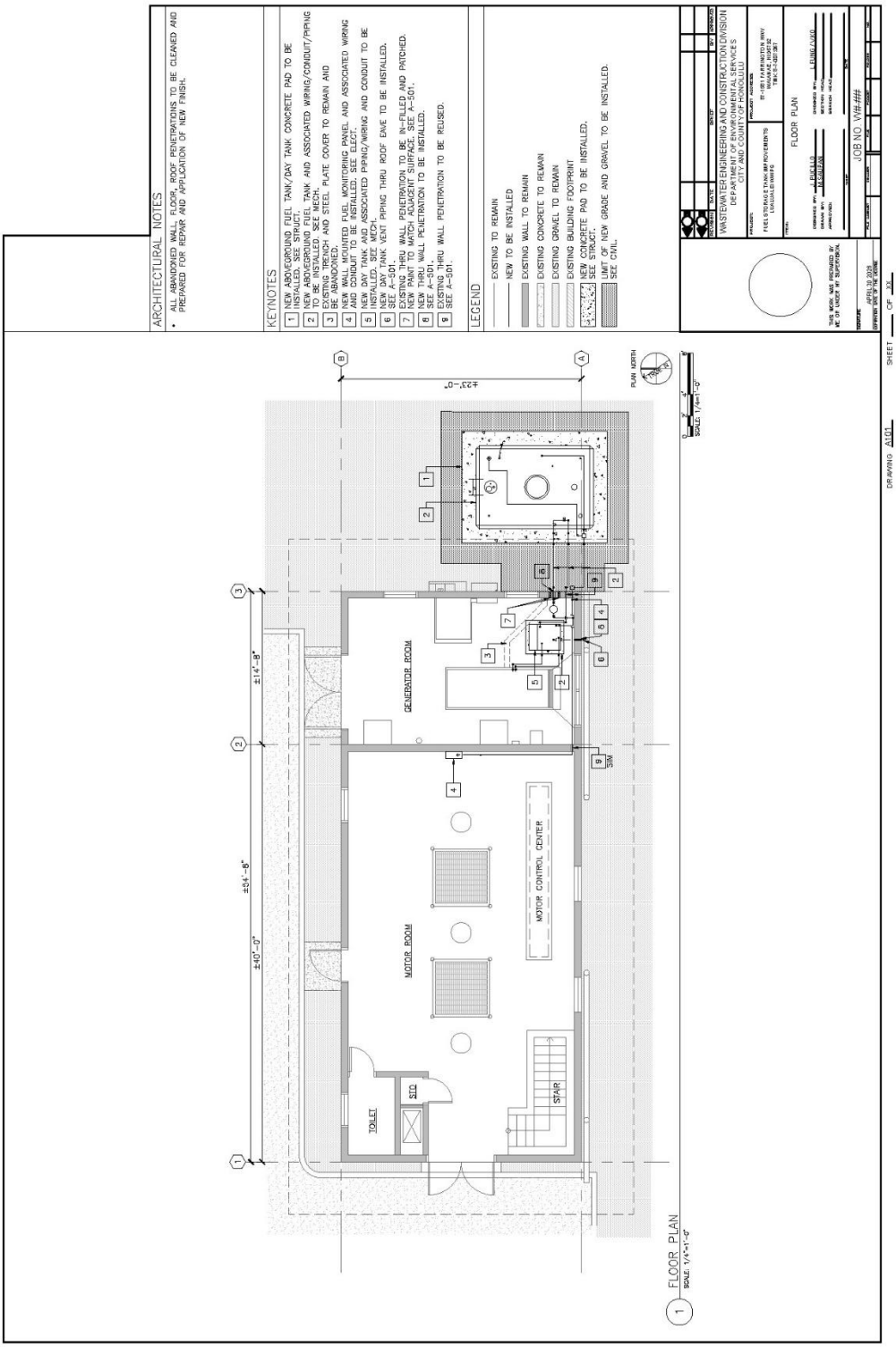
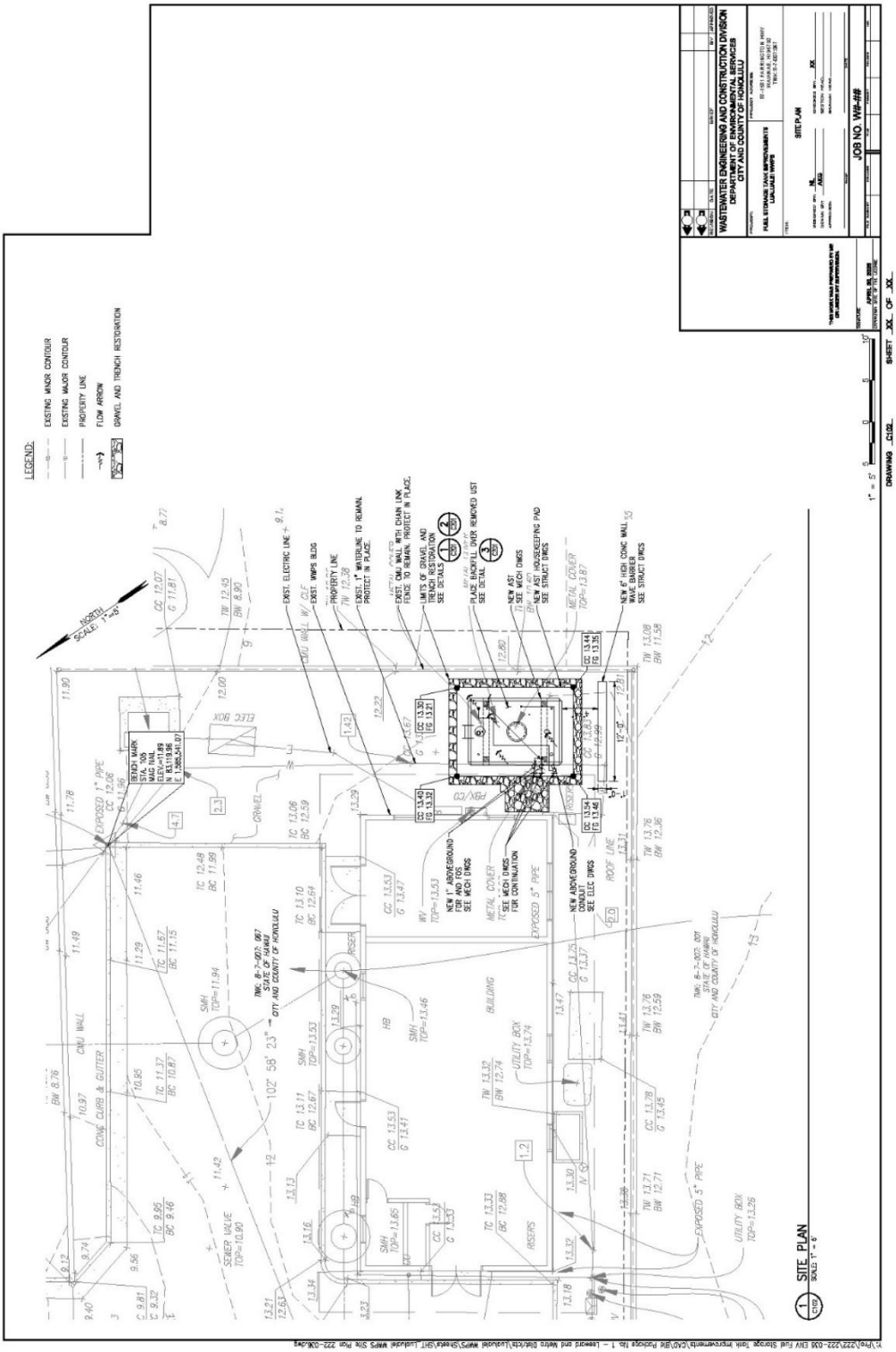


Figure 9. Detailed Site Plan with Proposed Action



1.6. Project Schedule

The project will be executed in multiple phases with other WWPSs, with construction expected to start in April 2027 for 12 months.

View of WWPS and location of the proposed AST to the left of the facility (facing the ocean).

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2. DESCRIPTION OF EXISTING ENVIRONMENT, PROJECT IMPACTS, AND MITIGATION

2.1. Physical Environment

2.1.1. Climate and Rainfall

The climate in the State of Hawai‘i is generally characterized by a two-season year: the summer period is warm and dry whereas the winter season is cool and wet. Rainfall distribution across Hawai‘i varies greatly according to geographic conditions, elevation, and long-term climatic cycles.

Similar to the rest of the State of Hawai‘i, the project site along the coast of Lualualei has a mild semi-tropical climate. Average temperatures at the project site range from 73 degrees Fahrenheit in February to 80 degrees Fahrenheit in August, while the average annual rainfall at the project site is estimated to be between 20.7 to 33.0 inches (Giambelluca et al., 2014). Trade winds in the project vicinity are generally from the northeast. Strong winds are known to occur in connection with storm systems that disrupt climatic patterns. During the winter months, the trade winds become less frequent and are replaced by the lighter southwest Kona winds.

Impacts and Mitigation Measures

The proposed project is not anticipated to affect or be significantly affected by the existing climatic conditions of the area and region. No mitigation is proposed.

2.1.2. Topography, Geology and Soils

The Island of O‘ahu is composed of the Wai‘anae and Ko‘olau mountain ranges, which are connected by a central plateau. The older Wai'anae mountain range spans a distance of about 20 miles across the western third of O‘ahu, while the younger Ko‘olau mountain range extends for 37 miles in a northwest to southeast alignment across the eastern two thirds of the island.

Located on the leeward side of the Wai‘anae range, the project site is at approximately 10 feet above mean sea level. The project site and surrounding area is relatively flat and situated within the Ulehawa Beach Park.

The project area consists of Mamala soil (MnC, Mamala cobbly silty clay loam, 0 to 12 percent slopes). Mamala soil is an alluvium found predominantly in coastal plains in areas with a mean annual precipitation of 18 to 25 inches ranging from 0 to 100

feet in elevation. This soil is well drained with medium runoff, making the frequency of flooding rare. (U.S. Department of Agriculture, Soil Conservation Service, 1972) Figure 10 depicts the soil classifications and topographic map.

The existing groundcover surrounding the UST is composed of gravel. The general site drainage pattern flows from the southwest to the northeast of the site although surface flow is minimal due to the extensive presence of crushed gravel

Impacts and Mitigation Measures

Project actions are expected to retain the overall topographic profile of the site. Minimal soil erosion and runoff are expected as the project site is relatively flat. The project will adhere to Erosion and Sediment Control measures in accordance with HAR 11-55 and the City's Storm Water Best Management Practice Manual, Construction, Draft, dated August 2017.

The following erosion prevention Best Management Practices (BMPs) will be required by the Contractor to prevent any runoff, sediment, soil and debris potentially resulting from associated construction activities from adversely impacting the coastal ecosystems and State waters:

- All exposed disturbed areas are to be permanently stabilized with ground covering such as vegetation, gravel, or pavers.
- Sediment fences or barriers will be used at the perimeter of all disturbed areas where there is potential for runoff from the project site. In addition to sandbags, a 12-inch compost filter sock will be used to protect the area and prevent runoff flow.

An early consultation letter from the Department of Land and Natural Resources (DLNR) Division of Aquatic Resources dated April 24, 2025 recommends the following measures for mitigation of erosion and land-based sources of pollution (LBSP):

- Utilize appropriate barriers (e.g., sediment barriers/bags, petroleum absorption diapers) to limit the amount of sediment of LBSP (e.g., petroleum products, chemicals, debris, etc.).
- Utilize environmentally inert construction materials, when practicable.
- Consider the weather when timing construction, preferably during low rain conditions. All construction should halt during storm conditions or

when storm conditions threaten the watershed. Secure the site during storm conditions so that runoff is minimized.

2.1.3. Natural Hazards

Tsunami

As shown in Figure 11, the project site lies within the Tsunami Evacuation Zone, highlighting the area's vulnerability to tsunami events as the parcel abuts the shoreline (Hawai‘i State Civil Defense, 2025). The tsunami evacuation zone maps identify low lying areas where evacuation is recommended since extensive damage to life and property may occur from seismic sea waves.

Hurricanes

The project area, similar to the rest of Hawai‘i, is susceptible to hurricanes, particularly during the Pacific hurricane season from June through November. The State of Hawai‘i has a 68.5 percent chance of a hurricane of any magnitude occurring within 60 nautical miles in any given year (Hawai‘i Emergency Management Agency, 2023). While direct hits are relatively rare, hurricanes can bring strong winds, heavy rainfall, and storm surges, which could impact the region.

Sea Level Rise

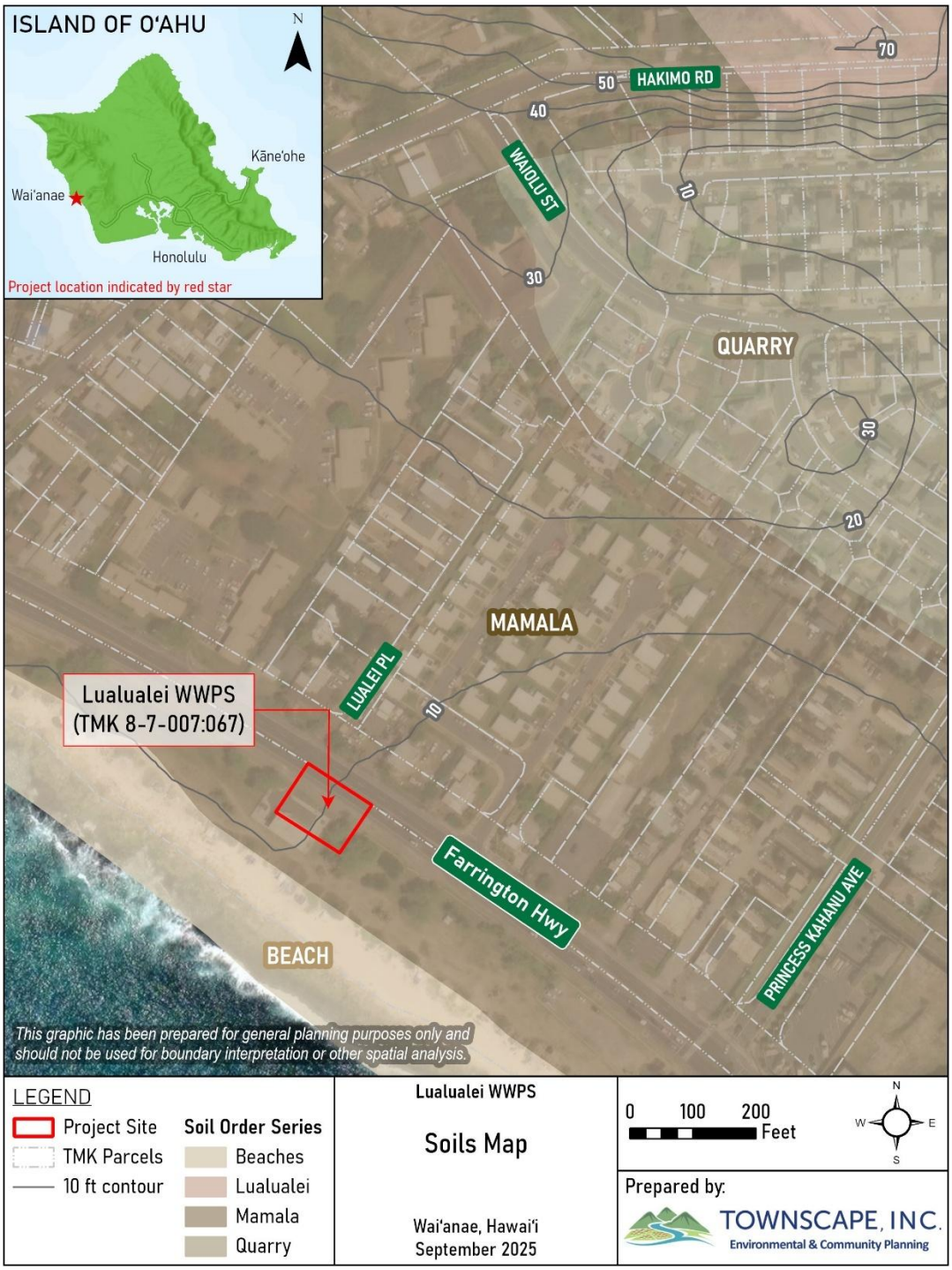
Sea level rise (SLR) has the potential to threaten life and property in coastal and low elevation areas. The *Sea Level Rise II* guidance document (2022) by the City’s Climate Change Commission recommends that the City set the Intermediate High (1.78 m, 5.8 ft by 2100) sea level rise scenario as a planning and policy benchmark for all planning and public infrastructure projects. Under this scenario, the Lualualei WWPS would not be inundated according to the Sea Level Rise Viewer tool provided by the National Oceanic and Atmospheric Administration (2025).

In an early consultation letter dated April 17, 2025, the Department of Planning and Permitting (DPP) stated that according to the State of Hawai‘i SLR Viewer, the project area may be affected by 2.0 feet of SLR by 2100. Figure 12 shows the extent of impact with 3.2 feet rise in sea level.

Flooding

According to the Flood Hazard Assessment Tool (2025) provided by DLNR, the project site is primarily located within Flood Zone VE and partially within Flood Zone AE, both classified as an area of high flood risk (see Figure 12). Flood Zone AE corresponds with areas subject to inundation by the one-percent-annual-chance flood event and Flood Zone VE corresponds with areas subject to inundation by the

Figure 10 Soils and Topography



one-percent-annual chance flood event with additional hazards due to storm-induced velocity wave action. Base Flood Elevations (BFE) within the project site are between 12 and 14 feet, or in other words the computed elevation to which floodwater is anticipated to rise during the one-percent-chance flood event.

Wildfires

The DLNR Division of Forestry and Wildlife (DOFAW) Fire Management Program classifies the project area as having a high wildfire risk. Located on the leeward side of the island, the likelihood of wildfire occurrence in this area is high.

Impacts and Mitigation Measures

The threats to people and property from unpredictable natural events will always be present. The likelihood and potential severity of tsunami and hurricane-related impacts will be no greater than elsewhere in the region, and the planned activities will not exacerbate their associated hazards. The location and planned activities do not introduce any significant factors that would elevate the likelihood of wildfire or flooding in the area. The proposed project is not expected to affect or exacerbate the occurrence of naturally occurring hazards.

Figure 11 Tsunami Hazard

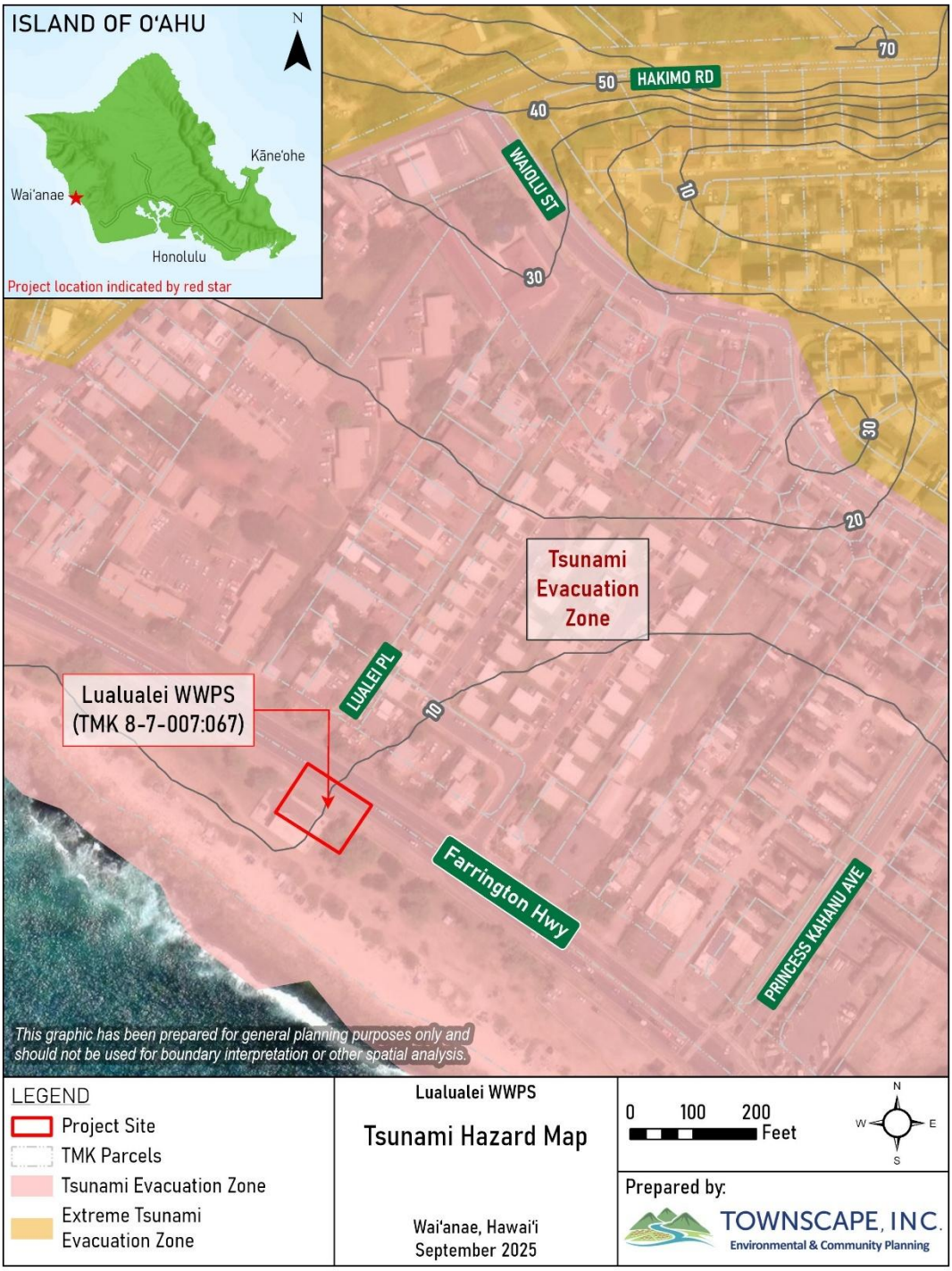
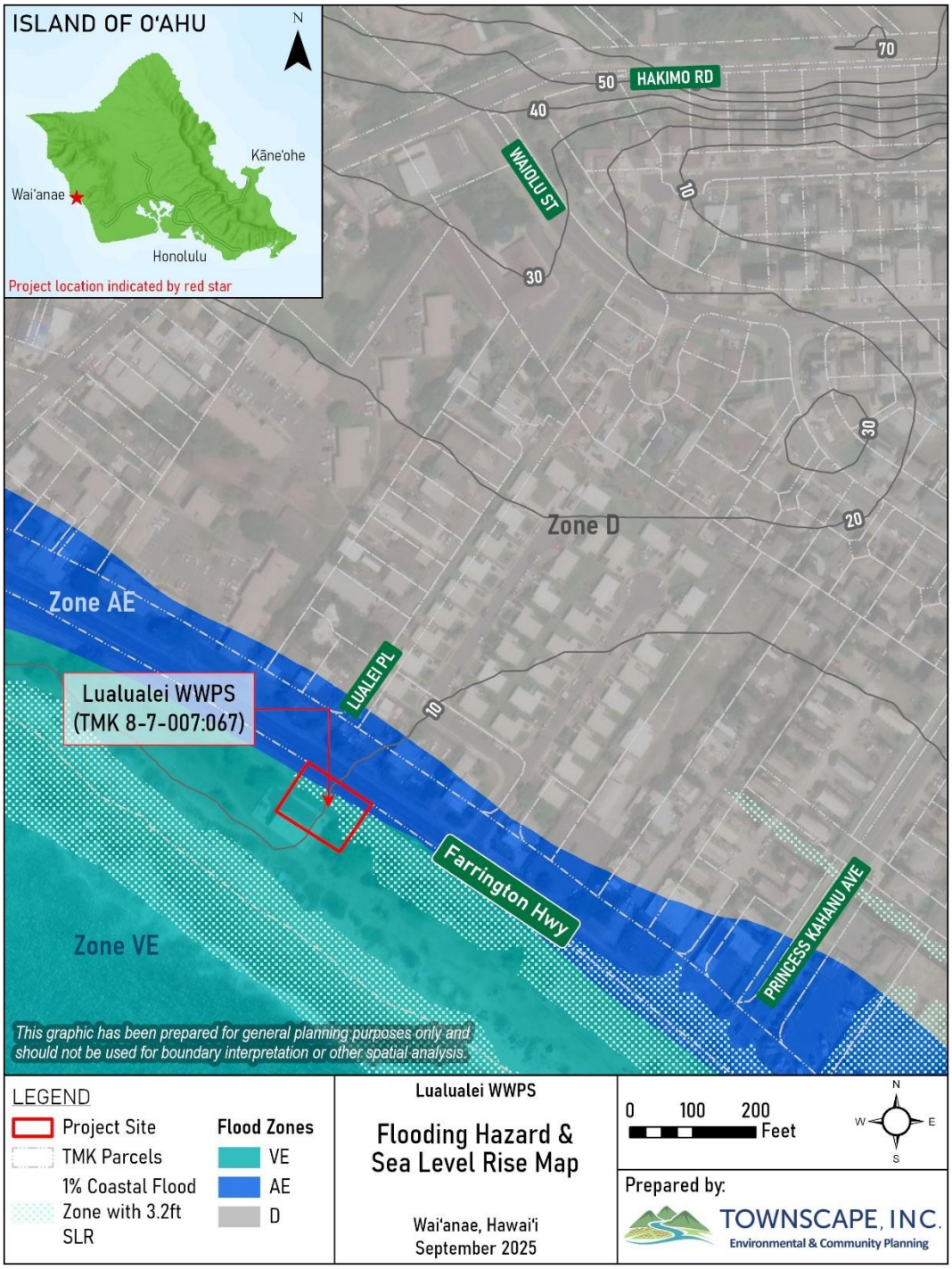


Figure 12 Flooding Level and Sea Level Rise



2.2. Archaeological, Architectural and Cultural Resources

Archaeologists with Cultural Surveys Hawai‘i (CSH) conducted a field inspection on March 19, 2025, which consisted of a pedestrian survey of the Lualualei WWPS and the surrounding area within the perimeter fence. No historic archaeological resources were identified during the survey. The following information is summarized from the Literature Review and Field Inspection report prepared by CSH (see Appendix A) unless otherwise noted.

The ahupua‘a of Lualualei, which the WWPS project site is situated within, has cultural significance and is known for its wahi pana (storied places) and traditional agricultural abundance. Lualualei has several wahi pana associated with the Polynesian demigod Māui, including Pu‘u Heleakalā, the cave where Hina would make kapa, and the Māui Pōhaku [(boulder) designated in the State Inventory of Historic Places # 50-80-07-00148], which is across Farrington Highway but only about 150 meters from the Lualualei WWPS. The project site is also situated close to the Ulehawa Beach Park land section and historical Ulehawa Stream (now just a drainage channel), which is believed to be the site where Māui was born (Sterling and Summers, 1978).

While people experience the Wai‘anae moku (district) as a dry place today, historically the area was quite abundant with water and supported pondfield taro cultivation. At the time of the Māhele in the mid-nineteenth century, 163 lo‘i (irrigated pondfield taro patches) were actively in cultivation in the ‘ili of Pūhāwai within the Lualualei ahupua‘a. On the periphery of the lo‘i areas, there were unirrigated crops grown on the kula (plains), including kō (sugarcane) and wauke (paper mulberry).

Land use in the area transitioned to ranching and sugar production in the late 19th century, as well as the establishment of U.S. military reservations and activities beginning in the early twentieth century. These former ranching activities, sugar industry, and the unregulated pumping of groundwater may have contributed to the dry conditions that developed over time in the Wai‘anae moku, and Lualualei in particular.

The first cattle were brought to O‘ahu in 1809 by Kamehameha I and John Young, and Lualualei was utilized as one of the first sites on-island for ranching. By 1880, ranching and grazing took up approximately 17,000 acres of land in Lualualei that were leased from the Crown. George Bowser observed the ranching and grazing taking place on the slopes and plains but expressed that the soils were suitable to support crops, if only irrigation were to be supplied (Bowser, 1880). In 1879, the

Waiʻanae Sugar Plantation was established and extended into Lualualei. It was one of the first and last plantations to be serviced by a railroad. Due to the dry conditions, the sugar plantation ultimately closed and the land was sold by 1946. A section of the railroad remains today makai of Farrington Highway and is approximately 200 meters away from the Lualualei WWPS project site.

Homesteading also began in Lualualei at the beginning of Hawaiʻi's Territorial period, but due to the lack of water during this time, the lots continued to be used for grazing and were purchased by Euro-American ranchers. Homestead lots were located mauka of Farrington Highway, but there is no indication of homestead lots being situated on the WWPS project site.

The coastal portion of Lualualei near the WWPS project site has only had a handful of archaeological studies conducted in the past due to minimal development in the area. Previous archaeological studies were conducted along the Lualualei coast, Ulehawa Beach Park, and in the immediate vicinity of the WWPS project site by Dega (1998), McDermott and Hammatt (2000), and (Mierzejewski et al. 2014a, 2014b), but no artifacts or historical properties were identified within the immediate vicinity of the project site. The only artifact found within 400 meters of the WWPS project site is the Māui Pōhaku mentioned above, which is located mauka of Farrington Highway. About one kilometer west of the project site, ancient house sites, a salt production pond, and a rock with petroglyphs were previously identified (Sterling and Summers, 1978; McAllister, 1933).

Impacts and Mitigation Measures

No impacts to existing archaeological, architectural, or cultural resources are anticipated. The installation of the AST and removal of the existing tank will not require expansion of the existing site nor disturbance to the land beyond what has already been displaced. Functionally, the new installation will have generally the same use and properties.

In the event that any unexpected iwi or other historical remains are uncovered during the various phases of construction (e.g. excavation and trenching), the Contractor will be required to halt construction activities and to immediately notify the State Historic Preservation Division (SHPD) of the discovery. The Contractor will prevent the disturbance or taking of any discovered archaeological, historic, or cultural resources to the extent possible by instituting the described mitigation measures (i.e., halt construction and immediately notify SHPD) and enforcing their implementation by its contractors.

2.3. Floral and Faunal Resources

The project site was previously disturbed for the construction of the WWPS. No vegetation has been observed in the proposed limits of disturbance during a site visit in January 2025 by the project team. An early consultation letter from DLNR DOFAW on May 20, 2025, states that there are no Federally declared critical habitats in the vicinity of this project nor any other Federal administered lands in the area. However, the following State listed species may occur within the project area: 1) ʻōpeʻapeʻa, or Hawaiian hoary bat (*Lasiurus semotus*), 2) several species of seabirds, 3) honu or green sea turtle (*Chelonia mydas*), and 4) ʻīlio holo i ka uaua or Hawaiian monk seal (*Monachus schauinslandi*).

According to the U.S. Fish and Wildlife Service's map for the Information for Planning and Consultation (2025), there are several species as potentially occurring in the general vicinity or passing through the area:

- Hawaiian Hoary Bat – *Lasiurus cinereus semotus*
- Band-Rumped Storm-petrel – *Hydrobates castro*
- Hawaiian Common Gallinule – *Gallinula galeata sandvicensis*
- Hawaiian Coot (Keʻokeʻo) – *Fulica alai*
- Hawaiian Duck – *Anas wyvilliana*
- Hawaiian Petrel – *Pterodroma sandwichensis*
- Hawaiian Stilt – *Himantopus mexicanus knudseni*
- Newell's Shearwater – *Puffinus newelli*
- Short-tailed Albatross – *Phoebastria albatrus*
- Green Sea Turtle – *Chelonia mydas*
- Hawksbill Sea Turtle – *Eretmochelys imbricata*

The following flora species have been identified for this region:

- ʻAkoko – *Euphorbia celastroides var. kaenana*
- ʻAkoko – *Euphorbia skottsbergii var. skotsbergii*
- ʻEnaʻena – *Pseudognaphalium sandwicensium var. molokaiense*
- Awiwi – *Schenkia sebaeoides*
- Dwarf Naupaka – *Scaevola coriacea*
- Ihi – *Portulaca villosa*
- Ohai – *Sesbania tomentosa*

- Popolo – *Solanum nelsonii*
- Puʻukaʻa – *Cyperus trachysanthos*
- Round-leaved Chaff-flower – *Achyranthes splendens var. rotundata*
- Ihiʻihi – *Marsilea villosa*

Impacts and Mitigation Measures

Construction will occur entirely within the existing City property on land that has been previously disturbed and where no native plants are present. Vegetation removal, if any, will be kept to a minimum, and the project is not expected to have a significant impact on flora and fauna in the area.

A letter from DLNR DOFAW on May 20, 2025 indicates that the Lualualei Forest Reserve is about 1.9 miles from the project site. It is requested that special attention be given to fire prevention and planning, forest pathogens, and invasive species.

The following guidance is provided to minimize impacts to the following species:

Hawaiian hoary bat

- Woody plants greater than 15 feet tall should not be disturbed, removed, or trimmed during the bat birthing and pup rearing season (June 1 through September 15).
- Barbed wire should not be used in any construction as bats can become ensnared and killed by such fencing material during flight.

Seabirds

- Prior to initiating construction and before restarting construction after a delay, qualified personnel with seabird biology experience will conduct surveys of nearby areas for signs of active nesting or brooding. If a nest or brood is found, a 100-foot buffer around the area will be created.
- For nighttime work that might be required, use fully shielded lights angled downward to reduce the risk of harm to native seabirds.
- Nighttime work that requires outdoor lighting should be avoided during the seabird fledging season (September 15 through December 15) when young seabirds make their maiden voyage to sea.
- If nighttime construction is required, a qualified biologist should be present at the project site to monitor and assess the risk of seabirds being attracted or grounded due to the lighting.

- Permanent lighting also poses a risk of seabird attraction and should be minimized or eliminated. If needed, permanent lighting should be shielded or angled downward.

Invasive Species

- DOFAW recommends minimizing movement of plant or soil material between worksites to prevent the transport of fungal pathogens, vertebrate and invertebrate pests, and invasive plant species. Consultation is recommended with the O‘ahu Invasive Species Committee to help design and plan the project.
- It is recommended that the import of soil or plant material from off-island that may contain fungi and other pathogens be avoided. Consultation is recommended with the Hawai‘i Interagency Biosecurity Plan in the construction process.
- To prevent infestation of the Coconut Rhinoceros Beetle (CRB), the movement of CRB-host material, including a) entire dead trees; b) mulch, compost, trimmings, fruit and vegetative scraps; and c) decaying stumps, is prohibited under the Hawai‘i Department of Agriculture’s Plant Quarantine Interim Rule 22-1. In addition, host plants for CRB include the live palm plants of the following genera: Washingtonia, Livistona, and Pritchardia (all commonly known as fan palms), Cocos (coconut palms), Phoenix (date palms), and Roystonea (royal palms), all of which may contain CRB infestations.

In addition, all on-site workers should be trained on recognizing State-listed waterbirds and seabirds. Should any State-listed waterbirds or seabirds be observed during construction operations, all activities within a 100-foot radius shall stop until all such birds depart the area on their own.

2.4. Environmental Quality

2.4.1. Visual Resources

The project site is located in a relatively undeveloped area, with views of the surrounding open space and beach park. Houseless encampments are present along the site boundaries. A CMU wall along Farrington Highway creates a clear separation between the roadway and the pump station, serving as a visual buffer from the roadway.

Impacts and Mitigation Measures

No significant impact on the area's visual resources is anticipated. The project site is fenced, including an existing CMU-wall fronting Farrington Highway that serves as a visual screen. Therefore, the viewsheds of the coastline would not be affected by the proposed project. The installation of the AST and a six-foot-high wave wall will occupy space within the project parcel, adjacent to the existing structure.

2.4.2. Acoustic Characteristics

Noise from the project site is influenced by its proximity to Farrington Highway, a major State roadway that serves as the only access point to the Waiʻanae Coast. Traffic along Farrington Highway is a prominent source of background noise in the area, with the constant flow of vehicles contributing significantly to the overall sound environment.

Impacts and Mitigation Measures

Temporary audible noise from the project is expected to be intermittent and unavoidable due to the presence of construction vehicles, heavy equipment, and excavation activities. Ambient noise levels are expected to briefly increase during construction, primarily from work vehicles and machinery.

To mitigate noise impacts, construction work will be scheduled during daytime hours, thereby avoiding excessive noise during the nighttime. Given the existing noise environment from vehicles passing along Farrington Highway, the construction is not expected to significantly increase overall noise levels.

The Contractor will be required to follow BMPs to control noise levels at all times. Temporary noise reduction measures during construction may include, but are not limited to, the use of sound-walls, sound blankets and curtains, equipment mufflers and low-noise generators.

2.4.3. Air Quality

The air quality at the WWPS is generally consistent with ambient conditions typical of coastal areas on the Waiʻanae Coast where prevailing trade winds typically help disperse odors and maintain good air circulation. Emissions from nearby traffic along Farrington Highway may contribute to localized air pollutants.

Impacts and Mitigation Measures

No significant impacts to air quality nor measurable adverse effect on climatic conditions is anticipated from the project. Ambient air quality may be temporarily affected by construction-related vehicles, equipment, and activities that would generate fugitive dust and emissions. To prevent air pollution and dust control as a result of the demolition of structures, the Contractor shall sprinkle exposed soils with water to maintain moistness.

2.4.4. Hazardous Materials

The proposed AST will store up to 2,000 gallons of diesel fuel for the WWPS facility operations. Stored fuel is regulated under National Fire Protection Association (NFPA) 30 (Flammable and Combustible Liquids Code), the Honolulu Fire Code, ROH Chapter 66, and Clean Water Act Spill Prevention, Control and Counter Measures or SPCC rule (40 CFR 112).

Impacts and Mitigation Measures

Secondary containment with interstitial monitoring will be provided in compliance with regulatory requirements. A minimum of 36 inches of clearance will be maintained around the AST.

The proposed fuel storage tank will be designed, installed, and maintained in accordance with all applicable federal, state, and county regulations. With appropriate containment and emergency measures in place, the project is not expected to result in significant adverse impacts related to hazardous materials. The upgrades of the storage tank system shall be in strict accordance with the guidelines and requirements set forth in the Federal Register 40, CFR PART 280 and the American Petroleum Institute recommended practice 2015 "safe entry and cleaning of petroleum storage tanks" and shall adhere to all required safety precautions.

If there are any fuel spillages or existing leaks found as a result of construction, the Contractor shall report it to the Hazard Evaluation and Emergency Response Unit of the Department of Health.

2.5. Public Infrastructure & Services

2.5.1. Site Access, Circulation and Traffic

Vehicular access to the project site is from Farrington Highway, the primary access roadway to the Waiʻanae Coast. Access to the site is restricted for security and operational purposes. The parcel is fully enclosed with a CMU wall or chain-link fence and secured by a locked gate. Entry to the WWPS property is limited to authorized City personnel and contractors. On-site circulation is minimal and consists of a small paved area extending from the gate to the front of the facility, which is sufficient for maneuvering maintenance vehicles and equipment. Due to the nature of the facility, traffic generation is minimal and predominately involves City staff conducting inspections, routine maintenance, and emergency responses.

Impacts and Mitigation Measures

Construction vehicles hauling materials and workers to and from the WWPS may contribute to traffic volume on Farrington Highway, and it is recommended that construction deliveries be scheduled to avoid peak hours. Temporary impacts to traffic may occur during construction of the proposed project, but the impacts are anticipated to be minimal.

2.5.2. Potable Water and Wastewater

Water service is supplied by the Honolulu Board of Water Supply. It provides potable water for the facility, which is used for a sink and restroom, hose connections, and air gap flushing. An 8-inch water line runs on Farrington Highway.

As stated earlier, wastewater from Lualualei WWPS is conveyed to the Waiʻanae WWTP via a 20-inch force main along Farrington Highway.

Impacts and Mitigation Measures

In an early consultation letter dated April 16, 2025, the Board of Water Supply indicated that the existing water system is adequate to accommodate the proposed development. Final decision on the availability of water will be confirmed when the building permit application is submitted for approval. Where applicable, water efficient fixtures will be installed and water efficient practices implemented to reduce increasing demand on the area’s freshwater resources.

The proposed upgrades will not alter the capacity or operations of the WWPS, but will improve the reliability of service so the community can expect continued reliable wastewater services, which support the economic and social welfare of the communities served by the WWPS. Since no significant impacts to the utilities are anticipated, no mitigation is proposed.

2.5.3. Power and Communications

Hawaiian Electric Company provides power to the pump station via their underground facilities. A transformer is pad-mounted on the East corner of the property. It is HECO owned and maintained.

The emergency power system is used to provide backup power when normal HECO service fails. The system consists of two major components: the emergency generator and the automatic transfer controller.

Communication systems consist of the following: Telemetry and SCADA, and telephone service. The telemetry and SCADA system provides local and remote monitoring of the facility. Telephone service is used for normal telephone communications and as a mechanism for telemetry to SCADA.

Impacts and Mitigation Measures

No significant adverse impacts to power and communications are anticipated. In an e-mail response dated April 16, 2025 from HECO during the early consultation process, HECO stated that coordination may be required for system extensions or service upgrades depending on the final design and electrical load requirements. Access to HECO facilities within or adjacent to the site will be maintained at all times for safe operation, maintenance, and emergency response.

During the transition from the removal of the existing UST, restoration of the UST area, and installation of the new AST fuel system, the standby generator will be without a diesel fuel source for a brief period. A portable fuel storage tank will be staged on site and connected to the generator in advance to ensure continuous standby power capability. Therefore, in the event of a HECO power outage, the generator will be able to use fuel from the temporary tank to provide backup power.

2.5.4. Emergency Service Facilities

Law enforcement services are provided by the Honolulu Police Department (HPD). The nearest police station is the Waiʻanae Police Station, located at 85-939 Farrington Highway, approximately 4.3 miles from the project site.

The Honolulu Fire Department (HFD) provides fire protection and first responder emergency services. The nearest fire station is Nānākuli Fire Station 28, located at 89-334 Nānākuli Avenue, approximately two miles from the project site.

The Waiʻanae Coast Comprehensive Health Center, located at 86-260 Farrington Highway, is approximately 3.4 miles from the project site.

Impacts and Mitigation Measures

No significant adverse impacts to police, fire, or medical services are anticipated to occur from the proposed project at the Lualualei WWPS. A letter from HPD dated April 14, 2025 stated that they do not have any concerns at this time and a letter dated April 11, 2025 from the HFD requested that all applicable requirements of the ROH Chapter 20 be in effect at the time the building permit application for the project is issued.

2.5.5. Recreational Resources

The WWPS is surrounded by Ulehawa Beach Park, which is managed by the City's Department of Parks and Recreation. The area immediately adjacent to the project site is occupied by houseless encampments.

Impacts and Mitigation Measures

The project is not anticipated to have any significant impact on the functioning or quality of existing recreational resources in the area. If the staging of equipment or vehicles is needed on park property during construction, the project team will coordinate with Department of Parks and Recreation (DPR) to obtain a Right of Entry Permit.

2.6. Socio-Economic Characteristics

The project site is situated on the Waiʻanae Coast on Oʻahu, within the Nānākuli-Māʻili Neighborhood Area. This region is predominately home to Native Hawaiian and Pacific Islander populations. The area has a resident population is 26,744 people and contains 6,161 total households, with an average household size of 4.2 individuals. The median household income is $83,841. (Department of Planning and Permitting, 2023)

Impacts and Mitigation Measures

The project will involve construction activities that will create short-term jobs in design and construction. The project will not affect population levels or housing. The proposed upgrades will not alter the capacity or operations of the WWPS. The community can expect continued reliable wastewater services, which support the economic and social welfare of the community served by the WWPS.

3. RELATIONSHIP TO PLANS, POLICIES, AND CONTROLS

3.1. Hawai‘i State Plan

The Hawai‘i State Plan, HRS Chapter 226, outlines broad goals, policies, and objectives to serve as guidelines for the future growth and development of the State. It also provides a basis for determining priorities, allocating limited resources, and improving coordination of State and County plans, policies, programs, projects, and regulatory activities. The Hawai‘i State Plan establishes a set of themes, goals, objectives, and policies that are meant to guide the State’s long-range growth and development activities. Applicable sections of HRS Chapter 226 to the proposed project are discussed below.

§226-13 Objectives and policies for the physical environment--land, air, and water quality.

Objective 1. Maintenance and pursuit of improved quality in Hawai‘i’s land, air, and water resources.

Policy 2. Promote the proper management of Hawai‘i’s land and water resources.

Policy 3. Promote effective measures to achieve desired quality in Hawai'i’s surface, ground, and coastal waters.

Policy 5. Reduce the threat to life and property from erosion, flooding, tsunamis, hurricanes, earthquakes, volcanic eruptions, and other natural or man-induced hazards and disasters.

§226-14 Objective and policies for facility systems--in general.

Policy 1. Accommodate the needs of Hawai‘i’s people through coordination of facility systems and capital improvement priorities in consonance with state and county plans.

Policy 6. Assess a range of options to mitigate the impacts of sea level rise to existing and planned state facilities.

§226-15 Objectives and policies for facility systems--solid and liquid wastes.

Objective 1. Maintenance of basic public health and sanitation standards relating to treatment and disposal of solid and liquid wastes.

Objective 2. Provision of adequate sewerage facilities for physical and economic activities that alleviate problems in housing, employment, mobility, and other areas.

Discussion:
The proposed project complies with the elements of the Hawai‘i State Plan by providing essential upgrades to critical public infrastructure and enhancing its resiliency against future disruptions or disasters. By upgrading the fuel tank storage infrastructure to reduce the risk of fuel leaks into the environment, the project supports the State’s objectives to maintain sewage facilities that meet public health and sanitation standards.

3.2. State Land Use District

The State Land Use Law (HRS Chapter 205) is intended to preserve, protect, and encourage the development of lands in the State for uses which are best suited to the public health and welfare for Hawai‘i’s people. All lands in the State are classified into four land use districts by the State of Hawai‘i, Land Use Commission: Urban, Rural, Agricultural, and Conservation.

The project site is entirely located within the Urban District, which is regulated by county zoning (see Section 3.8 City and County of Honolulu LUO). The proposed project is a permissible public use and structure within the Urban District, which has residential neighborhoods, commercial enterprises, industrial development, and community facilities such as public buildings.

3.3. State Coastal Zone Management Program

In 1977, Hawai‘i enacted HRS Chapter 205A, Hawai‘i Coastal Zone Management Program, to implement the state’s coastal policies and regulations. The program was designed to coordinate federal, state, and county agency efforts in the comprehensive management of Hawai‘i’s coastal resources. It is administered by the State of Hawai‘i, Office of Planning and Sustainable Development, while the four individual counties are responsible for local implementation through the Special Management Area (SMA) permit and Shoreline Setback Variance (SSV).

The objective of the act is to protect, preserve, and restore recreational, historic, and scenic resources as well as implement the State’s ocean resources management plan and protect coastal ecosystems.

The objectives and policies from HRS Chapter 205A-2, along with a discussion of how the project conforms to these objectives and policies, are provided below.

Recreational Resources

Objective: Provide coastal recreational opportunities accessible to the public.

Policies:

(A) Improve coordination and funding of coastal recreational planning and management; and

(B) Provide adequate, accessible, and diverse recreational opportunities in the coastal zone management area by:

(i) Protecting coastal resources uniquely suited for recreational activities that cannot be provided in other areas;

(ii) (Requiring replacement of coastal resources having significant recreational value including, but not limited to, surfing sites, fishponds, and sand beaches, when such resources will be unavoidably damaged by development; or requiring reasonable monetary compensation to the State for recreation when replacement is not feasible or desirable;

(iii) Providing and managing adequate public access, consistent with conservation of natural resources, to and along shorelines with recreational value;

(iv) Providing an adequate supply of shoreline parks and other recreational facilities suitable for public recreation;

(v) Ensuring public recreational uses of county, state, and federally owned or controlled shoreline lands and waters having recreational value consistent with public safety standards and conservation of natural resources;

(vi) Adopting water quality standards and regulating point and nonpoint sources of pollution to protect, and where feasible, restore the recreational value of coastal waters;

(vii) Developing new shoreline recreational opportunities, where appropriate, such as artificial lagoons, artificial beaches, and artificial reefs for surfing and fishing; and

(viii) Encouraging reasonable dedication of shoreline areas with recreational value for public use as part of discretionary approvals or permits by the land use commission, board of land

and natural resources, and county authorities; and crediting such dedication against the requirements of section 46-6.

Discussion:
While the Lualualei WWPS is surrounded by Ulehawa Beach Park, the proposed project will not impact access to the shoreline. Existing recreational uses in the vicinity of the project site are not anticipated to be adversely affected by the proposed project.

Historic Resources

Objective: Protect, preserve, and, where desirable, restore those natural and manmade historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture.

Policies:

(A) Identify and analyze significant archaeological resources;

(B) Maximize information retention through preservation of remains and artifacts or salvage operations; and

(C) Support state goals for protection, restoration, interpretation, and display of historic resources.

Discussion:
There are no known cultural or historic resources within the site boundary, which has been previously graded, but recommendations by the SHPD will be followed to protect cultural resources, should any be discovered during construction.

Scenic and Open Space Resources

Objective: Protect, preserve, and, where desirable, restore or improve the quality of coastal scenic and open space resources.

Policies:

(A) Identify valued scenic resources in the coastal zone management area;

(B) Ensure that new developments are compatible with their visual environment by designing and locating those developments to minimize the alteration of natural landforms and existing public views to and along the shoreline;

(C) Preserve, maintain, and, where desirable, improve and restore shoreline open space and scenic resources; and

(D) Encourage those developments that are not coastal dependent to locate in inland areas.

Discussion:
The potential for adverse visual impacts is anticipated to be minimal. The proposed project involves replacing an existing underground fuel storage tank with an aboveground fuel storage tank, which will be located behind a CMU wall fronting Farrington Highway. This wall serves as visual screen from the primary public view corridor. Site grading will be minimized to preserve the natural contours of the land.

The project preserves the existing shoreline vegetation and open space by limiting the development footprint to a previously disturbed area, thereby avoiding new encroachment into pristine open space. While the AST is not directly coastal-dependent, its location is determined by the presence of the existing WWPS infrastructure and the critical role it plays in ensuring the continued operation of the WWPS during emergencies.

Coastal Ecosystems

Objective: Protect valuable coastal ecosystems, including reefs, from disruption and minimize adverse impacts on all coastal ecosystems.

Policies:

(A) Exercise an overall conservation ethic, and practice stewardship in the protection, use, and development of marine and coastal resources;

(B) Improve the technical basis for natural resource management;

(C) Preserve valuable coastal ecosystems, including reefs, of significant biological or economic importance;

(D) Minimize disruption or degradation of coastal water ecosystems by effective regulation of stream diversions, channelization, and similar land and water uses, recognizing competing water needs; and

(E) Promote water quantity and quality planning and management practices that reflect the tolerance of fresh water and marine ecosystems and maintain and enhance water quality through the development and implementation of point and nonpoint source water pollution control measures.

Discussion:
This project replaces outdated infrastructure with a new fuel storage system that complies with current state regulations. The proposed AST will provide improved monitoring, maintenance and containment capabilities, thereby reducing the risk of fuel leaks that could impact coastal waters and marine ecosystems. The AST will be equipped with built-in secondary containment systems to capture any potential spills and minimize the risk of environmental contamination.

In addition, the project enhances accessibility and monitoring capability, which supports a more proactive and data-driven approach to resource management. The AST will include leak detection sensors and meet the latest standards for fuel storage safety, which is particularly important near sensitive coastal areas.

Economic Uses

Objective: Provide public or private facilities and improvements important to the State's economy in suitable locations.

Policies:

(A) Concentrate coastal dependent development in appropriate areas;

(B) Ensure that coastal dependent development and coastal related development are located, designed, and constructed to minimize exposure to coastal hazards and adverse social, visual, and environmental impacts in the coastal zone management area; and

(C) Direct the location and expansion of coastal dependent development to areas presently designated and used for that development and permit reasonable long-term growth at those areas, and permit coastal dependent development outside of presently designated areas when:

(i) Use of presently designated locations is not feasible;

(ii) Adverse environmental effects and risks from coastal hazards are minimized; and

(iii) The development is important to the State’s economy.

Discussion:
The proposed project supports a coastal-related public utility facility that is essential for conveying wastewater from schools, residential and commercial lots in Lualualei, as well as the upstream Nānākuli WWPS, to the Waiʻanae Wastewater Treatment Plant. By upgrading the infrastructure, the project ensures continued operation during power outages, thus supporting public health, safety, and economic stability.

Coastal Hazards

Objective: Reduce hazard to life and property from coastal hazards.

Policies:

(A) Develop and communicate adequate information about the risks of coastal hazards;

(B) Control development, in planning and zoning control, in areas subject to coastal hazards;

(C) Ensure that developments comply with requirements of the National Flood Insurance Program; and

(D) Prevent coastal flooding from inland projects.

Discussion:

The AST includes secondary containment to control potential fuel leaks and protect against point source pollution. A six-foot-high wave wall will be installed to minimize potential storm surge impact to the AST. The project will comply with all applicable flood requirements, including locating equipment above BFEs and ensuring that anchoring and construction standards meet flood zone regulations. In addition, the project will not increase runoff or alter drainage patterns in a way that could contribute to coastal flooding.

Managing Development

Objective: Improve the development review process, communication, and public participation in the management of coastal resources and hazards.

Policies:

(A) Use, implement, and enforce existing law effectively to the maximum extent possible in managing present and future coastal zone development;

(B) Facilitate timely processing of applications for development permits and resolve overlapping or conflicting permit requirements; and

(C) Communicate the potential short and long-term impacts of proposed significant coastal developments early in their life cycle and in terms understandable to the public to facilitate public participation in the planning and review process.

Discussion:
The project will require several permits and regulatory approvals, including compliance with the Coastal Zone Management Act, Department of Health requirements for fuel storage, floodplain management standards, and the Chapter 343 Environmental Review process. The project team has coordinated with relevant regulatory agencies and provided public access to project information through the EA, which outlines potential short-term impacts and long-term benefits of the project. The EA process, as well as the SMA and SSV permitting process, will provide an opportunity for the public to review and comment on the proposed project.

Public Participation

Objective: Stimulate public awareness, education, and participation in coastal management.

Policies:

(A) Promote public involvement in coastal zone management processes;

(B) Disseminate information on coastal management issues by means of educational materials, published reports, staff contact, and public workshops for persons and organizations concerned with coastal related issues, developments, and government activities; and

(C) Organize workshops, policy dialogues, and site-specific mediations to respond to coastal issues and conflicts.

Discussion:
The proposed project fosters public awareness and publication by promoting communication and engagement through the EA process. Additional opportunities for public participation will be provided through the SMA and SSV permitting process.

Beach and Coastal Dune Protection

Objective:

(A) Protect beaches for public use and recreation: public use and recreation; the benefit of coastal ecosystems; and use as natural buffers against coastal hazards; and

(B) Coordinate and fund beach management and protection.

Policies:

(A) Locate new structures inland from the shoreline setback to conserve open space, minimize interference with natural shoreline processes, and minimize loss of improvements due to erosion;

(B) Prohibit construction of private shoreline hardening structures, including seawalls and revetments, at sites having sand beaches and at sites where shoreline hardening structures interfere with existing recreational and waterline activities;

(C) Minimize the construction of public shoreline hardening structures, including seawalls and revetments, at sites having sand beaches and at sites where shoreline hardening structures interfere with existing recreational and waterline activities;

(D) Minimize grading of and damage to coastal dunes;

(E) Prohibit private property owners from creating a public nuisance by inducing or cultivating the private property owner's vegetation in a beach transit corridor; and

(F) Prohibit private property owners from creating a public nuisance by allowing the private property owner's unmaintained vegetation to interfere or encroach upon a beach transit corridor.

Discussion:
The proposed project conserves open space by being sited within an already developed area, thus avoiding impacts to natural shoreline processes. It does not involve any erosion-protection structures seaward of the shoreline and preserves public access to, and recreational use of, the beaches.

Marine Resources

Objective: Promote the protection, use, and development of marine and coastal resources to assure their sustainability.

Policies:

(A) Ensure that the use and development of marine and coastal resources are ecologically and environmentally sound and economically beneficial;

(B) Coordinate the management of marine and coastal resources and activities to improve effectiveness and efficiency;

(C) Assert and articulate the interests of the State as a partner with federal agencies in the sound management of ocean resources within the United States exclusive economic zone;

(D) Promote research, study, and understanding of ocean and coastal processes, impacts of climate change and sea level rise, marine life, and other ocean resources to acquire and inventory information necessary to understand how coastal development activities relate to and impact upon ocean and coastal resources; and

(E) Encourage research and development of new, innovative technologies for exploring, using, or protecting marine and coastal resources.

Discussion:
See discussion above for Objective 4, Coastal Ecosystems.

3.4. Special Management Area

The purpose of the SMA is to "preserve, protect, and where possible, to restore the natural resources of the coastal zone of Hawai'i" (HRS Chapter 205A). Any action defined as "development," pursuant to HRS Chapter 205A-22, requires an SMA (minor or major) Use Permit. On O'ahu, the SMA permit is administered by DPP. The project area is in the SMA and an SMA permit is required.

3.5. Shoreline Setback Area

The Shoreline Setback Area is a buffer zone inland from the certified shoreline, within which development is restricted or regulated to prevent adverse impacts. ROH Chapter 26 regulates the location and type of development allowed within shoreline setback areas to minimize hazards, protect coastal ecosystems, and preserve public shoreline access. As indicated by a letter from DPP on April 17, 2025, the project area is subject to yearly shoreline erosion and, per a Certified Shoreline Survey dated November 2, 2010, the proposed project is located in the shoreline area. A Shoreline Setback Variance will need to be obtained from the City DPP.

In accordance with ROH Section 26-1.8(b)(2), the Director may grant a variance if the proposed construction meets the Public Interest Standard:

> A variance may be granted for a structure or activity that is necessary for or ancillary to facilities or improvements by a public agency or public utility regulated under HRS Chapter 269…; provided that the proposal is the

practicable alternative which best conforms to the purpose of this chapter and the shoreline setback rules.

3.6. City and County of Honolulu General Plan

The O‘ahu General Plan (2021) contains aspirational objectives and policies that address the physical, social, cultural, economic, and environmental concerns affecting the City. The Honolulu City Council adopted the General Plan on December 1, 2021 and the Mayor signed it on January 14, 2022. Applicable objectives and policies from the General Plan relevant to the project are provided below.

III. Natural Environment and Resource Stewardship

Objective A: To protect and preserve the natural environment.

Policy 1: Protect O‘ahu's natural environment, especially the shoreline, valleys, and ridges, from incompatible development.

Policy 7: Protect the natural environment from damaging levels of air, water, and noise pollution.

V. Transportation and Utilities

Objective C: To maintain a high level of service for all utilities.

Policy 1: Maintain and upgrade utility systems in order to avoid major breakdowns and service interruptions.

Policy 2: Provide improvements to utilities in existing neighborhoods to reduce substandard conditions, and increase resilience to fluctuations, natural hazards, extreme weather, and other climate impacts.

Objective D: To maintain transportation and utility systems which will help O‘ahu continue to be a desirable place to live and visit.

Policy 1: Give primary emphasis in the capital- improvement program to the maintenance and improvement of existing roads and utilities.

Policy 4: Evaluate the social, economic, and environmental impact of additions to the transportation and utility systems before they are constructed.

IX. Health and Education

Objective A: To protect the health and well-being of residents and visitors.

Policy 3: Coordinate City and County health codes and other regulations with State and Federal health codes to facilitate the enforcement of air, water, and noise pollution controls.

Discussion:
The Lualualei WWPS project aligns with the objectives and policies of the City and County of Honolulu General Plan. The project aims to minimize negative impacts on the natural environment and to maintain a high level of wastewater service for residents by replacing outdated equipment to meet current regulations and protect public health. The proposed improvements are designed to be compatible with the surrounding area.

3.7. Waiʻanae Sustainable Communities Plan

The City and County of Honolulu has divided Oʻahu into eight planning areas by ordinance, each with a Development Plan or a Sustainable Communities Plan (SCP) that outlines the vision, objectives, and goals for future development in the area. These community-oriented plans are intended to help guide land use planning and development on Oʻahu. The Waiʻanae SCP encompasses the leeward coast of Oʻahu from Nānākuli to Kaʻena Point, an area that includes the Lualualei WWPS.

The Waiʻanae SCP was updated in 2012 and is currently being updated. It incorporates input from representatives and community leaders from the Waiʻanae community into broader statewide public and private objectives. The key elements of the vision for the 2012 Waiʻanae SCP are summarized below:

- Recognize the traditional ahupuaʻa of the Waiʻanae District and adapt the ahupuaʻa concept as a framework for land use and open space planning
- Delineate the four major land use types: Preservation Lands, Agricultural Lands, Rural Community Areas, and Coastal Lands
- Restrict coastal urban, suburban, or resort development makai of Farrington Highway

- Preserve all lands north of Kepuhi Point as open space lands
- Preserve and restore streams and stream corridors
- Preserve and protect cultural sites and cultural landscapes
- Improve transportation systems within the District
- Designate, plan, and develop Town Centers and Community Gathering Places for Waiʻanae, Nānākuli, Lualualei, and Mākaha
- Develop and support community-based businesses
- Government agencies should partner with community-based organizations in order to better manage Waiʻanae's natural and cultural resources

The plan outlines several policies principles for sustainability to promote the long-term health of the land and its people, and its community resources for current and future generations. These principles include:

- Encourage planning, development, and construction technologies that minimize negative environmental impacts
- Guide the process of change. Strive to make decisions based on an understanding of the effects such decisions will have on the land and community resources.
- As an integral part of the planning process, consider the long-term impact of proposed actions and prepare plans that can accommodate the needs of future generations accordingly.

The City's plan prioritizes the preservation of Waiʻanae's natural, cultural, and historic resources, working in tandem with members of the community. It also seeks to accommodate very little population growth and preserve the rural character and lifestyle of the Waiʻanae District's people.

The project area is located on land designated by the plan for preservation, which is part of an area of the coast located makai of Farrington Highway, adjacent to a neighborhood of Nānākuli designated "rural residential."

Discussion:
The Lualualei WWPS project supports the vision and policies outlined in the plan by upgrading vital community infrastructure to prevent future risk to the land and surrounding coastal resources. The AST allows for easier access to the fuel tanks for necessary maintenance and repairs and avoids the risk of leakage into the soil.

3.8. City and County of Honolulu Land Use Ordinance

The LUO regulates land use in accordance with adopted land use policies, including the City's General Plan and the Development/Sustainable Community Plans. The project site is located within the P-2 General Preservation District (Figure 3), and is considered a public use and structure, which are permitted in the P-2 District. No discretionary land use permit is required for uses conducted by, or for structures owned or managed by, the federal government, the State of Hawai‘i or the City to fulfill a government function, activity or service for public benefit and in accordance with public policy.

4. POSSIBLE ALTERNATIVES

4.1. No Action

The no action alternative would maintain the status quo. No improvements would be made to the WWPS. However, since this project aims to provide important upgrades to the emergency fuel storage system as required by the passage of HAR Chapter 11-280.1, this option is not feasible. The city is legally required to upgrade the fuel storage tank. To forestall this action would increase the risk to the environment and public health due to non-compliant equipment.

4.2. Delayed Action

A delayed action implies that a project of similar scope and size to the proposed action would occur at an unspecified future date. As with the “no action” alternative, this option would increase the risk for long term harm to the environment and public health of the surrounding community. In addition, as stated in HAR Chapter 11-280.1, these improvements must be completed before July 15, 2028. Postponing the construction would result in not meeting this deadline; therefore, this is not a feasible option.

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5. PERMITS AND APPROVALS

The exact permitting and approval requirements will be determined during the design phase, and the following list contains permits and approvals that may be required for the proposed project.

State of Hawai‘i

- AST Notification
- Community Noise Permit
- Non-Covered and/or Covered Source Permit
- Oversized and Overweight Vehicles on State Highways Permit
- Disability and Communication Access Board Review
- State Historic Preservation Division Review

City and County of Honolulu

- Application and Permit for Tank Installation
- Building Permit
- DPR Right of Entry Permit
- Grubbing, Grading, and Stockpiling Permit
- Erosion Control Plan/Best Management Practices
- Flammable/Combustible Liquid Permit
- Shoreline Setback Variance
- Special Management Area Use Permit

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6. DETERMINATION

According to HAR §11-200.1-13, an agency must determine whether an action may have a significant impact on the environment, considering all phases of the project, its expected primary and secondary impacts, cumulative effects with other projects, and its short- and long-term effects. In making this determination, the rules establish "significance criteria" to guide the consideration of potential environmental effects.

The proposed project is not likely to have a significant impact on the physical or human environment based on the analysis presented in this document. The City Department of Environmental Services anticipates that the appropriate determination is a Finding of No Significant Impact (FONSI). The supporting rationale for this finding as set forth in HAR §11-200.1-13 is discussed below.

(1) Irrevocably commit a natural, cultural, or historic resource;

The proposed project is not expected to result in the loss of or damage to natural, cultural, or historic resources. Instead, it aims to provide protection against the harmful effects to the environment and public health that would occur as a result of deterioration or malfunction if the project were not undertaken. The project proposes to upgrade an existing underground fuel storage tank to an aboveground fuel storage tank system with mandated secondary containment and interstitial monitoring in an area that has been previously disturbed by grading, utility lines and road construction. The proposed work is to take place within an existing pump station facility and will not extend the footprint of the property. Biological resources may exist in the area and recommendations by the DLNR-DOFAW will be followed to mitigate any impact on these resources.

(2) Curtail the range of beneficial uses of the environment;

The proposed project does not limit nor prevent future beneficial uses of the surrounding environment for recreational, cultural, or preservation use. Its scope is limited to land which has already been developed, and does not entail the expansion of that area beyond existing boundaries.

(3) Conflicts with the State's environmental policies or long-term environmental goals established by law;

The project does not conflict with the State's environmental policies or long-term environmental goals. Rather, it aligns with Hawai‘i's environmental goals

by reducing the risk of fuel leakage to the surrounding soils. Provision of the AST will ensure that the facility is operable during an emergency power outage to prevent wastewater back-up.

(4) Have a substantial adverse effect on the economic welfare, social welfare, or cultural practices of the community or State;

The project is not expected to have an adverse effect on economic, social, or cultural welfare. Through the use of BMPs during construction, disturbances to the surrounding community are expected to be minimal. The upgrades to the WWPS prevent future system failures that would cause significant disruptions to the local infrastructure. The ability to better monitor and administer needed repairs to the fuel storage system will help to protect the general welfare of the community.

(5) Have a substantial adverse effect on public health;

The project is not projected to have an adverse effect on public health. Instead, it aims to safeguard public health by reducing the possibility of system failure within the WWPS. Through the use of BMPs, temporary impacts such as fugitive dust, noise, and intermittent traffic, during the construction process is expected to be negligible.

(6) Involve adverse secondary impacts, such as population changes or effects on public facilities;

No major adverse secondary impacts are expected as a result of the proposed project. Construction work will occur within the site boundaries and is not expected to significantly disrupt traffic. Upgrades are expected to positively impact the environmental sustainability of the existing public facility.

(7) Involves a substantial degradation of environmental quality;

No major degradation of environmental quality is expected as a result of the proposed project. The installation of the AST and removal of the existing UST will occur in a previously developed area. Through the use of BMPs, construction work will limit impacts such as erosion or runoff. The project will serve the purpose of protecting the environment by reducing the risk of fuel spillage and malfunction.

(8) Be individually limited but cumulatively has substantial adverse effect upon the environment or involves a commitment for larger actions;

The project is limited in scope. No larger or cumulative impact on the environment is expected from the project.

(9) Have a substantial effect on rare, threatened, or endangered species, or its habitat;

The project area is not located within any critical habitats. No major impact on rare, threatened, or endangered species, or critical habitats is expected. Through the use of BMPs, construction work is expected to mitigate any disturbances to regional species to a minimal effect.

(10) Have a substantial adverse effect on air or water quality or ambient noise levels;

No substantial adverse effect on air or water quality or ambient noise levels are expected. Any potential impacts will be temporary and limited to construction-related disturbances, which will be mitigated through BMPs.

(11) Have a substantial adverse effect or is likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters;

The project is situated in an environmentally sensitive area within both a flood plain and a tsunami zone. However, the proposed project is necessary to ensure reliable service from the existing facility located in that area. To mitigate potential impacts to the AST from storm surges, a six-foot-high wave wall will be constructed.

(12) Have a substantial adverse effect on scenic vistas and view planes identified in county or state plans or studies; or

No substantial adverse effect on scenic vistas or view planes is expected as a result of the project. The proposed project will take place within a fenced parcel.

(13) Require substantial energy consumption or emit substantial greenhouse gas.

Installation of the AST and piping would take place during a limited time period and would not require substantial energy consumption. Greenhouse gas emissions from diesel-power construction equipment and generators would

occur during the temporary period of construction. No mitigation is proposed for temporary impacts. In the long term, permanent fuel tank system infrastructure represents a continuation of current operations.

7. PUBLIC AGENCY REVIEW AND CONSULTATION

An Early Consultation Letter and Handout was sent on March 27, 2025 to initiate the environmental review process. A list of consulted agencies, organizations, and interest groups are listed below. There were 15 formal responses to the early consultation letter, as indicated by the ✓ below. A copy of the Early Consultation Letter and Handout, as well as copies of the responses received, are included in the Appendix.

State of Hawai‘i

- Department of Hawaiian Home Lands
- Department of Health
- Department of Land and Natural Resources
  - Aha Moku Advisory Committee
  - Commission on Water Resource Management ✓
  - Division of Aquatic Resources ✓
  - Division of Boating & Ocean Recreation ✓
  - Division of Forestry and Wildlife ✓
  - Engineering Division ✓
  - Land Division ✓
  - Office of Conservation and Coastal Lands ✓
- Department of Transportation
- Hawai‘i Emergency Management Agency
- Office of Hawaiian Affairs
- Office of Planning and Sustainable Development ✓
- Senate District 22 (Senator Samantha Decorte)
- House District 45 (Representative Darius K. Kila)

City and County of Honolulu

- Board of Water Supply ✓
- Department of Climate Change, Sustainability, and Resiliency
- Department of Design and Construction ✓
- Department of Emergency Management
- Department of Environmental Services
- Department of Land Management
- Department of Facilities Maintenance
- Department of Parks and Recreation ✓
- Department of Planning & Permitting ✓
- Department of Transportation Services
- Honolulu City Council District 1 (Andria Tupola)

Honolulu Fire Department ✓
Honolulu Police Department ✓

Other

Hawaiian Electric Company ✓
Wai‘anae Coast Neighborhood Board No. 24

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Appendix A

Archaeological Literature Review and Field Inspection Report

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Appendix B

Early Consultation Letter, Handout, and Responses

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Draft

Archaeological Literature Review and Field Inspection for the Lualualei Wastewater Pump Station Improvements Project, Lualualei Ahupua‘a, Wai‘anae District, O‘ahu TMK: (1) 8-7-007:067

Prepared for
Townscape, Inc.
on behalf of the
City and County of Honolulu (C&C) Department of Environmental Services (ENV)

Prepared by
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Cultural Surveys Hawai‘i, Inc.
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Management Summary

Reference	Archaeological Literature Review and Field Inspection for the Lualualei Wastewater Pump Station Improvements Project, Lualualei Ahupua‘a, Wai‘anae District, O‘ahu, TMK: (1) 8-7-007:067 (Shideler and Hammatt 2025)
Date	April 2025
Project Number(s)	Cultural Surveys Hawai‘i, Inc. (CSH) Job Code: LUALUALEI 39
Investigation Permit Number	CSH completed the fieldwork component of this study under archaeological fieldwork permit number 25-04, issued by the Hawai‘i State Historic Preservation Division (SHPD) per Hawai‘i Administrative Rules (HAR) §13-13-282.
Agencies	SHPD
Project Proponent	City and County of Honolulu (C&C) Department of Environmental Services (ENV)
Project Funding	C&C
Project Location	The Lualualei Wastewater Pump Station Improvements project is located within the south corner of the Lualualei Wastewater Pump Station (WWPS) located at 87-1581 Farrington Highway, Wai‘anae, Hawai‘i 96792 in Lualualei Ahupua‘a, Wai‘anae District on the Island of O‘ahu (TMK: [1] 8-7-007:067). The Lualualei WWPS is located on the coast of Lualualei on the south-central Wai‘anae (west) coast of O‘ahu on the southwest side of Farrington Highway just south of the T-intersection with Lualei Place. The Lualualei WWPS is depicted on a portion of a 2017 Waianae U.S. Geological Survey (USGS) 7.5-minute series topographic quadrangle (Figure 1), a tax map plat (Figure 2), and a 2019 aerial photograph (Figure 3). The specific indicated project area (area of ground disturbance) for the removal of an underground tank and replacement with an aboveground tank at the same location, with piping connecting into the south corner of the immediately adjacent existing Lualualei WWPS Pump Station Building is approximately 20 square meters (sq m). For the purpose of this literature review and field inspection (LRFI) study, the study area is defined as the Lualualei WWPS within a rectangular fenced perimeter (which is only a ¼ acre).
Land Jurisdiction	C&C
Project Acreage	The Lualualei WWPS area is approximately 0.256 acres (0.10 hectares). The actual project area of ground disturbance is approximately 20 sq m.
Project Description and Ground Disturbance	The C&C ENV will be replacing the existing underground fuel storage tank (UST) with an aboveground storage tank (AST) at the Lualualei WWPS. A new 2,000-gallon Convault above ground fuel storage tank will be installed at the location of an existing underground tank

	(understood as to be removed) in the south corner of the Lualualei WWPS (Figure 4 through Figure 6, see also Figure 41 and Figure 42). The area of project ground disturbance thus will largely be in the location of the previously excavated hole for the existing underground tank. The proposed fuel supply/return piping will extend less than 3 m from the new above ground tank into the southwest corner of the existing Pump Station building (Figure 4 through Figure 6, see also Figure 43).
Historic Preservation Regulatory Context	This is a state/municipal “governmental” project needing review under Hawai‘i Revised Statutes (HRS) §6E-8 and HAR §13-275
Document Purpose	This investigation was designed—through detailed historical, cultural, and archaeological background research and a field inspection of the Lualualei WWPS focusing on the project area—to determine the likelihood that historic properties may be affected by the project and based on findings, consider cultural resource management recommendations. This document is intended to facilitate the project’s planning and support the project’s historic preservation environmental review compliance. This investigation does not fulfill the requirements of an archaeological inventory survey (AIS) investigation, per HAR §13-276.
Natural and Built Environment	The Lualualei WWPS is less than 50 m from the coast of Lualualei and is believed to be at an elevation of less than 7 m above mean sea level. According to the U.S. Department of Agriculture (USDA) Soil Survey Geographic (SSURGO) database (2001) and soil survey data gathered by Foote et al. (1972), soils within the Lualualei WWPS (Figure 7) are indicated as Mamala stony silty clay loam, 0 to 12% slopes (MnC): > This series consists of shallow, well-drained soils along the coastal plains on the islands of Oahu and Kauai. These soils formed in alluvium deposited over coral limestone and consolidated calcareous sand. […] These soils are used for sugarcane, truck crops, orchards, and pasture. The natural vegetation consists of kiawe, koa haole, bristly foxtail, and swollen fingergrass. [Foote et al. 1972:93] MnC soils are further described as with: “Stones, mostly coral rock fragments, are common in the surface layer and in the profile. […] Permeability is moderate. Runoff is very slow to medium, and the erosion hazard is slight to moderate” (Foote et al. 1972:93). There is a developed drainage approximately 500 m to the southeast approximating the Ulehawa stream alignment but this stream is believed to have been quite intermittent in this dry plain. The Lualualei WWPS receives approximately 440 mm (17.3 inches) annual rainfall which is insufficient for non-irrigated agriculture (Giambelluca 2013).

	Farrington Highway, adjacent to the northeast, is the major vehicular artery serving the Wai‘anae Coast. The floor of seaward Lualualei Valley, particularly fronting Farrington Highway, is largely covered with single family homes.
Background Research Methods	Background research included a review of previous archaeological studies on file at the SHPD; review of documents at Hamilton Library of the University of Hawai‘i, the Hawai‘i State Archives, the Mission Houses Museum Library, the Hawai‘i Public Library, and the Bishop Museum Archives; study of historic photographs at the Hawai‘i State Archives and the Bishop Museum Archives; and study of historic maps at the Survey Office of the Department of Accounting and General Services. Historic maps and photographs from the CSH library were also consulted. In addition, Māhele records were examined from the Waihona ‘Aina database (Waihona ‘Aina 2025).
Cultural Context	Lualualei and the community of Nānākuli just to the south were among the driest places on O‘ahu and were sparsely populated. The main population center of Lualualei, as small as it was, was at Pūhāwai nearly 8 km to the north at the base of the northern rim of the valley where there was water sufficient for limited agriculture and human life (Figure 8). There were undoubtedly temporary fishing camps at the coast and some burials in the coastal sands but a generally low level of evidence of traditional Hawaiian activity would be expected. Today’s Farrington Highway does follow a traditional Hawaiian coastal trail that developed over time for horses, buggies carts, cars, and the Oahu Railway & Land (OR&L) railroad which was a major feature of coastal development. Lualualei has many places associated with traditions of the Polynesian demi-god Māui including Pu‘u Heleakalā, Hina’s cave, and the celebrated Māui *Pōhaku* (boulder), designated State Inventory of Historic Places (SIHP) # 50-80-07-00148, which is only about 150 m across Farrington Highway from the Lualualei WWPS.
Land Commission Awards (LCAs)	In the Māhele land division of 1848, Lualualei was part of the crown lands owned by Kamehameha III (McGrath et al. 1973:28). Twelve land claims were made in Lualualei, but only six were actually awarded. All six Land Commission Awards (LCAs) were located upland in the *‘ili* (traditional Hawaiian land division smaller than an *ahupua‘a*) of Pūhāwai, located nearly 8 km north-northeast of the Lualualei WWPS in the extreme north corner of the *ahupua‘a* (traditional land division typically running from the mountains to the sea) (shown on Figure 8). No native tenant land titles were claimed near the coast. From the claims, it can be determined that at least eight families were living in Pūhāwai at the time of the Māhele in 1848. Together, they cultivated a minimum of 163 *lo‘i* (wetland agriculture plot). The numerous *lo‘i* mentioned in the

	claims indicate the land was ideal for growing wetland taro and that this livelihood was actively pursued by the awardees. In addition, dryland crops were grown on the *kula* (plains), *wauke* (paper mulberry, *Broussonetia papyrifera*), was being cultivated, and one claimant was making salt.
Historical Background Focused on a Review of Historic Maps and Aerial Photographs	Vancouver (1967:217) was not impressed with what he saw of the Wai‘anae coastline, stating in his log for March 1793 that the entire coast was “one barren rocky waste, nearly destitute of verdure, cultivation or inhabitants.” This has reinforced the traditional understanding that > […] the people who settled arid Nanakuli and the barren plains of Lualualei were scattered and few. They had plenty of fish from the ocean but taro and breadfruit grew only at the base of the mountains and in limited supply. People living on the beach could not grow vegetables at all. They had only bitter, brackish water to drink.[…] [McGrath et al. 1973:10] Following Western Contact, the Wai‘anae Coast experienced a swift decline in population due to disease and a “tendency to move to the city where there was more excitement” (McGrath et al. 1973:25). This catastrophic depopulation facilitated the passing of large tracts of land into the hands of a few landholders, and led to the decline of the traditional economy that once supported the region. The first longhorn cattle were brought to O‘ahu from Hawai‘i Island in 1809 by John Young and Kamehameha I (Kamakau 1992:268). One of the first areas to be utilized for ranching on the Wai‘anae coast was in Lualualei. Hawai‘i Bureau of Land Conveyances (1845–1869) records show William Jarrett leased approximately 17,000 acres of land from Kamehameha III in 1851. This was the beginning of Lualualei Ranch. The lease was written for 30 years with a lease fee of $700 per year (DLNR 1845–1903:4:616–618). In 1880, George Bowser traveled through Wai‘anae and described Lualualei in his journal: > Leaving Wai‘anae, a ride of about two miles brought me to the Lualualei Valley, another romantic place opening to the sea and surrounded in every direction by high mountains. This valley is occupied as a grazing farm by Messrs. Dowsett & Galbraith, who lease some sixteen thousand acres from the Crown. Its dimensions do not differ materially from those of the Waianae Valley, except that it is broader —say, two miles in width by a length of six or seven miles. The hills which enclose it, however, are not so precipitous as those at Waianae, and have, therefore, more grazing land on their lower slopes, a circumstance

> which adds greatly to the value of the property as a stock farm. Although only occupied for grazing purposes at present, there is nothing in the nature of the soil to prevent the cultivation of the sugar cane, Indian corn, etc. Arrangements for irrigation, however, will be a necessary preliminary to cultivation. [Bowser 1880:493–494]

With strong financial backing from King Kalākaua, Hermann A. Widemann, a German immigrant, was able to initiate the Waianae Sugar Plantation in 1879. This plantation would extend into Lualualei. Although it was never a large-scale plantation by modern standards, it was one of the first and last to be served by a plantation railroad. Some 15 miles of 30-inch narrow-gauge railroad delivered harvested cane to the mill. All the sugar was shipped by inter-island vessels to Honolulu departing from Wai‘anae Landing, until the OR&L railroad was extended to Wai‘anae and beyond in 1889. The OR&L railroad ran along the *makai* (seaward) side of Farrington Highway. By the time of our earliest detailed maps (see the 1899 Beasley map, Figure 9) life in Lualualei was already massively changed by the OR&L railroad along the coast. The Beasley map shows the OR&L on the inland side of the coastal government road near the Lualualei WWPS and the extensive cane fields in mid-valley (which were serviced by plantation railroads).

The 1901 Emerson map (Figure 10) notes major changes following close after annexation (in 1898) including the very extensive military reservations along the coast (extending to the Lualualei WWPS) and the opening up of homestead lots back from the coast road. Fine print on this map notes the presence of “young kiawe” (*Prosopis pallida*) and “klue” (*klu, Acacia farnesiana*) near the Lualualei WWPS location which may have just been becoming prominent thorny vegetation.

By 1901, the Waianae Sugar Company had obtained a five-year lease on 3,332 acres of land at Lualualei to be used for raising cane as well as for ranching (DLNR 1902). Sugar and ranching continued to dominate the Lualualei landscape during the early years of the twentieth century. The 1906 Donn map (Figure 11) shows the Lualualei WWPS area in public lands and also as used for grazing and low intensity ranching activity.

The determining factor in the success of Lualualei for sugar production was always the water. By the 1940s the Waianae Sugar Company could no longer compete with foreign labor. The combination of drought problems, labor unions, and land battles undermined the Waianae Sugar Company. In 1946 the company was liquidated and the land was sold.

There were two waves of homesteading on the Wai‘anae Coast. The first impacted Lualualei and coincided with homesteading occurring at Wai‘anae Kai. In 1902, the Government ran ads in the local newspapers stating their intent to open up land in Lualualei for homesteads (Kelly

	1991:328). Due to the lack of water, the lots were classified as second-class pastoral land, rather than agricultural land. The homesteads were sold in three series between the years 1903 and 1912. In Lualualei, the first series was for *mauka* (toward the uplands) lots purchased by McCandless, who ranched most of his land until 1929, subletting use rights to the Sandwich Island Honey Company. The second and third series were for lots in the lower valley and along the coast, *mauka* of the government road. Most of these land grants (like Grant 4751 to Von Holt and Grant 5262 to J.K. Notley near the Lualualei WWPS location) were bought up by Euro-American (*haole*) ranchers (Figure 12). The 1919 U.S. Army War Department map (Figure 13) shows the OR&L railway and improved Farrington Highway road alignment along the coast and symbols for sugarcane cultivation inland but the vicinity of the present Lualualei WWPS is remarkably barren. The 1919 map also shows a sidetrack off the coastal OR&L extending north, approximately 350 m east of the Lualualei WWPS. This portion of track may be related to a cattle loading zone and later to the development of the ranching-to-market activities of Mikilua Ranch or this spur track could have been intended to transport sugarcane grown further inland. By the early 1920s, about 40 families had settled on homestead lots in Lualualei (Kelly 1991:331–332). The 1928 aerial photograph (Figure 14) shows no discernible evidence of activity in the present Lualualei WWPS area or *makai* of the OR&L and government road but just across the road many small homesteads are apparent. The modest success of the Lualualei Homesteads effort is reflected in the 1929 USGS map (Figure 15) and 1936 (Figure 16) and 1943 (Figure 17) War Department maps that depict a relatively uniform light density of houses extending *mauka* a short distance from the coastal road. The 1949 aerial photograph (Figure 18) and the 1954 USGS map (Figure 19) show substantial housing development *mauka* of the newly renamed “Farrington Highway” (named for Wallace Rider Farrington, governor of Hawaii,1921-1929). From 1949, a large quarry for limestone or aggregate dominates the landscape inland of the highway. The 1958 aerial photograph (Figure 20) shows modest increase in population particularly off Hakimo Road further inland. The vicinity of the Lualualei WWPS on the *makai* side of Farrington Highway appears completely undeveloped in thick trees. The 19623 USGS map (Figure 21) shows the only intrusion *makai* of Farrington Highway as the mouth of Ulehawa Stream. It is understood that the Ulehawa Drainage Channel was completed in 1964, but part of the channelization effort may have already been in place. This channel transports water from Ulehawa Stream’s upper reaches in Lualualei Valley to the ocean. The 1965 aerial photograph conveys the completion

	of this channel with stabilization and infilling of the southeast side of the stream mouth to allow for further housing development. The history of the development of the small Lualualei WWPS is not clear in the 1965 (Figure 22), 1971 (Figure 23), and 1977 (Figure 24) aerial photographs (owing perhaps to the tree cover) and 1998 USGS map (Figure 25). The City and County website lists the “Year in service” for the Maunawili Park Wastewater Pump Station as 1983.
Synopsis of Previous Archaeological Work in the Vicinity	Previous archaeological studies in the vicinity are depicted in Figure 26 and summarized in Table 1. Previously identified historic properties in the vicinity are located on Figure 29 and summarized in Table 2. As a sweeping generalization, coastal Lualualei has received relatively little archaeological study owing to a relatively low level of development and perhaps a belief that the density of archaeological resources is low. There have been two studies along the coast (Dega 1998 and McDermott and Hammatt 2000) with the later archaeological inventory survey of 57+ acres of Ulehawa Beach Park being the more robust. Their six test excavations—“Trenches 25-30 in Area 7”—bracketed the Lualualei Wastewater Pump Station (Figure 27) but “No sign of any cultural deposit was observed” (McDermott and Hammatt 2000:104). CSH produced two archaeological monitoring reports in the immediate vicinity. An archaeological monitoring report for an Ulehawa Beach Park wastewater treatment reconstruction project (Mierzejewski et al. 2014a, 2014b) and an archaeological monitoring report for a Lualualei Wastewater Pump Station force main system project (Mierzejewski et al. 2014b) identified no historic properties. A profile, photograph of an excavation, and stratigraphic description “at the Lualualei Wastewater Pump Station” are provided in Figure 28. The only historic property identified within 400 m is the “Māui rock” (McAllister identified SIHP # -00148). While certainly a historic, celebrated place, the rock is natural.
Fieldwork Effort	A brief field inspection of the Lualualei WWPS focused on the project area was conducted by CSH archaeologists David W. Shideler, M.A., and Adam Taba, B.A., on 19 March 2025. The fieldwork took approximately 0.5 person-day. A tracklog of one of the two archaeologists with a key to the following photographs (showing the general location and orientation of the photographs) is provided in Figure 30. The field inspection was completed to identify the likelihood of historic properties being present within the project area. Representative photographs are provided from the exterior of the Lualualei WWPS facility starting at the front (northeast side) facing Farrington Highway (Figure 31), and proceeding clockwise with views

	of the southeast side (Figure 32), southwest (*makai*) side (Figure 33), and northwest side (Figure 34). A view is provided of the entrance off Farrington Highway (Figure 35) and then views are provided from the interior corners of the small facility, from the north (Figure 36), east (Figure 37), south (Figure 38), and west (Figure 39). A view is provided of the front of the Pump Station building (Figure 40). The actual project area is mostly covered by a concrete slab of approximately 2 m by 5 m over the existing (to-be-removed) underground fuel tank adjacent to the southeast of the south corner of the Pump Station building (Figure 41 and Figure 42). The proposed fuel supply/return piping will extend less than 3 m from the new above ground tank (at the location of the existing concrete slab) into the southwest corner of the existing Pump Station building (an area with three small-diameter white pipes shown in Figure 43). An effort was made to search for any evidence of the former OR&L railroad in the vicinity of the Lualualei WWPS but none was observed (within a distance of approximately 200 m) northwest and southeast of the WWPS on the *makai* side of Farrington Highway. The entire Lualualei WWPS facility appears to have been previously graded and is covered in asphalt, coral gravel, the Pump Station building, or small related pump station appurtenances. It was evaluated in the field that there was no potential for above ground historic properties (other than possibly the pump station itself). The prospect of significant subsurface deposits was evaluated as low. The prospect of adverse impact to any possible character-defining properties of the pump station as a potential historic property was evaluated as low (the above ground fuel tank would be on the back south corner, Figure 40).
Historic Properties Potentially Affected	The only potential historic property identified within the project area and within the entirety of the Lualualei WWPS was the Lualualei WWPS itself, but this is less than 50 years old (built in 1983) and it was evaluated in the field that the improvements project would have no adverse effect on any character-defining features of the station as a potential historic property.
Historic Preservation Next Steps	This study would support a C&C ENV determination as per HAR §13-275-7(a)(1) of “No historic properties affected” and no further historic preservation study. Early consultation with the SHPD archaeology and architecture branches (with submittal of this study to the SHPD HICRIS system) is recommended.

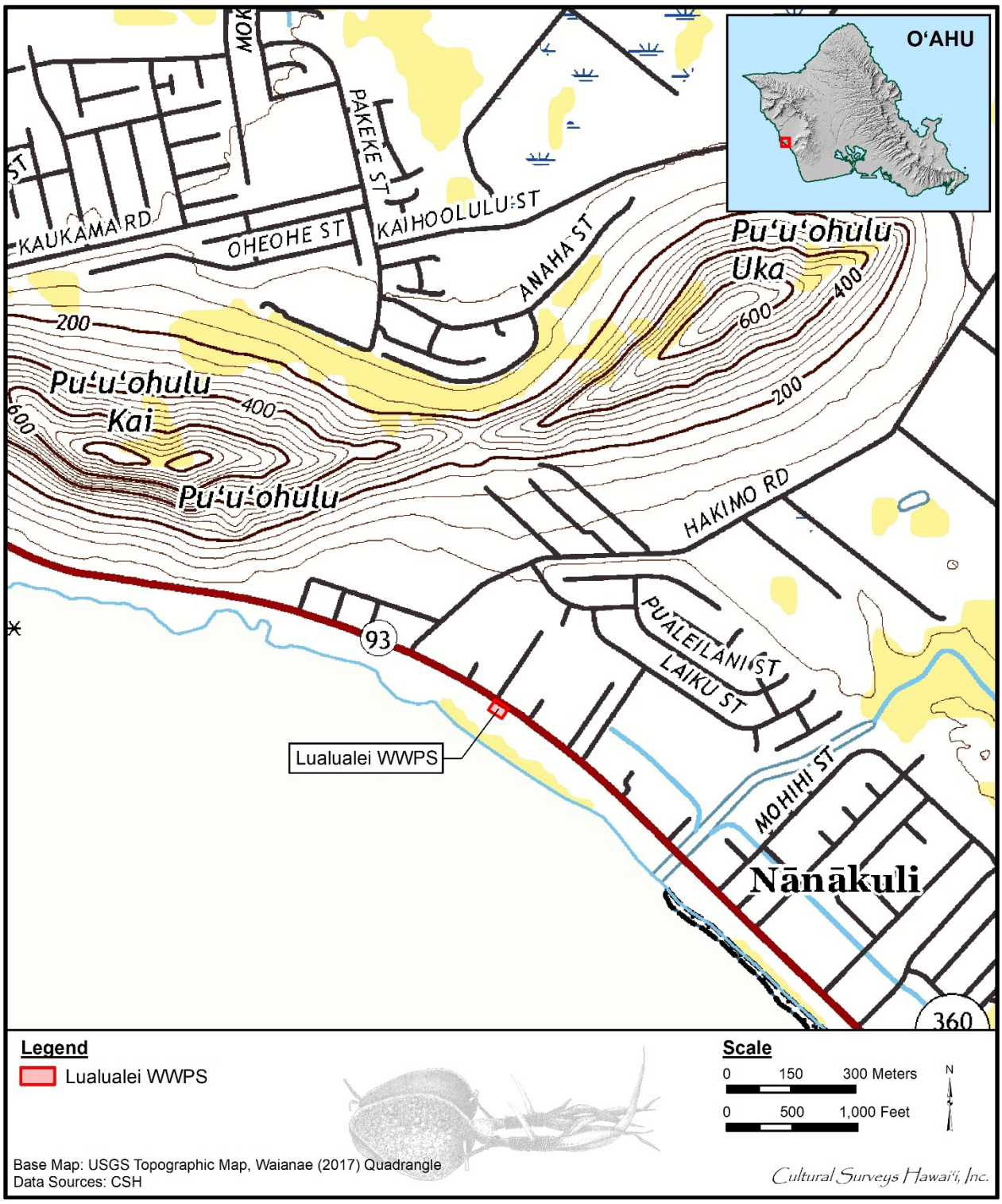


Figure 1. Portion of a 2017 Waianae USGS 7.5-minute topographic quadrangle showing the Lualualei WWPS

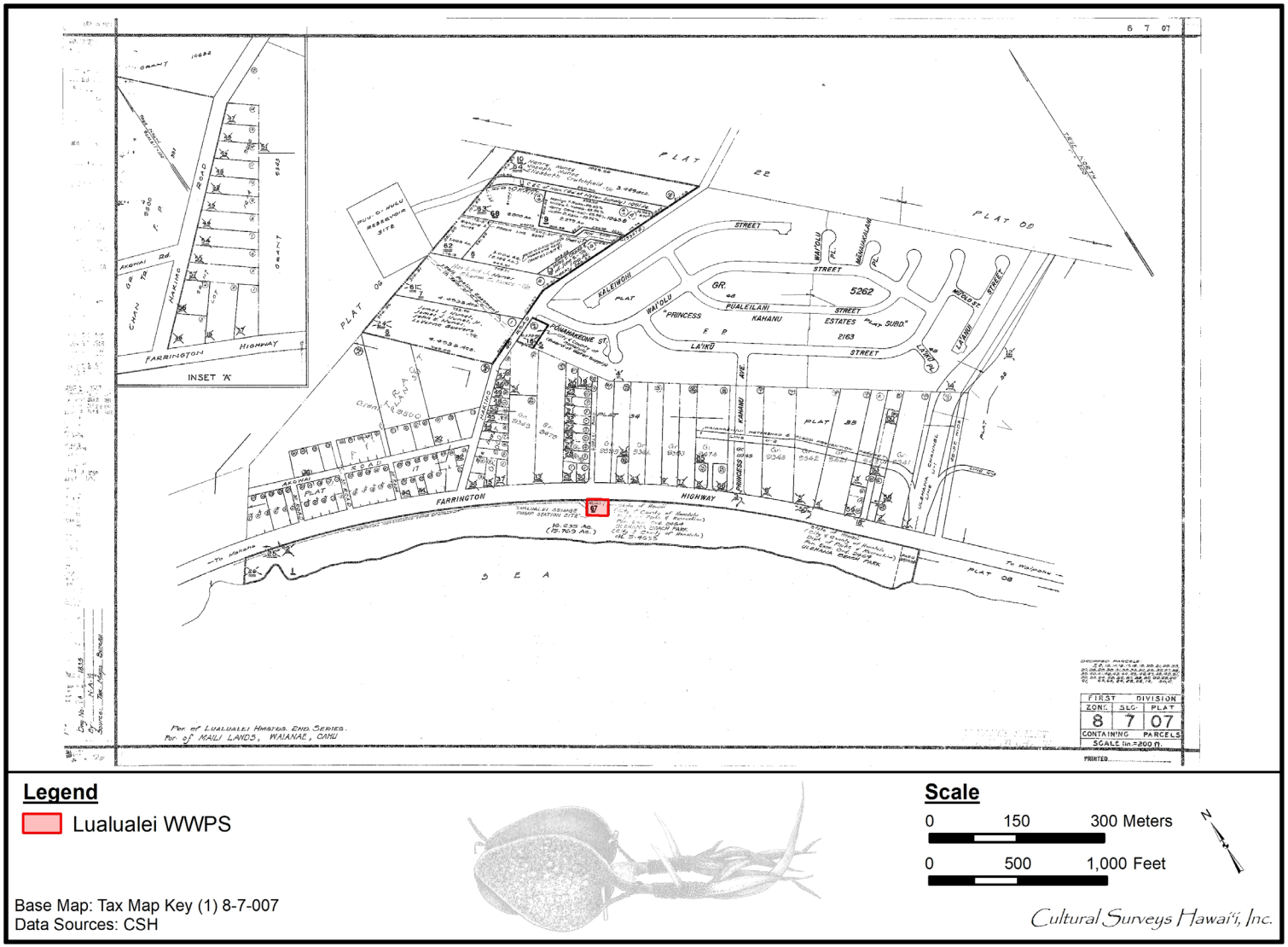


Figure 2. TMK: (1) 8-7-007 showing the Lualualei WWPS (Hawai‘i TMK Service 2025)

Figure 3. Aerial photograph (ESRI 2019) showing the Lualualei WWPS

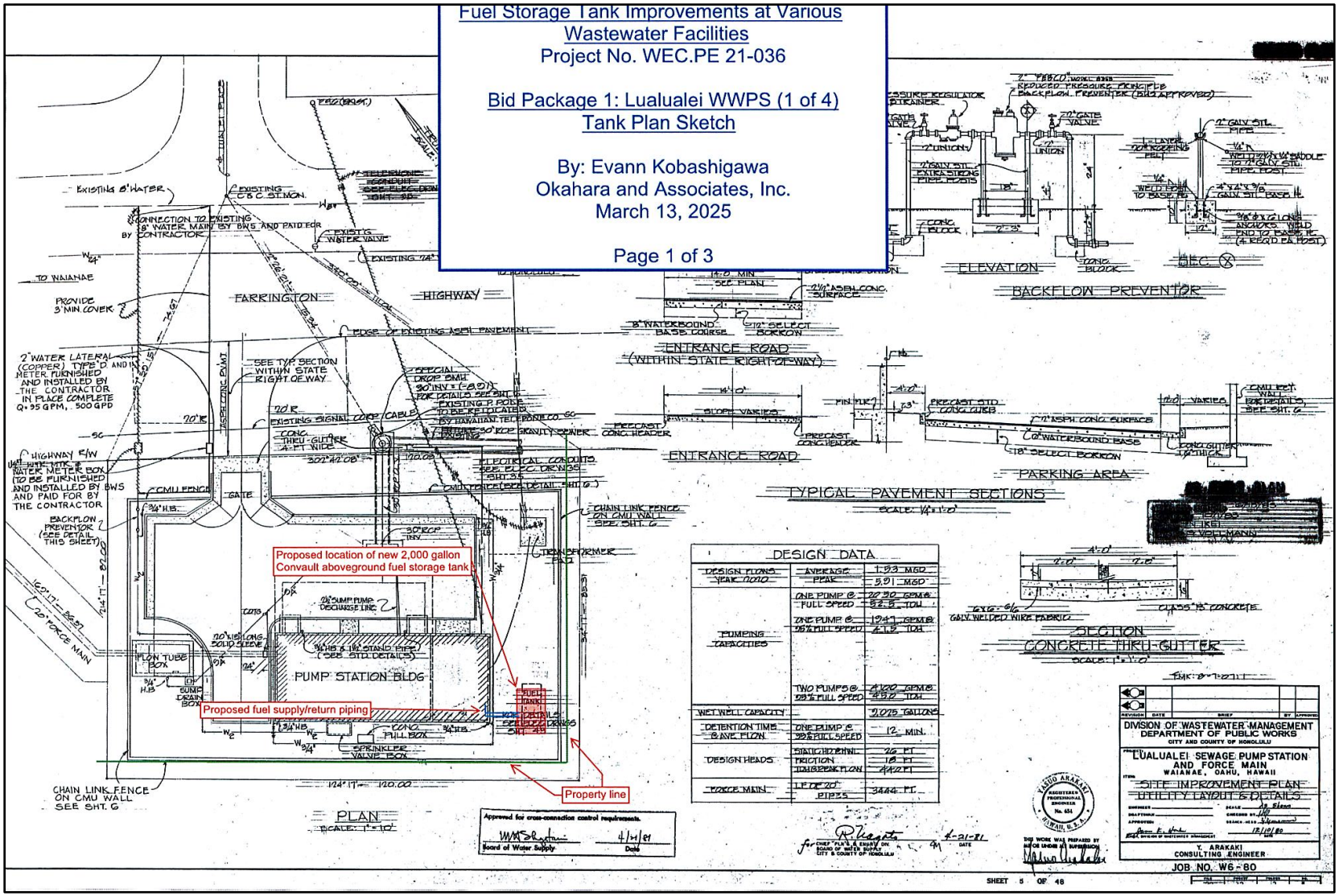


Figure 4. Lualualei WWPS Improvements project showing the proposed location of a new 2,000-gallon Convault aboveground fuel storage tank and the proposed fuel supply/return piping (Okahara and Associates, Inc.; courtesy of client)

Figure 5. Photograph of the Lualualei WWPS Improvements project showing the proposed location of a new 2,000-gallon Convault aboveground fuel storage tank and the proposed fuel supply/return piping (Okahara and Associates, Inc.; courtesy of client)

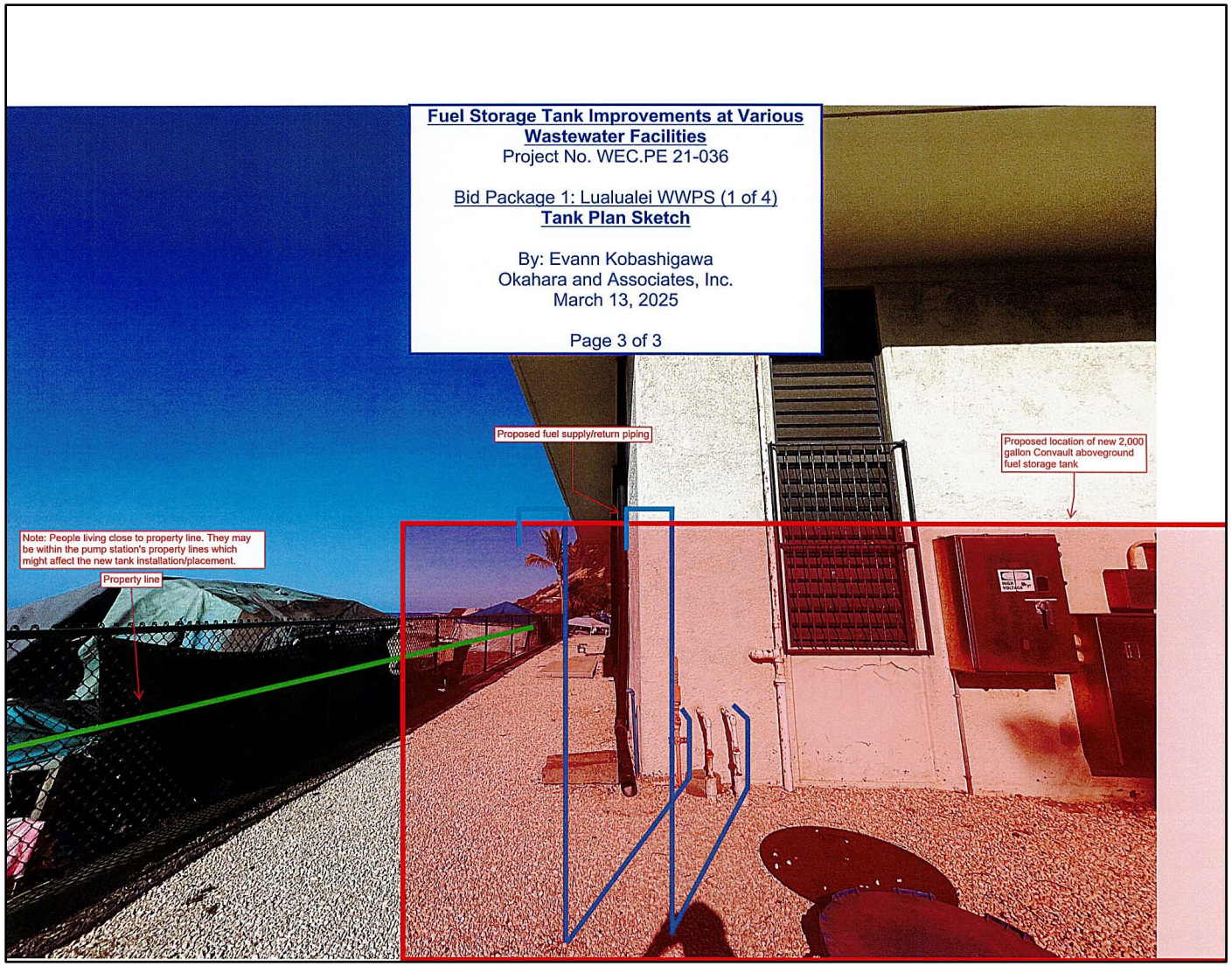


Figure 6. Photograph of the Lualualei WWPS Improvements project showing the proposed location of a new 2,000-gallon Convault aboveground fuel storage tank and the proposed fuel supply/return piping (Okahara and Associates, Inc.; courtesy of client)

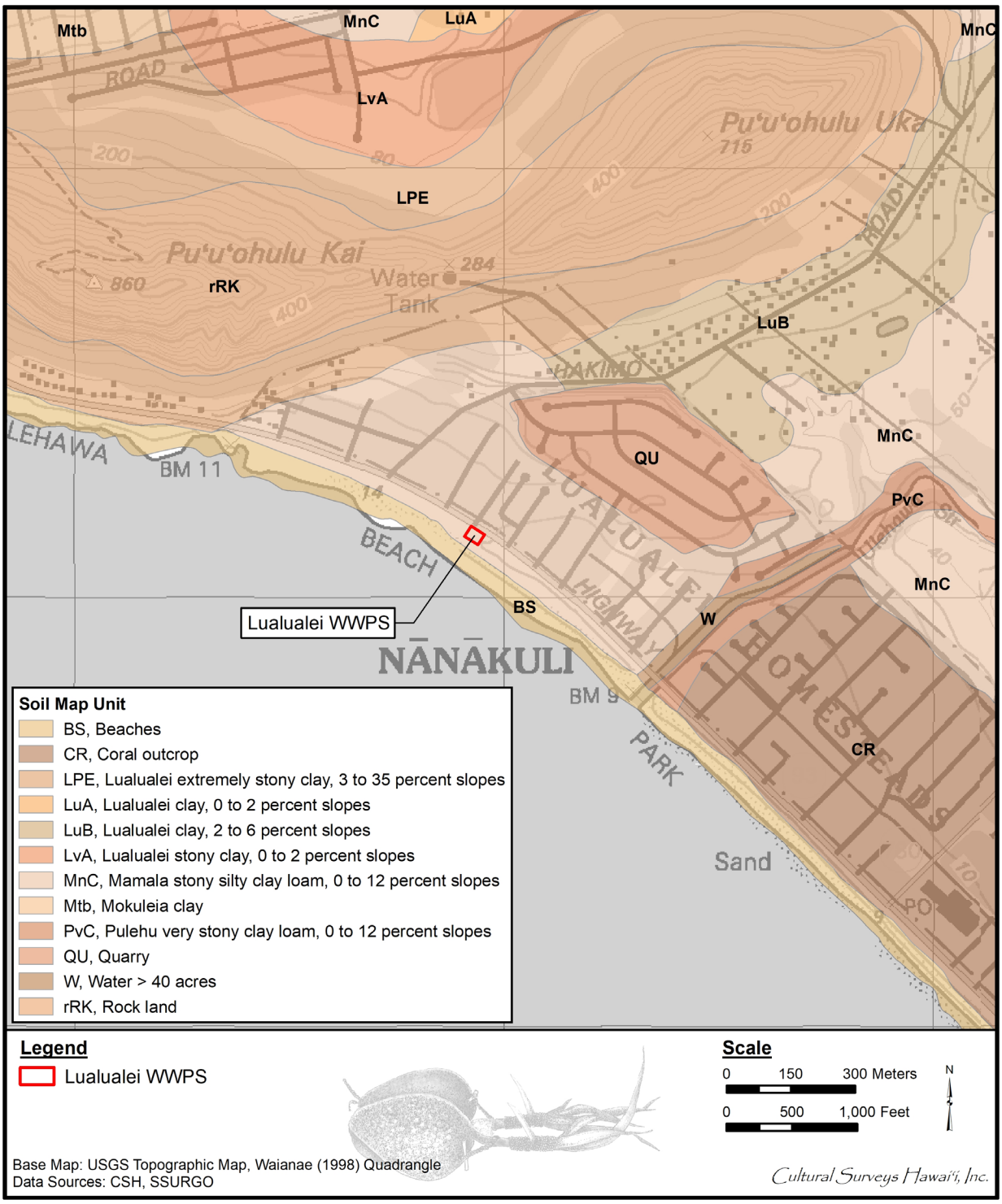


Figure 7. Overlay of *Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai and Lanai, State of Hawaii* (Foote et al. 1972; USDA SSURGO 2001), indicating soil types within and surrounding the location of the Lualualei WWPS (base map: 1998 Waianae USGS topographic quadrangle)

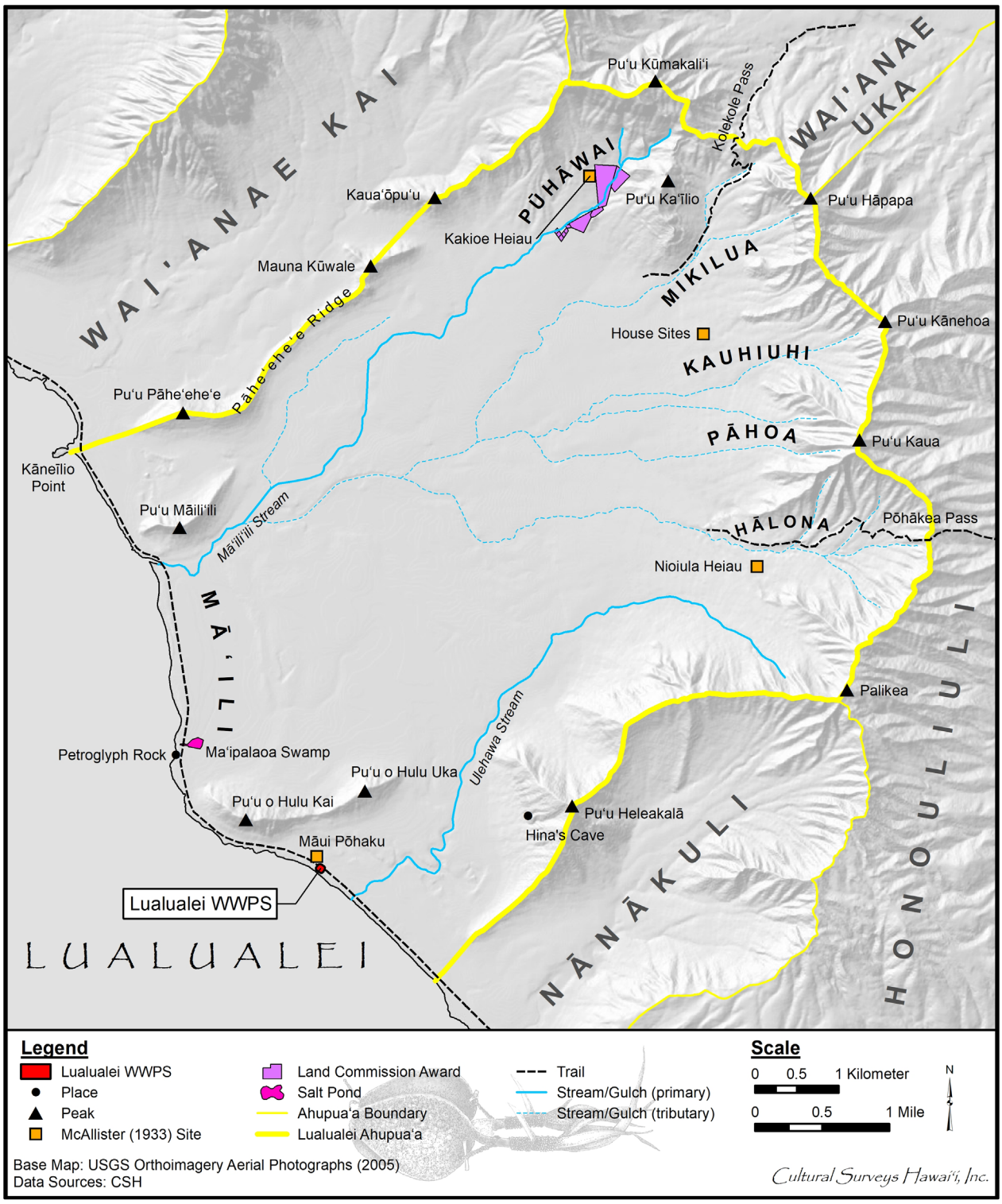


Figure 8. Traditional place names in the vicinity of the Lualualei WWPS and depiction of the LCA area (Pūhāwai) in the extreme north corner of the *ahupua‘a* (base map: 2005 USGS orthoimagery aerial photographs)

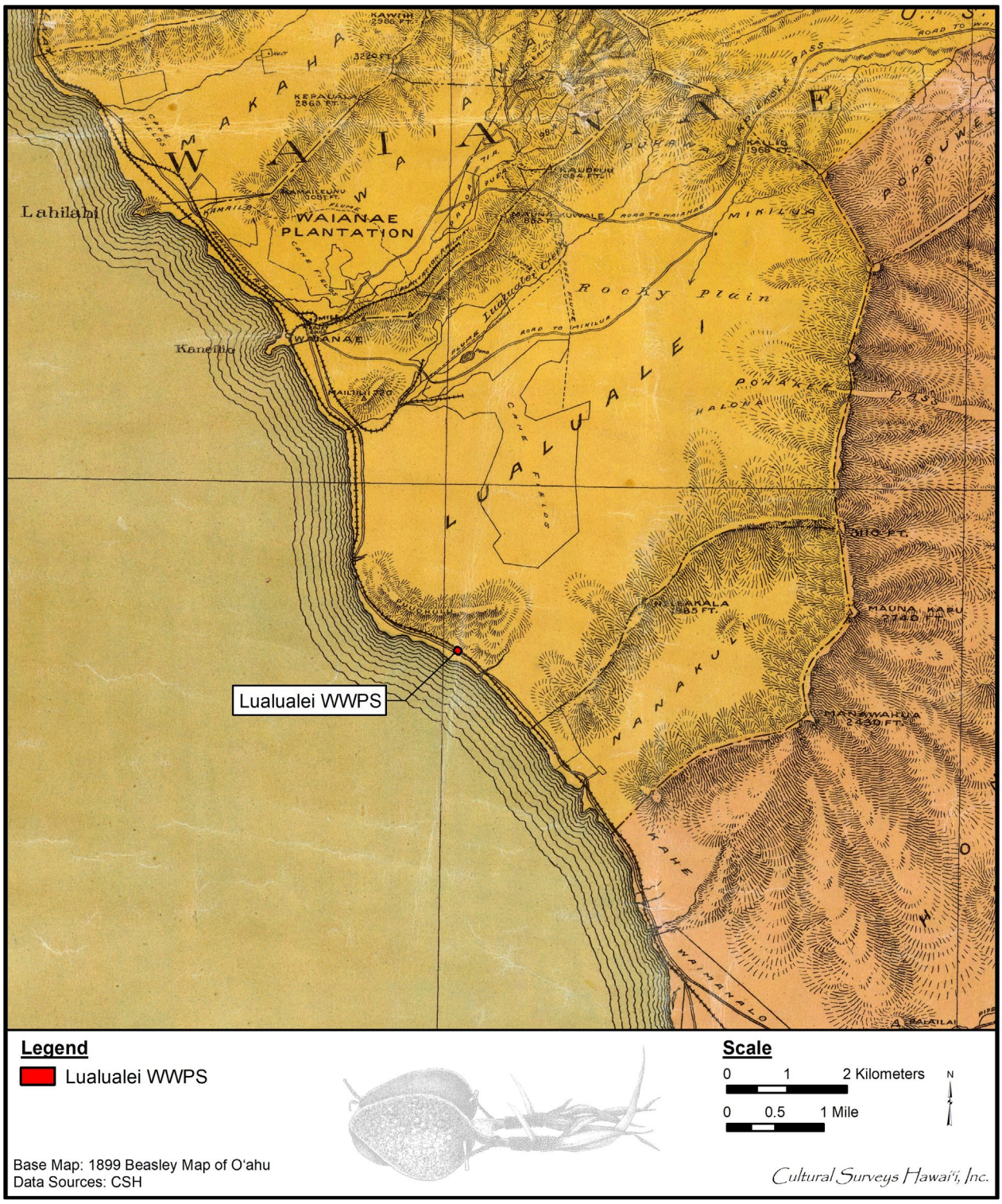


Figure 9. Portion of the 1899 Beasley map of O‘ahu showing the location of the Lualualei WWPS (note this map shows the OR&L railroad has already been built adjacent to the *mauka* side of the coastal government road in the vicinity of the Lualualei WWPS)

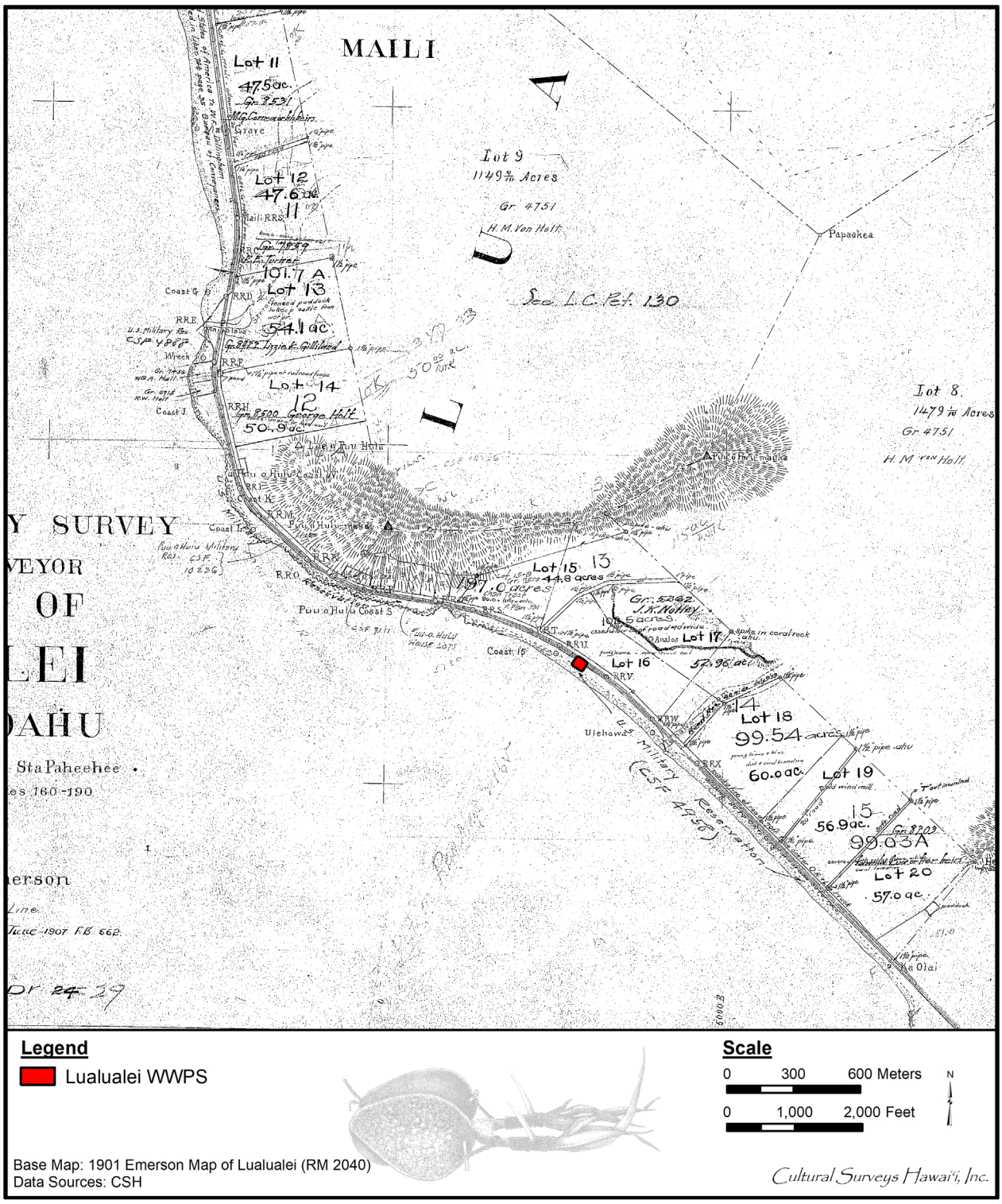


Figure 10. Portion of the 1901 Emerson map of Lualualei (RM 2040) showing the location of the Lualualei WWPS; note references to the relatively new OR&L railroad and U.S. Military Reservation along the coast

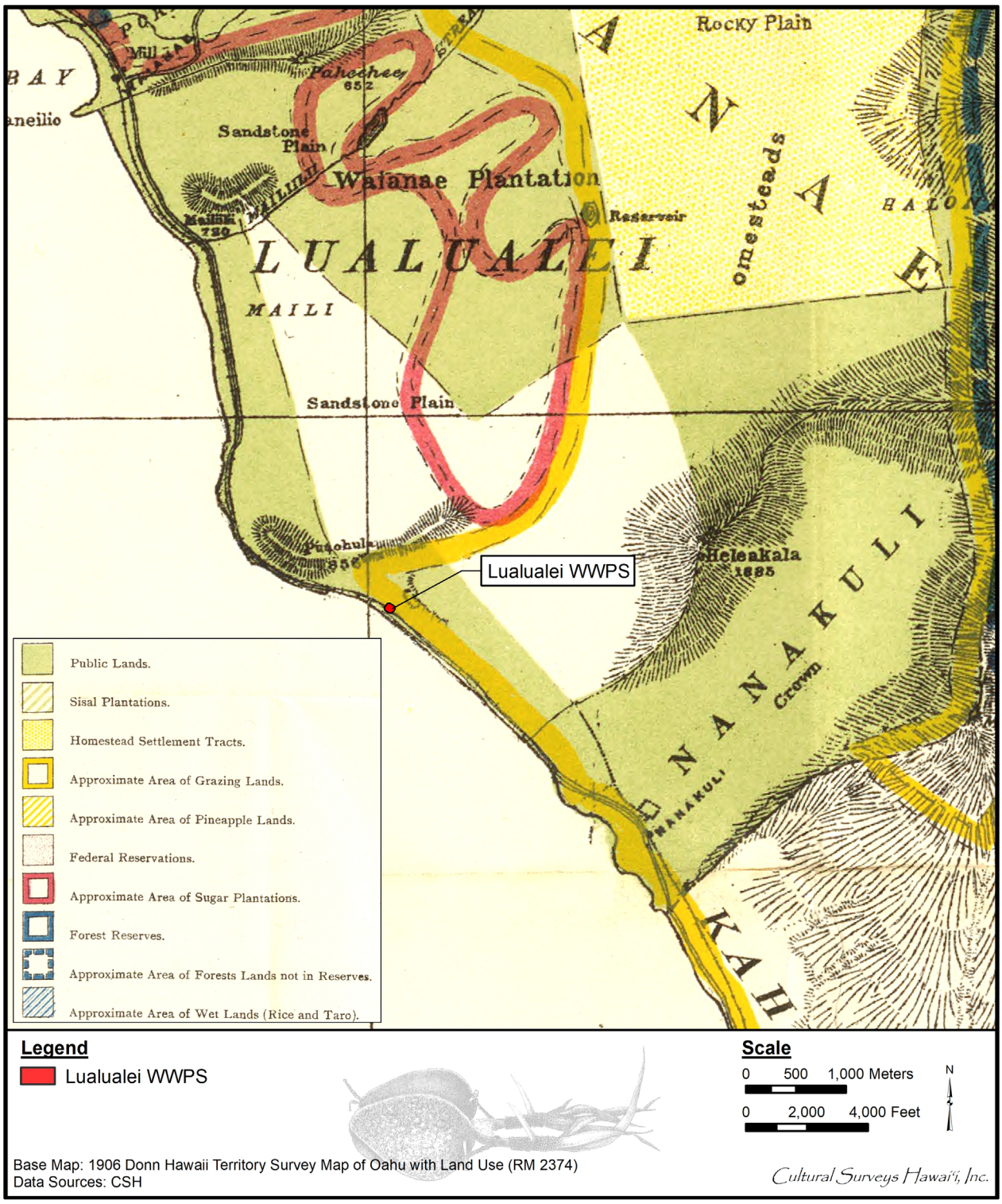


Figure 11. Portion of the 1906 Donn Hawaii Territory Survey map of O‘ahu with land use (RM 2374) showing the location of the Lualualei WWPS

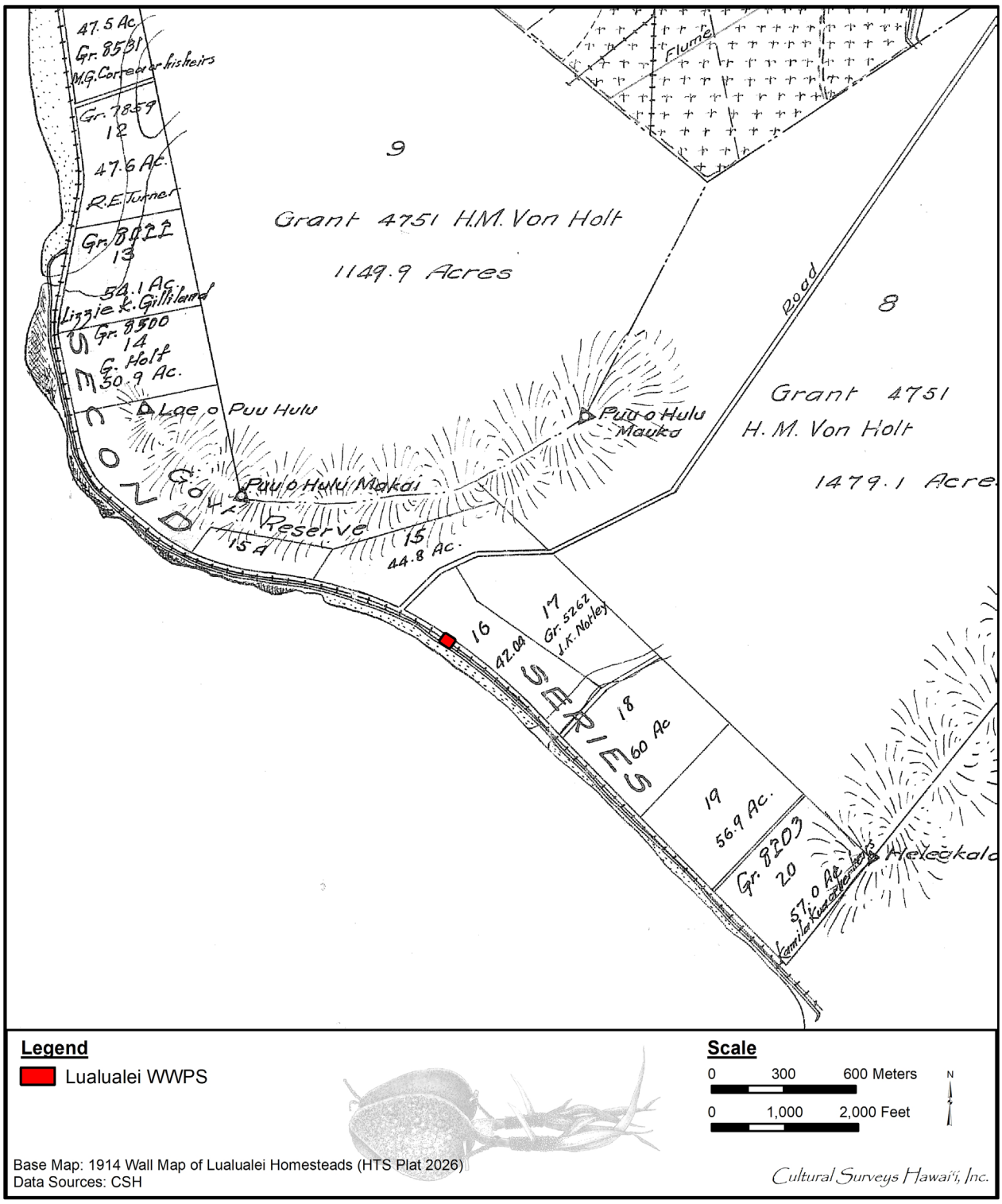


Figure 12. Portion of the 1914 Wall map of Lualualei Homesteads (HTS Plat 2026) showing the location of the Lualualei WWPS (this map shows the OR&L railroad alignment on the *makai* side of the coastal government road in the vicinity of the Lualualei WWPS)

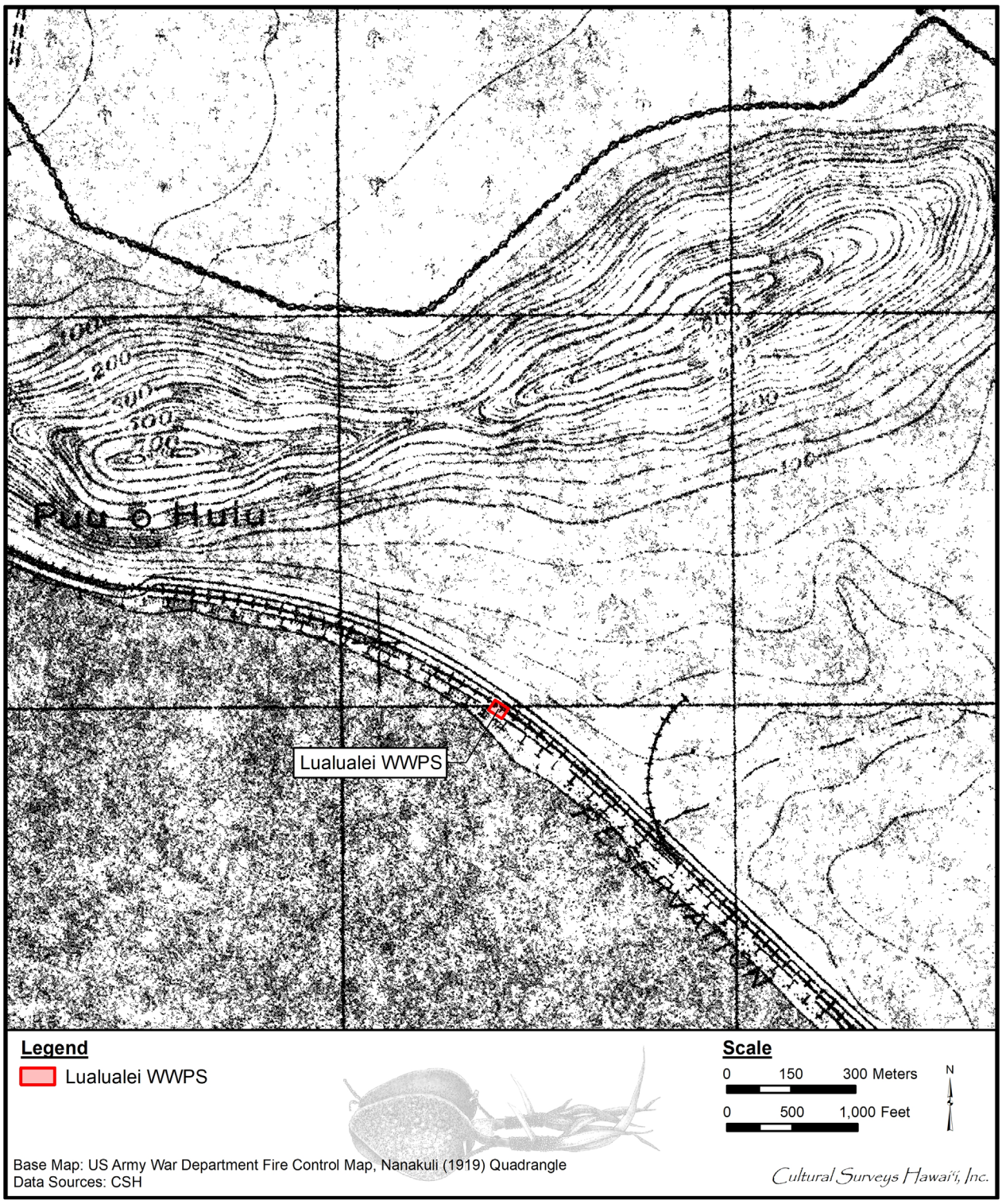


Figure 13. Portion of the 1919 U.S. Army War Department fire control map, Nanakuli quadrangle showing the location of the Lualualei WWPS

Figure 14. 1928 Lualualei aerial photograph (UH SOEST) showing the location of the Lualualei WWPS

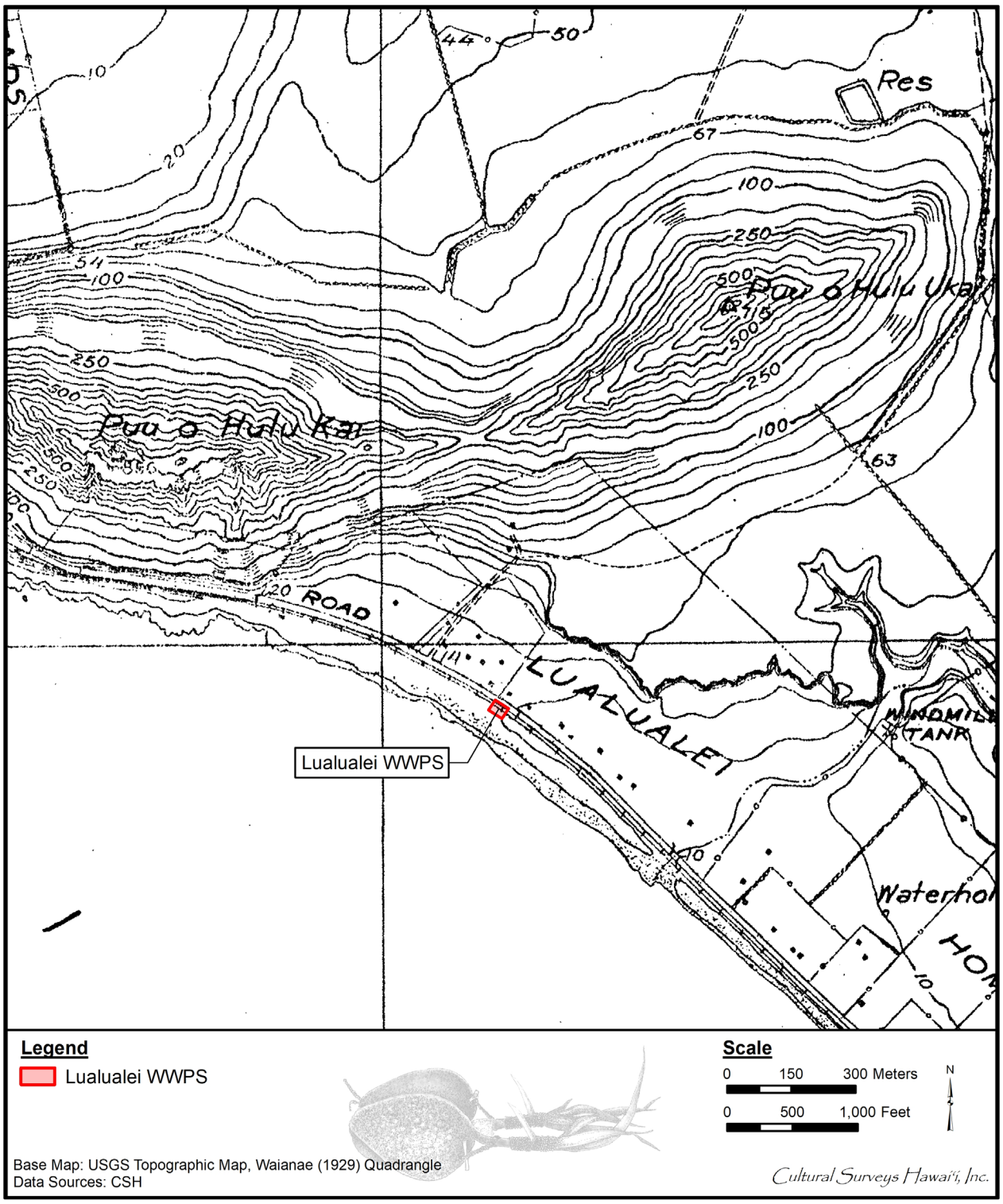


Figure 15. Portion of the 1929 Waianae USGS topographic quadrangle showing the location of the Lualualei WWPS

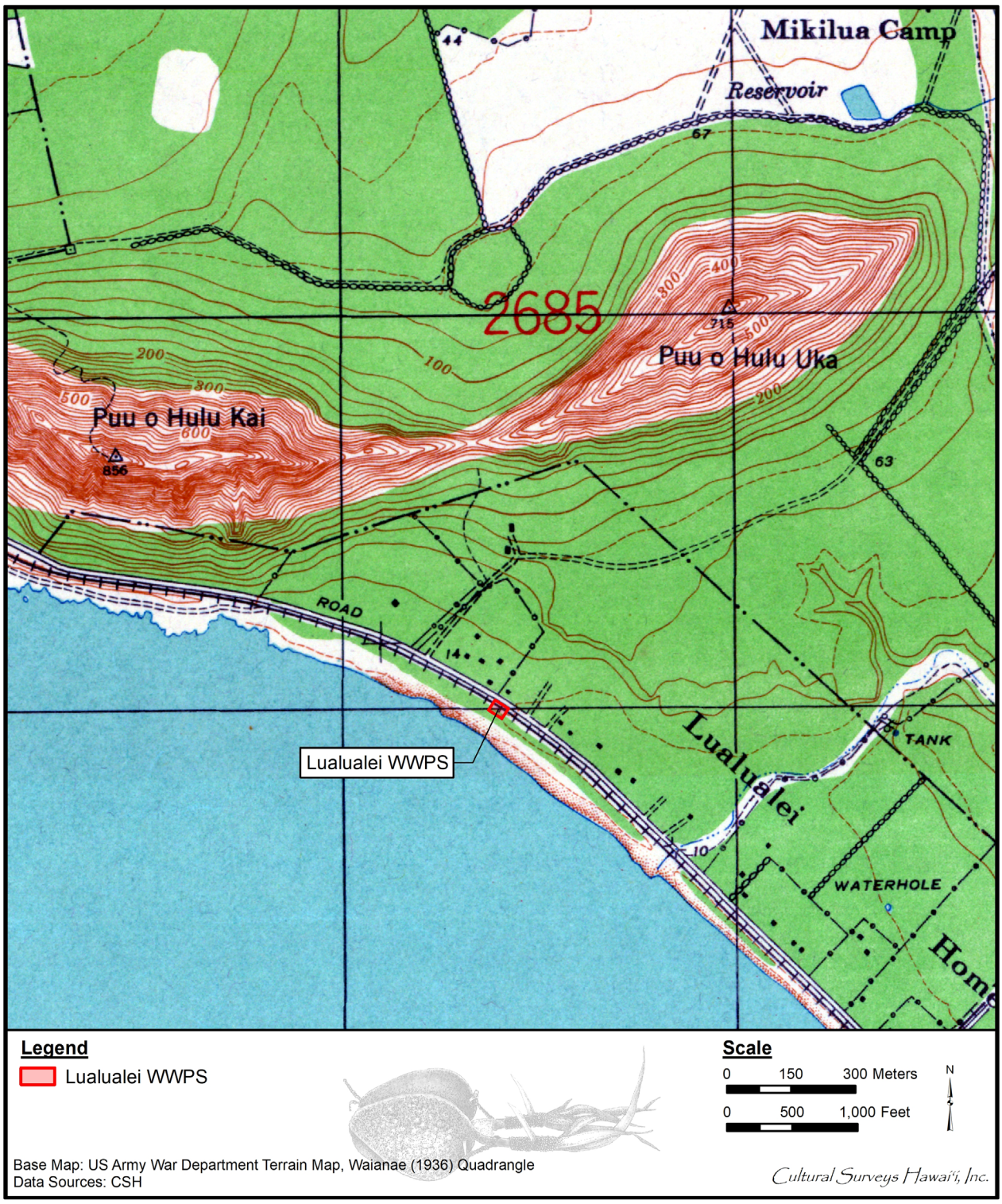


Figure 16. Portion of the 1936 U.S. Army War Department terrain map, Waianae quadrangle showing the location of the Lualualei WWPS

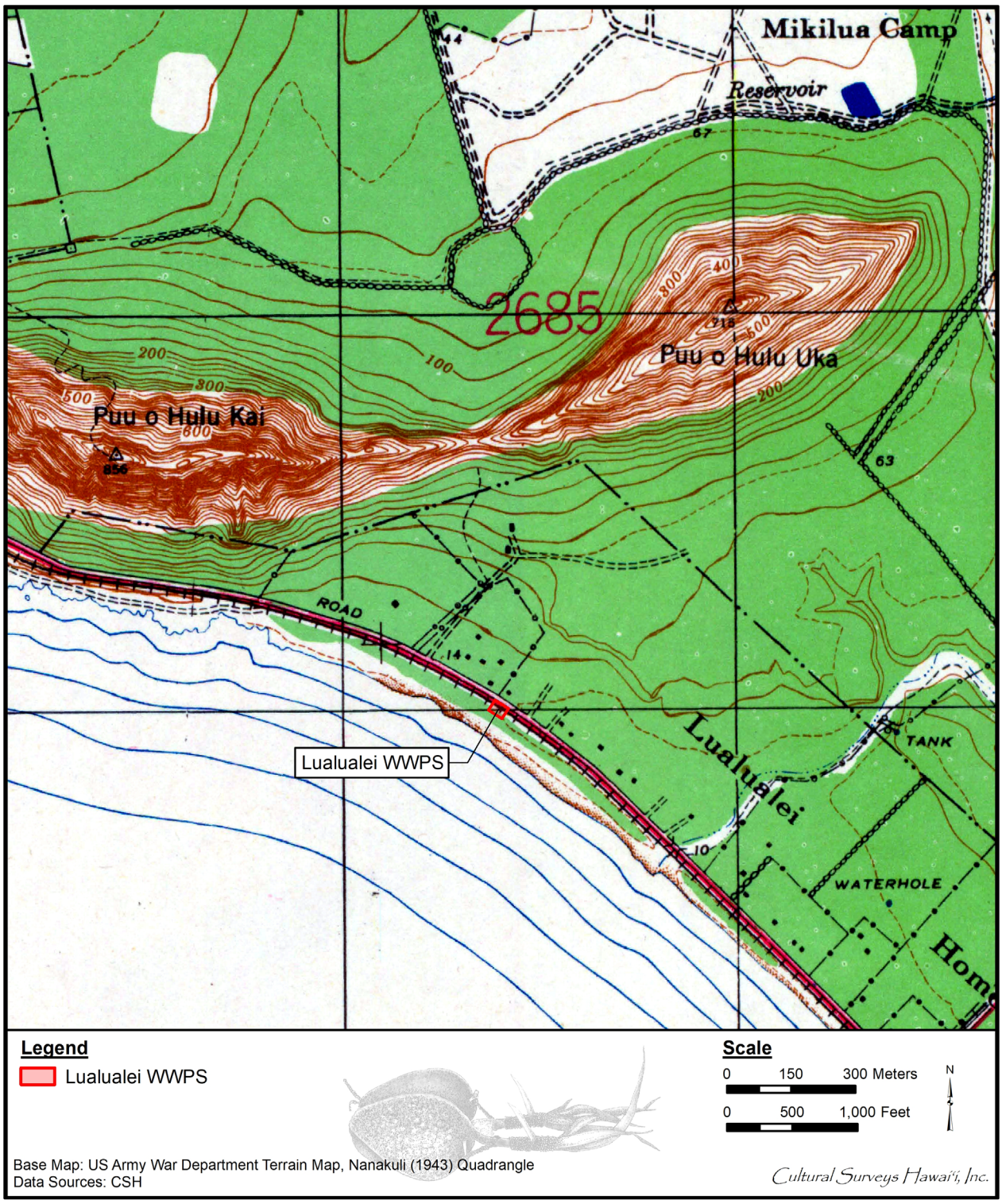


Figure 17. Portion of the 1943 U.S. Army War Department terrain map, Nanakuli quadrangle showing the location of the Lualualei WWPS

Figure 18. 1949 Lualualei Coast aerial photograph (UH SOEST) showing the location of the Lualualei WWPS

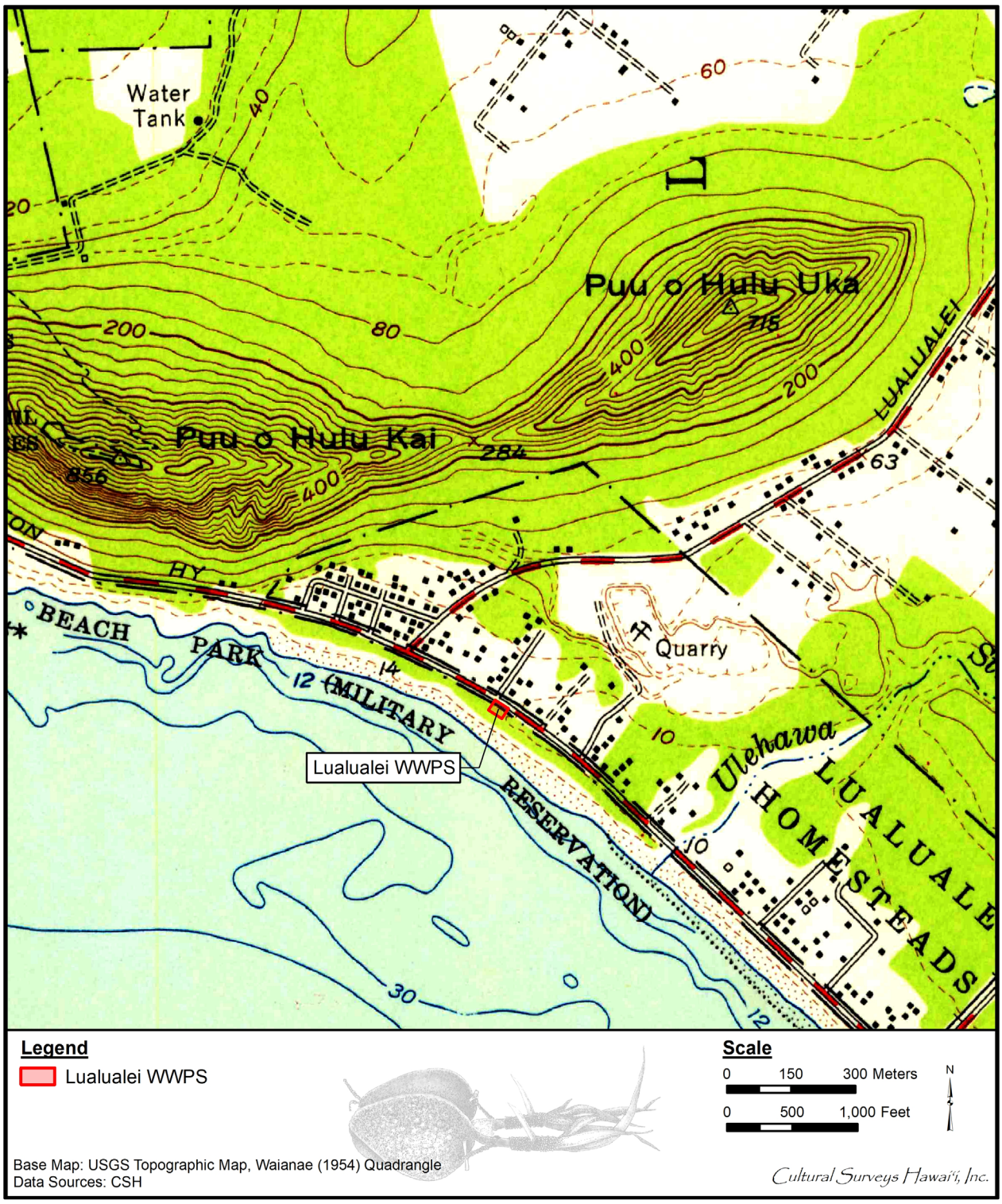


Figure 19. Portion of the 1954 Waianae USGS topographic quadrangle showing the location of the Lualualei WWPS

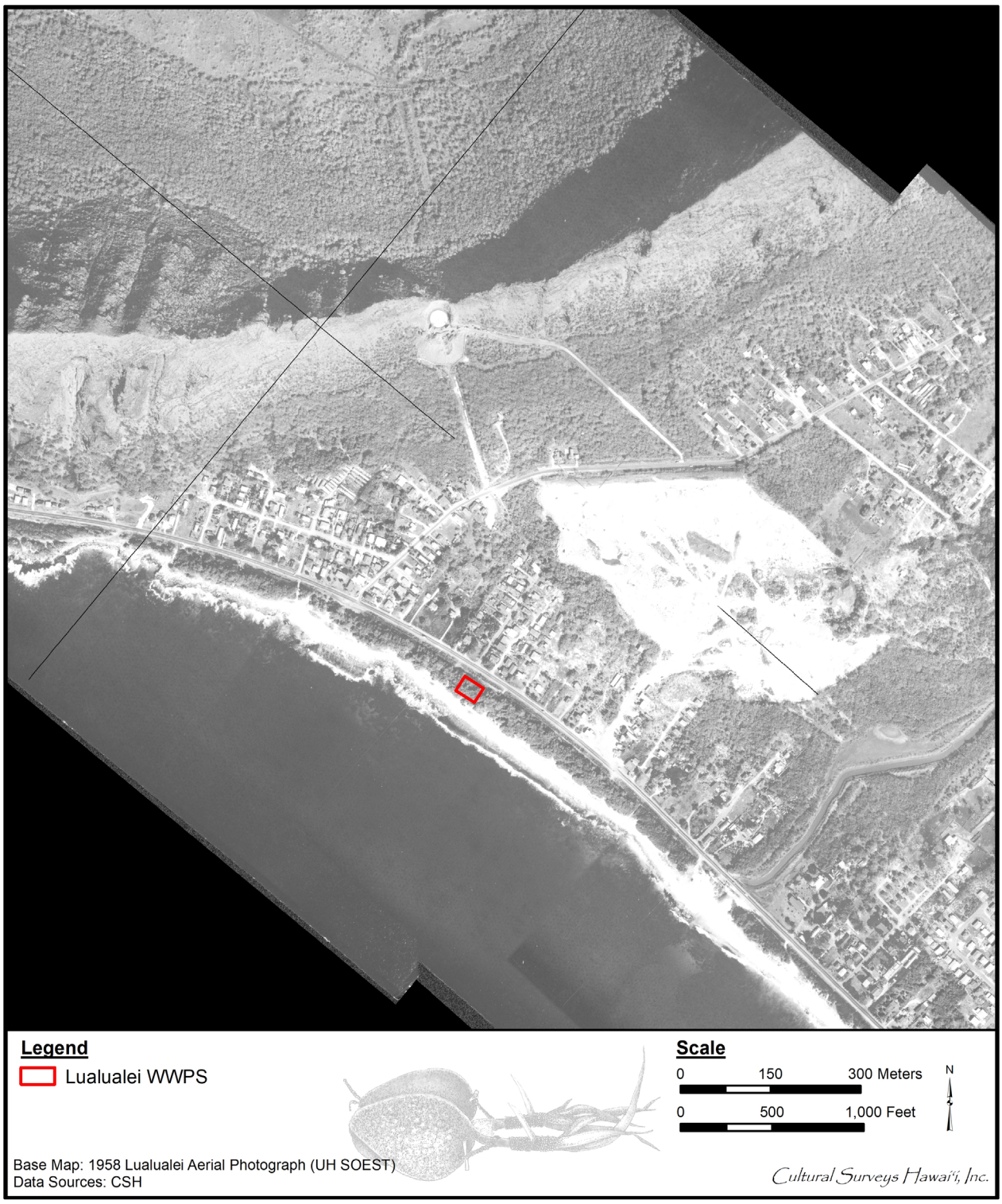


Figure 20. 1958 Lualualei Coast aerial photograph (UH SOEST) showing the location of the Lualualei WWPS

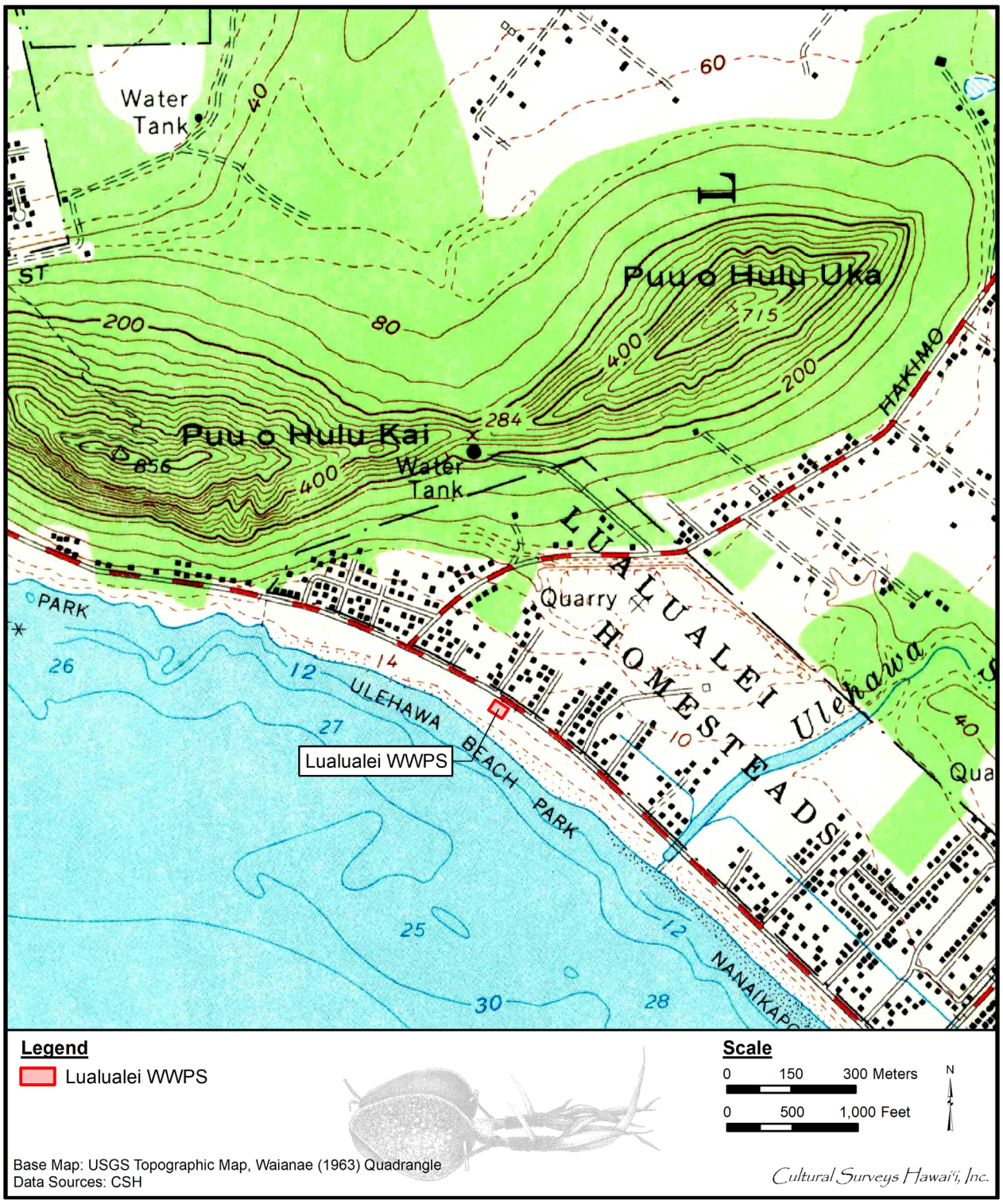


Figure 21. Portion of the 1963 Waianae USGS topographic quadrangle showing the location of the Lualualei WWPS

Figure 22. 1965 USDA aerial photograph of Lualualei (UH MAGIS) showing the location of the Lualualei WWPS

Figure 23. 1971 Lualualei Coast aerial photograph (UH SOEST) showing the location of the Lualualei WWPS

Figure 24. Portion of the 1977 USGS Orthophotoquad aerial photograph, Waianae quadrangle showing the location of the Lualualei WWPS

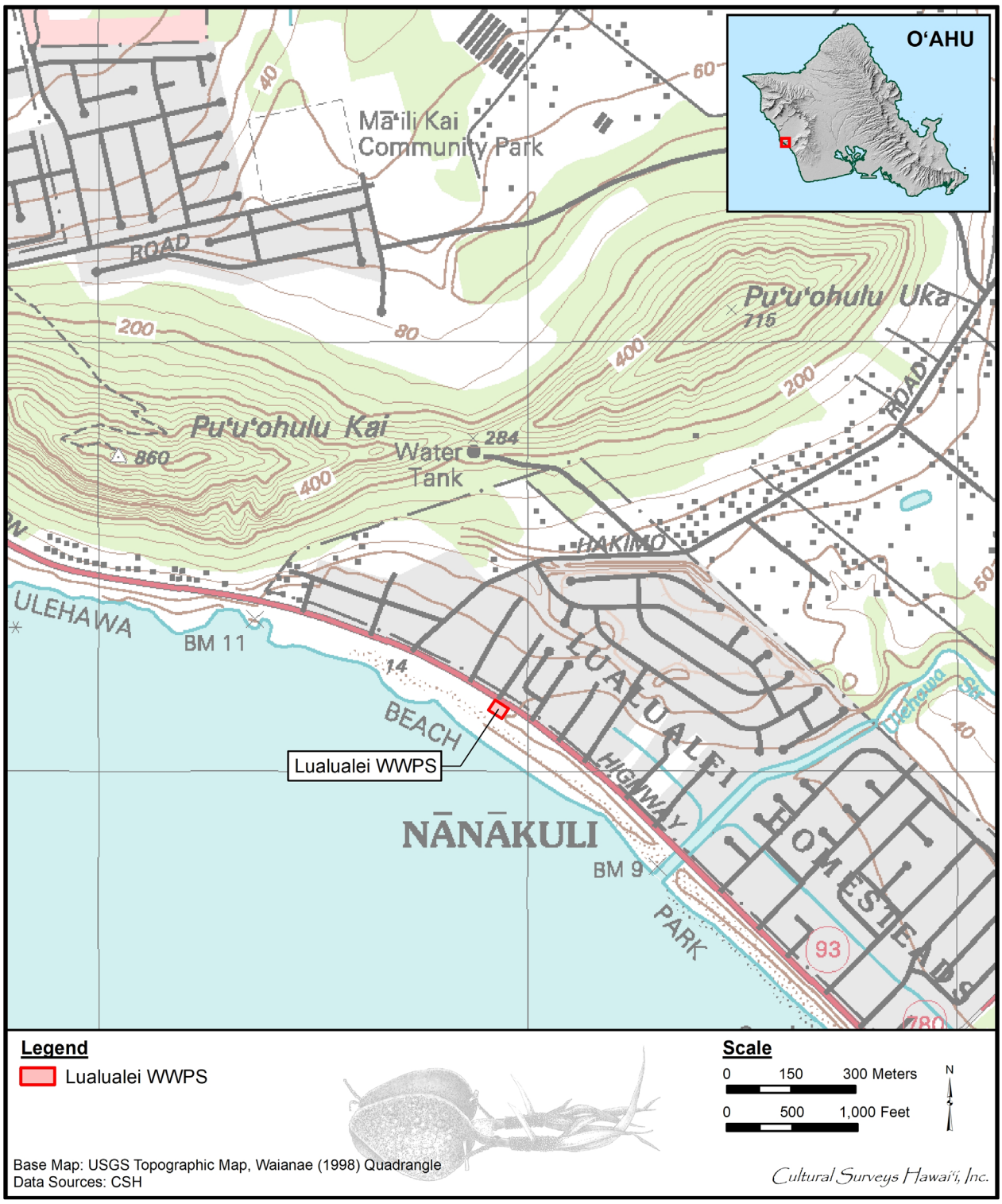


Figure 25. Portion of the 1998 Waianae USGS topographic quadrangle showing the Lualualei WWPS

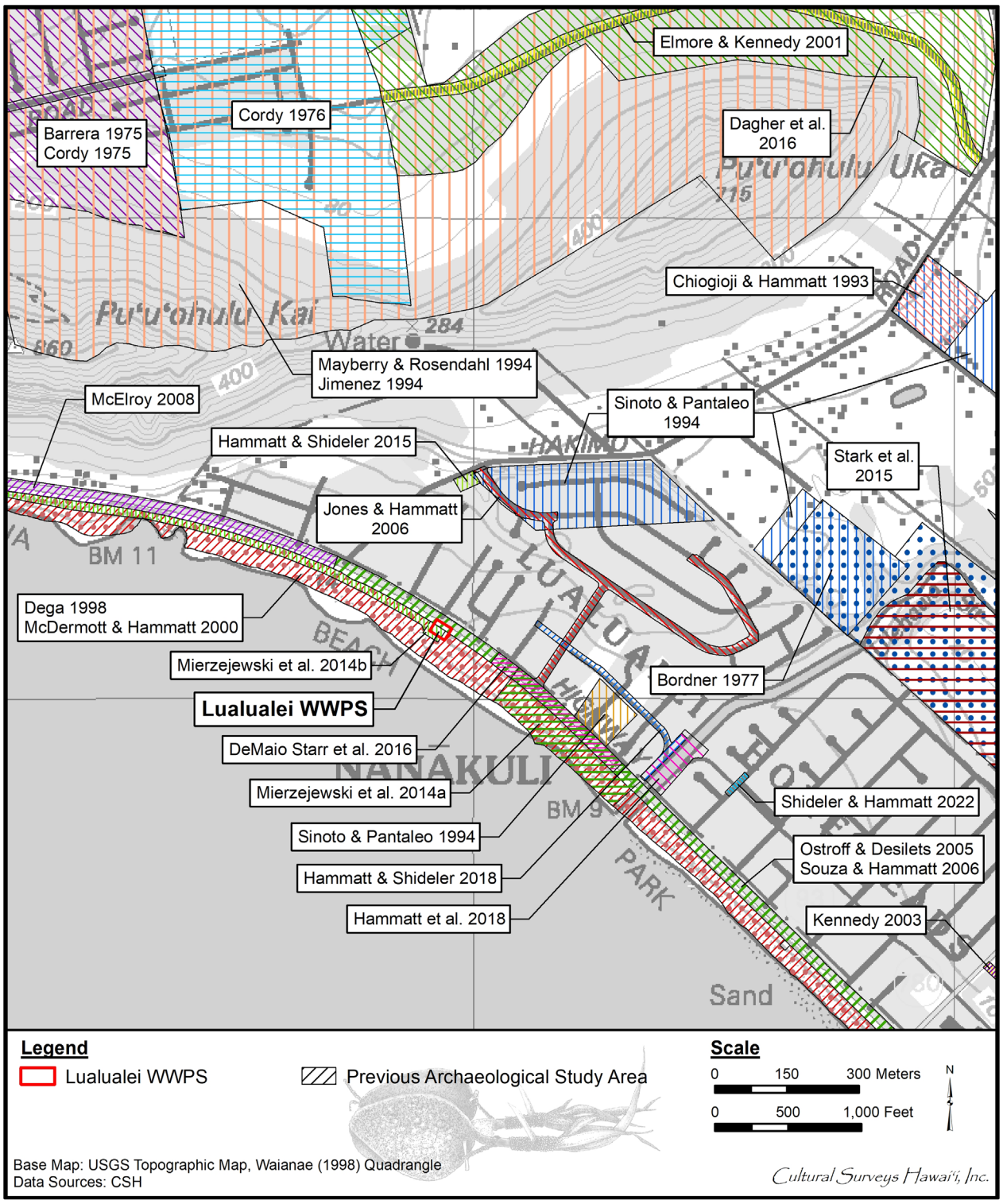


Figure 26. Previous archaeological studies within approximately 1.0 km of the Lualualei WWPS (base map: 1998 Waianae USGS topographic quadrangle)

Table 1. Previous archaeological studies within approximately 1.0 km of the Lualualei WWPS

Reference	**Type of Study**	**Location**	**Results (SIHP # 50-80-07-XXXX); (not all within scope of** Figure 29**)**
McAllister 1933	Island-wide survey	Lualualei Ahupua‘a	Recorded eight historic properties in or near Lualualei: (McAllister) Site 147, Ilihune Heiau; Site 148, rock called Maui; Site 149, Nioiula Heiau on Hālona ridge; Site 150, house sites or *heiau* (pre-Christian place of worship) at Pahoa cliffs; Site 151, Kakioe Heiau at Pūhāwai; Site 152 Pu‘u Pāhe‘ehe‘e Heiau; Site 153, Kū‘īlioloa Heiau; Site 162, Mauna Kūwale burial cave, house sites and petroglyph rock in Ulehawa Beach Park
Barrera 1975	Archaeological reconnaissance survey	Mā‘ili, Kaiser Pacific Properties land, central *makai* Lualualei	Identified possible religious structure (Site CH-Oa-1), C-shaped feature, two house sites, and petroglyph rock (no SIHP #s assigned)
Cordy 1975	Archaeological excavation	Mā‘ili, Kaiser Pacific Properties land, central *makai* Lualualei	Excavation at Site SH-Oa-1 (identified by Barrera 1975) yielded no evidence site is religious structure, and Cordy (1975) concluded it was constructed no earlier than 1930
Cordy 1976	Archaeological reconnaissance survey	Mā‘ili Kai, Kaiser Pacific Properties land, central *makai* Lualualei	Identified 16 historic properties including walls, enclosures, platforms, and a trail
Bordner 1977	Archaeological reconnaissance survey	Nānākuli landfill, TMK: (1) 8-7-009	No historic properties identified
Chiogioji and Hammatt 1993	Archaeological survey and testing	5-acre parcel between Pu‘u o Hulu and Ulehawa Stream, S *makai* Lualualei	No historic properties identified

Reference	Type of Study	Location	Results (SIHP # 50-80-07-XXXX); (not all within scope of Figure 29)
Jimenez 1994	Archaeological inventory survey	Mā‘ili Kai, central *makai* Lualualei	Conducted additional AIS at four archaeological sites previously recommended for further data collection (SIHP #s -03339, -03344, -03750, and -03755); findings led to altered significance assessments and site treatment recommendations for project area’s 26 sites
Mayberry and Rosendahl 1994	Archaeological reconnaissance survey	415+ acre Mā‘ili Kai, central *makai* Lualualei	Found 26 sites; 12 sites newly identified, and 14 of 25 previously recorded sites confirmed; noted large-scale ranching, land clearing, and quarrying from 1851 to present [1994] extensively altered Maili Kai property project area
Sinoto and Pantaleo 1994	Reconnaissance survey	Lualualei Homesteads	No historic properties identified in five alternative sites examined
Dega 1998	Letter report regarding archival and field reconnaissance	Ulehawa Beach Park project, Nānākuli	Pedestrian survey identified 10 m x 8-10 cm thick cultural horizon in stabilized dune profile consisting of charcoal flecks, bird and fish bone plus historic structures including abandoned WWII bunkers; report also commented on 2 x 2 ft sandstone petroglyphic rock with three figures removed from beach park area to Bishop Museum
McDermott and Hammatt 2000	Archaeological inventory survey	Mā‘ili, Ulehawa Beach Park fronting present project area (see present Figure 27)	Three historic properties, including features of WWII-era bunker (SIHP # -05761) and two subsurface cultural layers (SIHP #s -05762 and -05763) documented during test excavations; deposits consisted of midden (e.g., marine shell, fish bone) and both indigenous (fishhooks, volcanic glass, basalt flakes) and historic (glass, metal, and concrete fragments) artifacts; both layers appeared to date to late traditional Hawaiian or very early post-Contact periods

Reference	Type of Study	Location	Results (SIHP # 50-80-07-XXXX); (not all within scope of Figure 29)
Elmore and Kennedy 2001	Archaeological inventory survey	Wai‘anae Coast Emergency Access Road (several discrete areas including Helelua Place in south coastal Lualualei discussed in Addendum)	No historic properties identified in Helelua Place
Kennedy 2003	Addendum to an archaeological inventory survey	Wai‘anae Coast Emergency Access Rd, S *makai* Lualualei	Addresses additional investigations at three potential cultural features (pit caves) in vicinity of Helelua Place Extension Corridor; no historic properties identified
Ostroff and Desilets 2005	Archaeological monitoring	Water line installation on Farrington Hwy	Identified five charcoal-enriched sand deposits
Jones and Hammatt 2006	Archaeological monitoring	La‘ikū, Wai‘olu, and Princess Kahanu streets, Lualualei, TMKs: (1) 8-7-007:033, 042, and 043	No historic properties identified
Souza and Hammatt 2006	Archaeological monitoring	Fiber optic installation, Farrington Hwy	No historic properties identified
McElroy 2008	Archaeological monitoring	Lualualei, Wai‘anae, and Mākaha Ahupua‘a, portions of TMKs: (1) 8-2 through 8-7	No historic properties identified
Mierzejewski et al. 2014a	Archaeological monitoring	Ulehawa Beach Park	No historic properties identified
Mierzejewski et al. 2014b	Archaeological monitoring	Lualualei Wastewater Pump Station Force Main System project	No historic properties identified, (included portion of present Lualualei WWPS study area, see present Figure 28)
Hammatt and Shideler 2015	Archaeological evaluation (field inspection and literature review)	HECO Pole Replacement project in Mā‘ili, Lualualei Ahupua‘a, TMKs: (1) 8-7-006:002 and 008	Notes presence of remnants of former Pu‘u-o-Hulu Military Reservation and coast defense Battery No. 303; coast defense site originally constructed after Pearl Harbor attack to house emergency battery of two obsolete 7-inch guns; modernized in 1944 to house two modern 6-inch guns with tunnels for magazines, generators, and support

Reference	Type of Study	Location	Results (SIHP # 50-80-07-XXXX); (not all within scope of Figure 29)
Stark et al. 2015	Archaeological literature review and field inspection	PVT Integrated Solid Waste Management Facility in Lualualei, TMKs: (1) 8-7-009:025 and 8-7-021:026	Two potential historic properties described with temporary site #s: CSH 1, dry-stacked historic (ca. 1936) rock wall and CSH 2, linear pile of boulders meandering along top margin of break in slope to form a terrace; appears to have infilling on high side of terrace
Dagher et al. 2016	Archaeological inventory survey	123.6 acres on north side of Pu‘u‘ohulu Kai Ridge, S *makai* Lualualei	Study area subject of several previous archaeological investigations (Cordy l976, Jimenez 1994, and Mayberry and Rosendahl 1994); newly identified two sites (SIHP #s -07391, a mound and -07392, a wall), and confirmed and further documented three previously identified sites (SIHP #s -03337 a wall, -03338 a mound, and -03750, a C-shape enclosure)
DeMaio Starr et al. 2016	Archaeological assessment (AIS with negative results)	Farrington Hwy Drainage Improvements project, Lualualei Ahupua‘a, TMK: (1) 8-7-007:001 por. and Farrington Hwy Right-of-Way (ROW)	No historic properties identified
Hammatt et al. 2018	Archaeological literature review and field inspection	Ulehawa U-1 Channel Improvements project	No historic properties observed other than U-1 drainage ditch and channelization of Ulehawa Stream; early consultation with SHPD archaeology and architecture branches recommended regarding possible need for further documentation of U-1 drainage ditch and channelization of Ulehawa Stream

Reference	Type of Study	Location	Results (SIHP # 50-80-07-XXXX); (not all within scope of Figure 29)
Hammatt and Shideler 2018	Archaeological literature review and field inspection	Ulehawa U-2 Channel Improvements project	No historic properties observed other than U-1 drainage ditch and channelization of Ulehawa Stream; early consultation with SHPD archaeology and architecture branches recommended regarding possible need for further documentation of U-1 drainage ditch and channelization of Ulehawa Stream
Shideler and Hammatt 2022	Archaeological literature review and field inspection	Mōhihi St (BWS 8-inch water main project)	No archaeological historic properties identified; raises question regarding historic nature of Ulehawa U-1, U-2, and U-3 channels

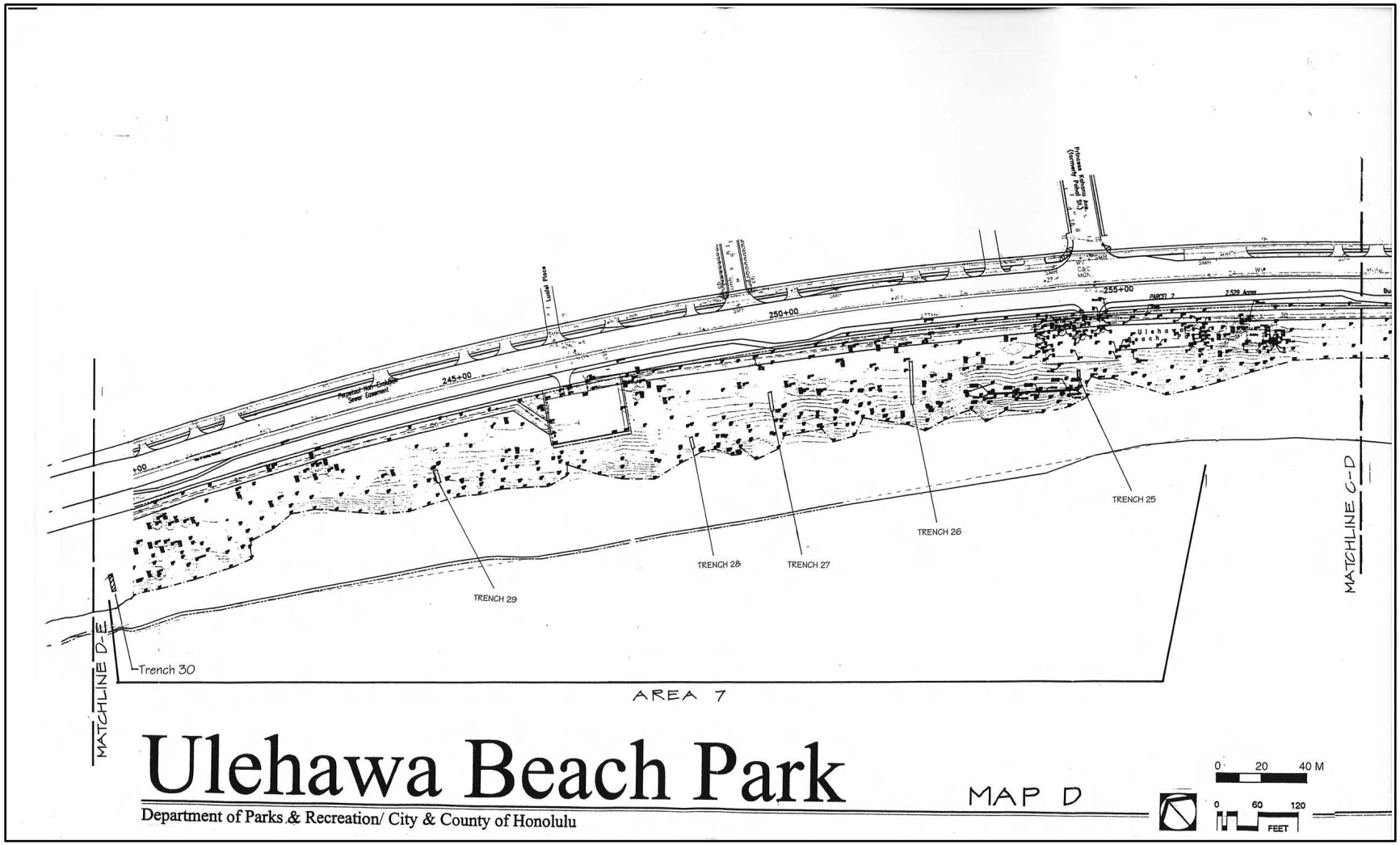
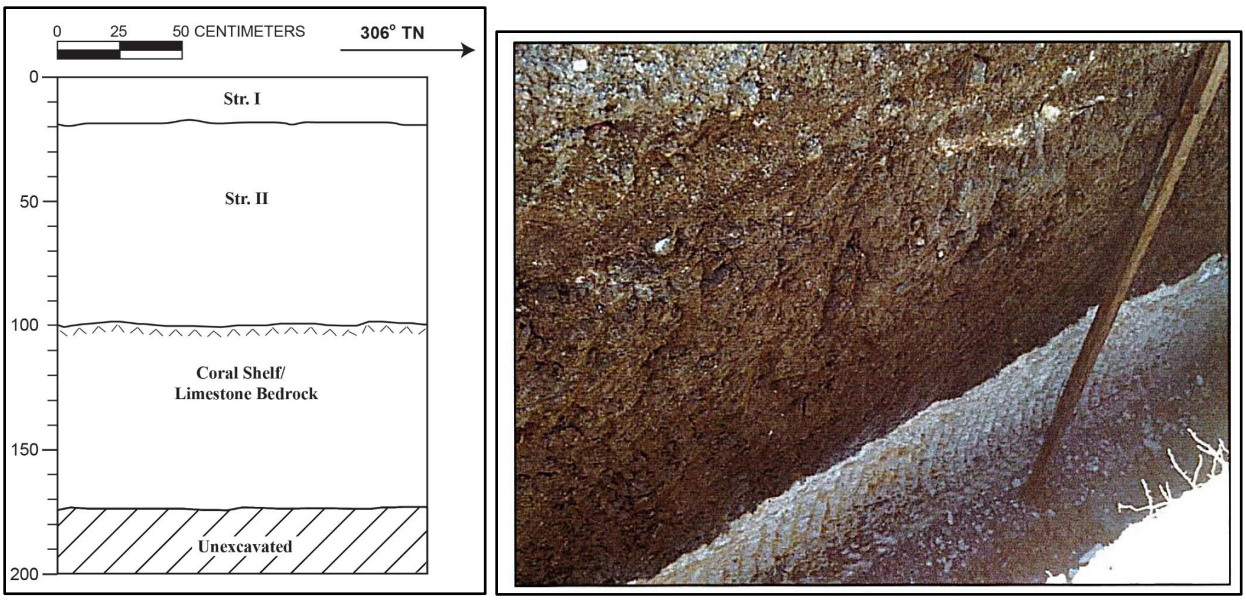


Figure 27. “Map D Showing Location of Backhoe Trenches 25-30 in Area 7” (from McDermott and Hammatt 2000:105) bracketing the Lualualei WWPS (“No sign of any cultural deposit was observed”; McDermott and Hammatt 2000:104)



Stratum	Depth (cmbs)	Description
I	0-20	7.5 YR 3/2, dark brown; very gravelly sandy loam; weak, fine, crumb structure; moist, friable consistency; no cementation; nonplastic; mixed origin; abrupt lower boundary; smooth topography; small roots common; no cultural material observed; reworked natural sediment associated with previous grading
II	20-100	10 YR 3/2 very dark greyish brown; gravelly clay loam; moderate, medium, blocky structure; moist, friable consistency; no cementation; slightly plastic; mixed origin; abrupt lower boundary, smooth topography; few fine to medium roots present; no cultural material observed; naturally deposited alluvial sediment
N/A	100-180 Base of Excavation	Coral shelf/limestone bedrock

Figure 28. “Profile 4” at the Lualualei Wastewater Pump Station (from Mierzejewski et al. 2014b:56–57)

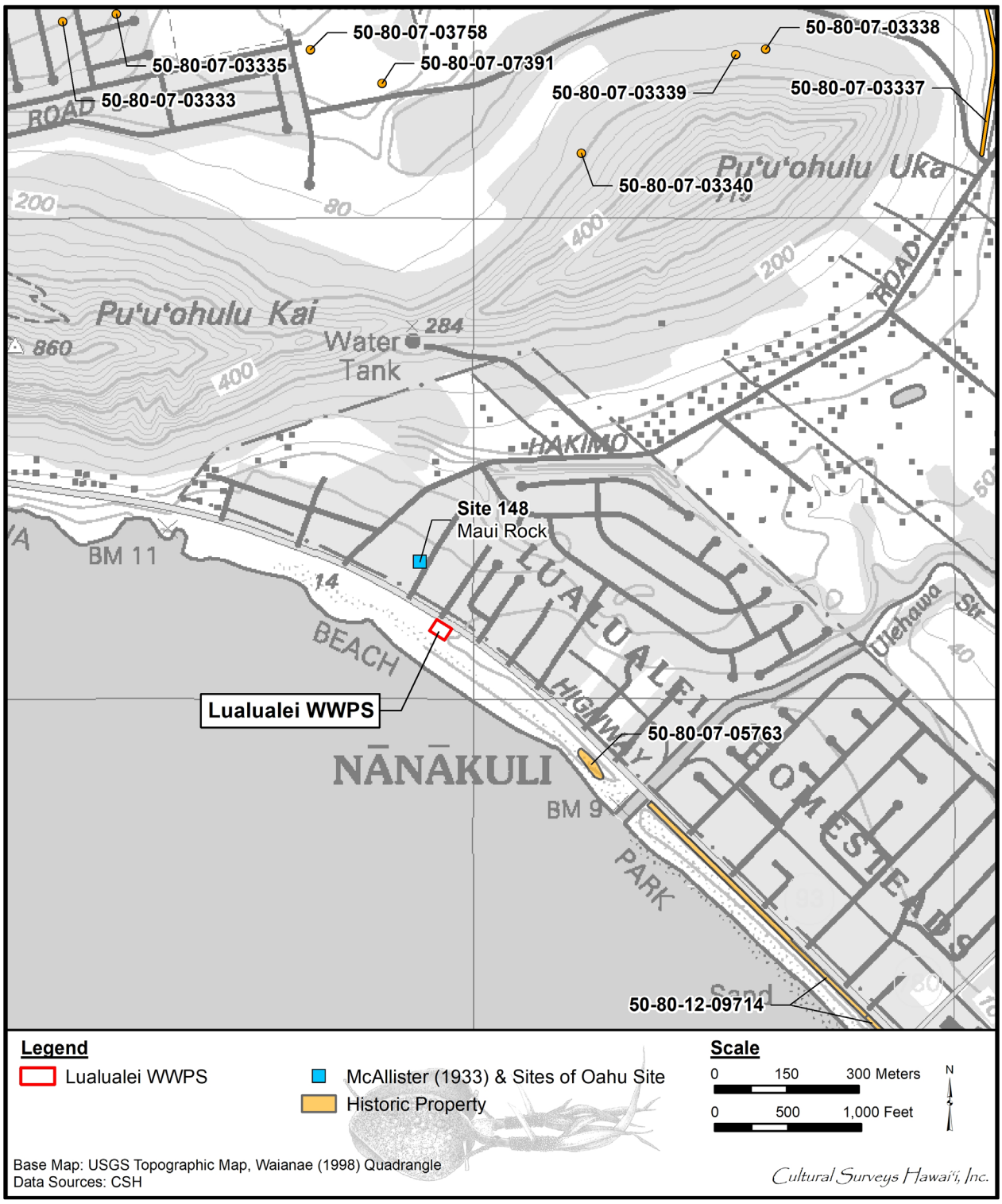


Figure 29. Previously identified historic properties within approximately 1.0 km of the Lualualei WWPS (base map: 1998 Waianae USGS topographic quadrangle)

Table 2. Previously identified historic properties within approximately 1.0 km of the Lualualei WWPS

SIHP #	Formal Type	Source	Comment
Site 148 50-80-07-00148	Maui Rock (storied stone or *pōhaku*)	McAllister 1933	NW coastal Lualualei, *mauka* of Farrington Hwy
50-80-07-03333	Agricultural/ranching complex	Mayberry and Rosendahl 1994	Central *makai* Lualualei, one standing structure and two collapsed structures with post-WWII trash
50-80-07-03335	Well	Mayberry and Rosendahl 1994	Central *makai* Lualualei, limestone sinkhole used as a well
50-80-07-03337	Wall	27066, 9522, 9500	Central *makai* Lualualei, post-Contact
50-80-07-03338	Mounds	Mayberry and Rosendahl 1994	Central *makai* Lualualei, antiquity uncertain
50-80-07-03339	C-shape and wall	Mayberry and Rosendahl 1994	Central *makai* Lualualei, antiquity uncertain
50-80-07-03340	C-shaped enclosure	Mayberry and Rosendahl 1994	Central *makai* Lualualei, composed of dry-laid basalt rocks and possible dating to WWII
50-80-07-03758	Mound	Cordy 1976, Mayberry and Rosendahl 1994	Central *makai* Lualualei, likely dates to early 20th century
50-80-07-05763	Subsurface cultural deposit (pre-Contact)	McDermott and Hammatt 2000	On coast, central Lualualei
50-80-07-07391	Mound	Dagher et al. 2016	Central *makai* Lualualei, age undetermined
50-80-12-09714	OR&L ROW (National Register portion) (post-Contact)	Chiogioji and Hammatt 1993	On coast, length of Lualualei

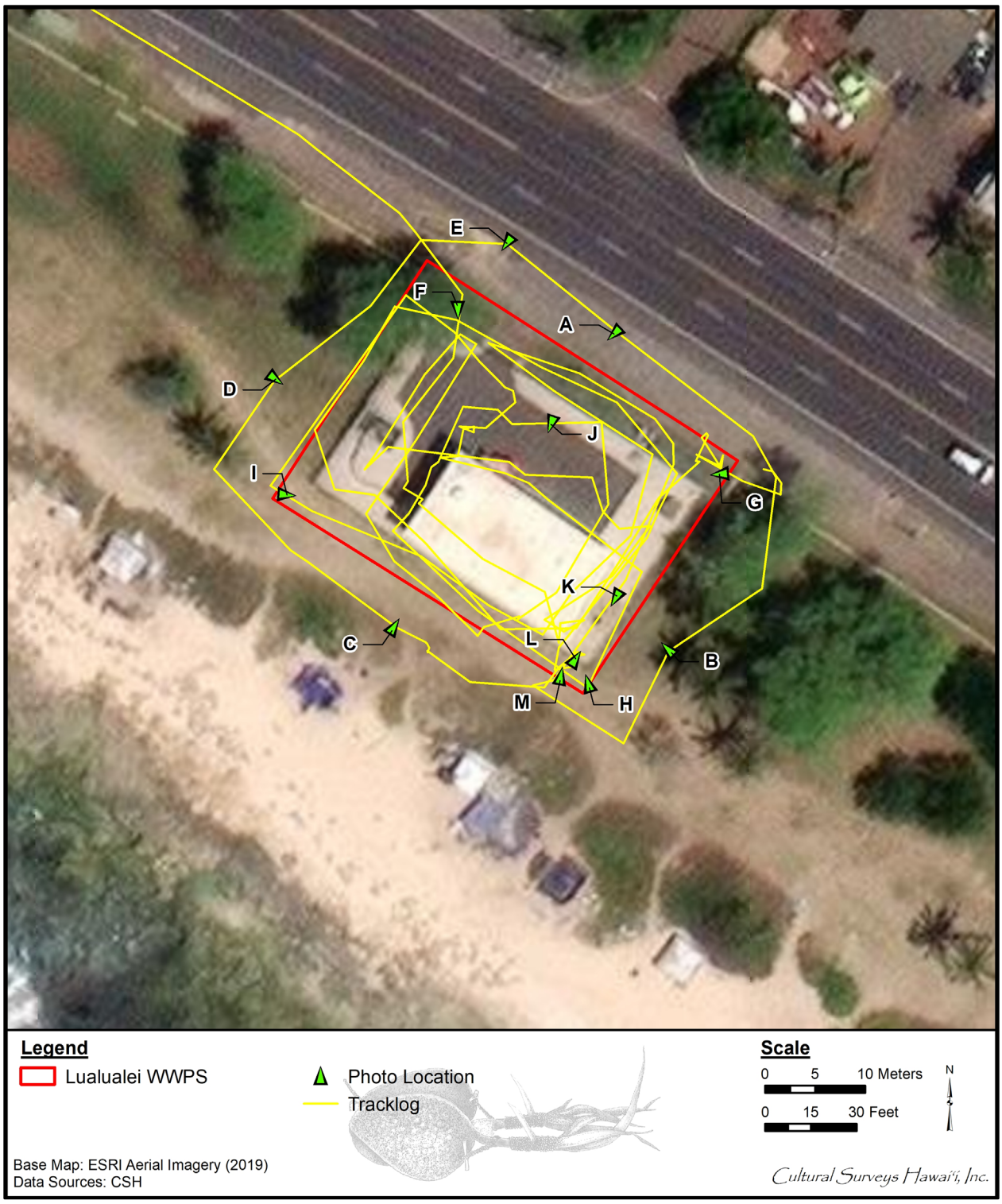


Figure 30. Archaeologist’s track log and key to the following photographs indicating general location from which the photograph was taken and the general orientation (base map: ESRI 2019 aerial photograph; the aerial is slightly oblique and the tracklog overlay is slightly skewed)

Figure 31. Photo A: View of the front (northeast side) of the Lualualei WWPS from Farrington Highway, view to southwest

Figure 32. Photo B: View of the southeast side of the Lualualei WWPS, view to northwest

Figure 33. Photo C: View of the *makai* (southwest) side of the Lualualei WWPS, view to northeast

Figure 34. Photo D: View of the northwest side of the Lualualei WWPS, view to southeast

Figure 35. Photo E: View of the entrance to the Lualualei WWPS, view to southwest

Figure 36. Photo F: View from the north corner of the Lualualei WWPS, view to south

Figure 37. Photo G: View from the east corner of the Lualualei WWPS, view to west

Figure 38. Photo H: View from the south corner of the Lualualei WWPS, view to north

Figure 39. Photo I: View from the west corner of the Lualualei WWPS, view to east

Figure 40. Photo J: View of the front of the Lualualei WWPS Pump Station building, the above ground fuel tank (on the back left side) would not be visible in this view, view to southwest

Figure 41. Photo K: View of the proposed location of new 2,000-gallon Convault aboveground fuel storage tank (at location of existing UST at concrete slab) in south corner of Lualualei WWPS, view to southwest

Figure 42. Photo L: View of the proposed location of new 2,000-gallon aboveground fuel storage tank (at location of existing UST at concrete slab in south corner of the Lualualei WWPS), view to northeast

Figure 43. Photo M: View of proposed fuel supply/return piping alignment (connecting to Lualualei WWPS Pump Station Building near three white pipes at left), view to north

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TOWNSCAPE, INC.
Environmental & Community Planning

900 Fort Street Mall Suite 1160 · Honolulu, HI 96813 · PH: (808) 536-6999 · FAX: (808) 524-4998 · www.townscapeinc.com

March 27, 2025

Subject: Early Consultation Request for Draft Environmental Assessment (DEA)
Fuel Storage Tank Improvements for the Lualualei Wastewater Pump Station – Waiʻanae, Island of Oʻahu
Tax Map Key 8-7-007:067

Dear Participant,

On behalf of the City and County of Honolulu, Department of Environmental Services, Townscape, Inc. is preparing a DEA, pursuant to Hawaiʻi Revised Statues, Chapter 343, and Hawaiʻi Administrative Rules (HAR), Chapter 11-200.1 for the **Fuel Storage Tank Improvements for the Lualualei Wastewater Pump Station** ("Project").

Pursuant to HAR, Chapter 11-200.1-18, the City's Department of Environmental Services (Proposing Agency) is conducting early consultation to seek input from agencies, citizen groups, and individuals who may have an area of expertise, which may guide the scope and preparation of the DEA, and/or may be affected by the proposed Project. Please find enclosed an Early Consultation Handout with a project description and location map for your review and comment. We are requesting comments no later than **April 27, 2025** to be sent via mail or e-mail to:

Townscape, Inc.
Attn: Gabrielle Sham
900 Fort Street Mall, Suite 1160
Honolulu, HI 96813
E-mail: gabrielle@townscapeinc.com

If we do not receive a response by this date, we will assume your agency or organization has no comments. Please contact the undersigned with any questions you may have at (808) 550-3894 or via e-mail at gabrielle@townscapeinc.com. Mahalo in advance for your participation in the early consultation for this Project.

Sincerely,

Gabrielle Sham
Associate Planner

Enclosure: Early Consultation Handout

Project Name	Fuel Storage Tank Improvements for the Lualualei Wastewater Pump Station
Proposing and Determining Agency	City and County of Honolulu, Department of Environmental Services 1000 Ulu'ōhi'a Street Suite 308 Honolulu, Hawaii 96707
Agent	Townscape, Inc. 900 Fort Street Mall, Suite 1160 Honolulu, HI 96813 Phone: (808) 550-3894 E-mail: gabrielle@townscapeinc.com
HRS, Chapter 343 Trigger	Use of County lands and funds; In shoreline area.
Project Location	85-1581 Farrington Hwy, Wai'anae, HI 96792
Tax Map Key & Recorded Fee Owner	(1) 8-7-007:067, City & County of Honolulu
Project Area	0.2311 acres (or 11,065 square feet)
State Land Use District	Urban
Development Plan	Wai'anae Sustainable Communities Plan
Special Management Area	In Special Management Area

Overview of Proposed Project

The Lualualei Wastewater Pump Station (WWPS) has been in service since 1983. The proposed project involves replacing the existing underground fuel storage tank with a new 2,000-gallon aboveground fuel storage tank. Additionally, the project includes replacing the underground fuel piping, fuel monitoring panel, and all associated sensors, as well as connecting the new fuel monitoring panel to the supervisory control and data acquisition (SCADA) system. This work must be completed by July 15, 2028, in compliance with Hawai'i Administrative Rules 11-280.1, which mandates that all underground storage tanks and piping installed before August 9, 2013 to provide secondary containment and utilize interstitial monitoring. The aboveground storage tank will supply the fuel required for the emergency backup generator to service the WWPS.


ISLAND OF O'AHU
N
Kāne'ohe
Wai'anae
Honolulu
Project location indicated by red star
HAKIMO RD
WAIOLU ST
LUALEI PL
Lualualei WWPS
(TMK 8-7-007:067)
Farrington Hwy
PRINCESS KAHANU AVE
This graphic has been prepared for general planning purposes only and should not be used for boundary interpretation or other spatial analysis.
LEGEND
Project Site
TMK Parcels
Lualualei WWPS
Project Location
Wai'anae, Hawai'i
March 2025
0 100 200 Feet
N
W
E
S
Prepared by:
TOWNSCAPE, INC.
Environmental & Community Planning

JOSH GREEN, M.D.
GOVERNOR | KE KIAʻĀINA

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIAʻĀINA

DAWN N. S. CHANG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

STATE OF HAWAIʻI | KA MOKUʻĀINA ʻO HAWAIʻI
DEPARTMENT OF LAND AND NATURAL RESOURCES
KA ʻOIHANA KUMUWAIWAI ʻĀINA
LAND DIVISION

P.O. BOX 621
HONOLULU, HAWAII 96809

April 27, 2025

Townscape, Inc.
Attn: Gabrielle Sham
900 Fort Street Mall, Suite 1160
Honolulu, HI 96813

via email: gabrielle@townscapeinc.com

SUBJECT: Draft Environmental Assessment (DEA) for Fuel Storage Improvements at Lualualei Wastewater Pump Station Located in Waiʻanae, Island of Oʻahu; TMK: (1) 8-7-007:067.

Dear Ms. Sham:

Thank you for the opportunity to review and comment on the subject matter. The Land Division of the Department of Land and Natural Resources (DLNR) distributed or made available a copy of your request pertaining to the subject matter to DLNR's Divisions for their review and comments.

Please find comments from the following divisions: Aquatic Resources, Boating & Ocean Recreation, Engineering, the Land Division – Shoreline Specialist, the Commission on Water Resource Management, and the Office of Conservation and Coastal Lands on the subject matter. Should you have any questions, please feel free to contact Dayna Vierra at (808) 587-0423 or email: dayna.k.vierra@hawaii.gov.

Sincerely,

FOR Russell Y. Tsuji
Land Administrator

Enclosure(s)

JOSH GREEN, M.D.
GOVERNOR | KE KIAʻĀINA

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIAʻĀINA

DAWN N. S. CHANG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

STATE OF HAWAIʻI | KA MOKUʻĀINA ʻO HAWAIʻI
DEPARTMENT OF LAND AND NATURAL RESOURCES
KA ʻOIHANA KUMUWAIWAI ʻĀINA
LAND DIVISION

P.O. BOX 621
HONOLULU, HAWAII 96809

April 4, 2025

MEMORANDUM

TO: **DLNR Agencies:**
_X_ Div. of Aquatic Resources (kendall.l.tucker@hawaii.gov)
_X_ Div. of Boating & Ocean Recreation (richard.t.howard@hawaii.gov)
_X_ Engineering Division (DLNR.ENGR@hawaii.gov)
_X_ Div. of Forestry & Wildlife (rubyrosa.t.terrago@hawaii.gov)
__ Div. of State Parks
_X_ Commission on Water Resource Management (DLNR.CWRM@hawaii.gov)
_X_ Office of Conservation & Coastal Lands (sharleen.k.kuba@hawaii.gov)
_X_ Land Division – Oʻahu District (barry.w.cheung@hawaii.gov)
_X_ Land Division – Ian C. Hirokawa (ian.c.hirokawa@hawaii.gov)
_X_ Land Division – Rebecca L. Anderson (rebecca.l.anderson@hawaii.gov)
_X_ Land Division – Planner (dayna.k.vierra@hawaii.gov)
_X_ Land Division – Planner (lauren.e.yasaka@hawaii.gov)
_X_ Aha Moku Advisory Committee (leimana.k.damate@hawaii.gov)

FROM: FOR Russell Y. Tsuji, Land Administrator

SUBJECT: **Draft Environmental Assessment for Fuel Storage Tank Improvements for the Lualualei Wastewater Pump Station**

LOCATION: Waiʻanae, Island of Oʻahu; TMK: 8-7-007:067

APPLICANT: Townscape, Inc. on behalf of the City and County of Honolulu, Department of Environmental Services

Transmitted for your review and comment is information on the above-referenced subject matter.

Please submit comments by **April 24, 2025.** If no response is received by this date, we will assume your agency has no comments. Should you have any questions about this request, please contact Dayna Vierra at dayna.k.vierra@hawaii.gov. Thank you.

BRIEF COMMENTS:

( ) We have no objections.
( ) We have no comments.
(__) We have no additional comments.
(☑) Comments are included/attached.

Signed:
Print Name: Brian J. Neilson-Administrator
Division: Aquatic Resources
Date: 04/24/2025

Attachments

STATE OF HAWAIʻI | KA MOKUʻĀINA ʻO HAWAIʻI
DEPARTMENT OF LAND AND NATURAL
RESOURCES DIVISION OF AQUATIC RESOURCES
1151 PUNCHBOWL STREET, ROOM 330
HONOLULU, HAWAII 96813

Date: 4/24/2025
DAR #6862

MEMORANDUM

TO: Brian J. Neilson
DAR Administrator

FROM: Kate Gonzalez, Aquatic Biologist

SUBJECT: Draft Environmental Assessment for Fuel Storage Tank Improvements for the Lualualei Wastewater Pump Station

Request Submitted by: Townscape, Inc.
85-1581 Farrington Hwy, Waiʻanae, Island of Oʻahu, 96792

Location of Project: TMK: 8-7-007:067

Brief Description of Project:

The Lualualei Wastewater Pump Station (WWPS) has been in service since 1983. The proposed project involves replacing the existing underground fuel storage tank with a new 2,000-gallon aboveground fuel storage tank. Additionally, the project includes replacing the underground fuel piping, fuel monitoring panel, and all associated sensors, as well as connecting the new fuel monitoring panel to the supervisory control and data acquisition (SCADA) system. This work must be completed by July 15, 2028, in compliance with Hawai'i
Administrative Rules 11-280.1, which mandates that all underground storage tanks and piping
installed before August 9, 2013 to provide secondary containment and utilize interstitial

Comments:

☐ No Comments ☑ Comments Attached

Thank you for providing DAR the opportunity to review and comment on the proposed project. Should there be any changes to the project plan, DAR requests the opportunity to review and comment on those changes.

Comments Approved: _____ Date: 04/24/2025
Brian J. Neilson
DAR Administrator

DAR# 6862

Brief Description of Project

monitoring. The aboveground storage tank will supply the fuel required for the emergency
backup generator to service the WWPS.

DAR# 6862

Comments

Erosion/LBSP:

DAR recommends that Applicant implement the following mitigation measures for mitigation of erosion and land-based sources of pollution (LBSP).

Mitigation Measure 1. Applicant should consider the proximity of the proposed action to aquatic resources during design and construction. Landscape leveling should be such that long-term erosion and LBSP are minimized.

Mitigation Measure 2. During the construction phase of the proposed action, Applicant should utilize appropriate barriers (e.g., sediment barriers/bags, petroleum absorption diapers, etc.) to limit the amount of sediment or LBSP (e.g., petroleum products, chemicals, debris, etc.) to the maximum extent practicable.

Mitigation Measure 3. Applicant should utilize environmentally inert construction materials to the extent practicable.

Mitigation Measure 4. Applicant should consider the weather while performing construction. Some work may be performed during low rain conditions, but all construction should be halted during storm conditions or when storm conditions threaten the watershed. The site should be secured during storm conditions so that runoff into nearby natural waterbodies is unlikely.

DAR would like to request notification, photo documentation, and GPS coordinates for any occurrence where above-average amounts of sediment or pollution have entered the water or drainage systems, to assess the impact, if any.

Native Biota:

Chapter 13, Section 124, HAR, prohibits injuring or killing indigenous wildlife. During fledgling season for native seabirds, adults and fledglings migrate to the ocean. Artificial light can cause

Comments

disorientation, which can result in crashing or falling. Groundings of fledgelings can cause injury or vulnerability to predators. Therefore, it is recommended that during construction all nighttime light sources are shielded and angled downward to reduce the risk of harm to native seabirds. Nighttime work that requires outdoor lighting should be avoided during the seabird fledging season from September 15 through December 15. Post-construction, all permanent lighting should also be shielded or angled downward.

All on-site workers should be trained on recognizing State-listed waterbirds and seabirds (https://dlnr.hawaii.gov/wildlife/birds/). Should any State-listed waterbirds or seabirds be observed amid construction operations, all activities within a 100-foot radius (30 meters) must halt, and proximity to the bird must be avoided. Once the bird departs the area on its own, work can resume as usual.

Sedimentation:

Sedimentation can introduce suspended solids, nutrients, and pollutants into aquatic ecosystems, leading to turbidity, reduced light penetration, and impaired water quality. Implement erosion and sediment control measures such as silt fences, sediment traps, and erosion control blankets to minimize soil disturbance and sediment runoff during construction activities.

Vegetation buffers: Maintain vegetative buffers along coastal areas to stabilize soil, reduce erosion, and filter sediment-laden runoff before it reaches the ocean.

Stormwater management: Implement stormwater management practices such as permeable pavement, vegetated swales, and retention ponds to reduce stormwater runoff volume and pollutant loads.

Monitoring and compliance: Consider establishing monitoring protocols to assess sedimentation levels, water quality parameters, and compliance with regulatory requirements throughout the project lifecycle.

DAR# 6862

Comments

DAR would like to request notification, photo-documentation, and GPS-coordinates for any occurrence where above-average amounts of sediment have entered the water, in order to assess impact, if any.

Protected Marine Species:

In the event that protected species such as the Hawaiian monk seal, other marine mammal, or sea-turtle is observed in close proximity to the construction site, and the activities being conducted may be considered as a "negligent or intentional act which results in disturbing or molesting a marine mammal", contractors should take appropriate action to modify activities in order to avoid disturbance to the regular behavior and activities of the animal. Appropriate action would include but is not limited to ceasing construction activity until the animal leaves the area of its own accord. If a pup is observed in the area, particular caution should be taken including creating a larger buffer between construction and the animals.
All staff working on-site will receive training to recognize the Hawaiian monk seal and sea turtles, as well as learn the necessary procedures to follow if these species are observed.
Any interaction between a protected species and the construction and repair activity proposed should be reported to the NOAA Protected Species Division and State of Hawaii DOCARE:

NOAA Marine Mammal Response Coordinators (Oahu): 808-220-7802

NOAA Sea Turtles (Oahu): Monday-Friday, 7:30am-4pm NOAA National Marine Fisheries Service - PIFSC Marine Turtle Biology and Assessment Program: (808) 725-5730

State of Hawaii Department of Land and Natural Resources (DLNR) Division of Conservation and Resources Enforcement (DOCARE): 808-643-3567

Seabirds may nest near coastal areas. Prior to initiating construction and before restarting construction after a delay, qualified personnel with seabird biology experience conduct surveys of nearby areas for signs of active nesting or brooding. If a nest or brood is found, create a 100ft buffer around the area until it is no longer active.

DAR# 6862

Comments

DAR recommends that the applicant utilize best management practices to eliminate any potential for incidental entanglement of any marine organism. Entanglement prevention practices will include but are not limited to: minimizing the amount of in-water structures or components that may potentially cause entanglement during operations (loops, holes, slack lines).
At the end of each day and upon completion of the construction project, all construction-related debris that could potentially endanger species by causing entanglement shall be cleared from the construction area.

Barbed wire poses a large hazard for seabirds, especially fledgelings. Fences should not have barbed wire.

If incidental entanglement of protected species occurs DAR and the appropriate federal agency should be notified immediately.

JOSH GREEN, M.D.
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA

DAWN N. S. CHANG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

STATE OF HAWAI'I | KA MOKU'ĀINA 'O HAWAI'I
DEPARTMENT OF LAND AND NATURAL RESOURCES
KA 'OIHANA KUMUWAIWAI 'ĀINA
LAND DIVISION

P.O. BOX 621
HONOLULU, HAWAII 96809

April 4, 2025

MEMORANDUM

FROM: ~~TO:~~

DLNR Agencies:
_X_ Div. of Aquatic Resources (kendall.l.tucker@hawaii.gov)
_X_ Div. of Boating & Ocean Recreation (richard.t.howard@hawaii.gov)
_X_ Engineering Division (DLNR.ENGR@hawaii.gov)
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_X_ Land Division – Rebecca L. Anderson (rebecca.l.anderson@hawaii.gov)
_X_ Land Division – Planner (dayna.k.vierra@hawaii.gov)
_X_ Land Division – Planner (lauren.e.yasaka@hawaii.gov)
_X_ Aha Moku Advisory Committee (leimana.k.damate@hawaii.gov)

TO: ~~FROM:~~ FOR Russell Y. Tsuji, Land Administrator

SUBJECT: **Draft Environmental Assessment for Fuel Storage Tank Improvements for the Lualualei Wastewater Pump Station**

LOCATION: Wai'anae, Island of O'ahu; TMK: 8-7-007:067

APPLICANT: Townscape, Inc. on behalf of the City and County of Honolulu, Department of Environmental Services

Transmitted for your review and comment is information on the above-referenced subject matter.

Please submit comments by **April 24, 2025.** If no response is received by this date, we will assume your agency has no comments. Should you have any questions about this request, please contact Dayna Vierra at dayna.k.vierra@hawaii.gov. Thank you.

BRIEF COMMENTS:

( ) We have no objections.
( ) We have no comments.
( ) We have no additional comments.
(✓) Comments are included/attached.

Signed:
Print Name: Dina U. Lau, Acting Chief Engineer
Division: Engineering Division
Date: Apr 22, 2025

Attachments

DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

LD/Russell Y. Tsuji

Ref: Draft Environmental Assessment for Fuel Storage Tank Improvements for the Lualualei Wastewater Pump Station
Location: Wai'anae, Island of O'ahu
TMK(s): (1) 8-7-007:067
Applicant: Townscape, Inc. on behalf of the City and County of Honolulu, Department of Environmental Services

COMMENTS

The rules and regulations of the National Flood Insurance Program (NFIP), Title 44 of the Code of Federal Regulations (44CFR), are in effect when development falls within a Special Flood Hazard Area (high-risk areas). Be advised that 44CFR, Chapter 1, Subchapter B, Part 60 reflects the minimum standards as set forth by the NFIP. Local community flood ordinances may stipulate higher standards that can be more restrictive and would take precedence over the minimum NFIP standards.

The owner of the project property and/or their representative is responsible for researching the Flood Hazard Zone designation for the project. Flood zones subject to NFIP requirements are identified on FEMA's Flood Insurance Rate Maps (FIRM). The official FIRMs can be accessed through FEMA's Map Service Center (msc.fema.gov). Our Flood Hazard Assessment Tool (FHAT) (fhat.hawaii.gov) could also be used to research flood hazard information.

If there are questions regarding the local flood ordinances, please contact the applicable County NFIP coordinating agency below:

- Oahu: City and County of Honolulu, Department of Planning and Permitting (808) 768-8098.
- Hawaii Island: County of Hawaii, Department of Public Works (808) 961-8327.
- Maui/Molokai/Lanai County of Maui, Department of Planning (808) 270-7139.
- Kauai: County of Kauai, Department of Public Works (808) 241-4849.

Signed: _____
DINA U. LAU, ACTING CHIEF ENGINEER

Date: Apr 22, 2025

JOSH GREEN, M.D.
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA

DAWN N. S. CHANG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

STATE OF HAWAI'I | KA MOKU'ĀINA 'O HAWAI'I
DEPARTMENT OF LAND AND NATURAL RESOURCES
KA 'OIHANA KUMUWAIWAI 'ĀINA
LAND DIVISION

P.O. BOX 621
HONOLULU, HAWAII 96809

April 4, 2025

MEMORANDUM

TO: **DLNR Agencies:**
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X Div. of Boating & Ocean Recreation (richard.t.howard@hawaii.gov)
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X Aha Moku Advisory Committee (leimana.k.damate@hawaii.gov)

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SUBJECT: **Draft Environmental Assessment for Fuel Storage Tank Improvements for the Lualualei Wastewater Pump Station**
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BRIEF COMMENTS:

( ) We have no objections.
(✓) We have no comments.
( ) We have no additional comments.
( ) Comments are included/attached.

Signed:
Print Name: K. Tiger Mills
Division: DLNR. OCCL
Date: 4.4.2025

Attachments

JOSH GREEN, M.D.
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA

DAWN N. S. CHANG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

STATE OF HAWAI'I | KA MOKU'ĀINA 'O HAWAI'I
DEPARTMENT OF LAND AND NATURAL RESOURCES
KA 'OIHANA KUMUWAIWAI 'ĀINA
LAND DIVISION

P.O. BOX 621
HONOLULU, HAWAII 96809

APR 04 2025
RECEIVED

April 4, 2025

MEMORANDUM

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LOCATION: Wai'anae, Island of O'ahu; TMK: 8-7-007:067
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BRIEF COMMENTS:

No objections provided that activities do not affect State land makai of the shoreline and BMPs are employed to minimize disruption to state submerged land and nearshare waters.

( ) We have no objections.
( ) We have no comments.
( ) We have no additional comments.
(X) Comments are included/attached.

Signed:
Print Name: Rebecca L. Anderson
Division: DLNR Land Division
Date: 4 April 2025

Attachments

JOSH GREEN, M.D.
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA

DAWN N. S. CHANG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

STATE OF HAWAI'I | KA MOKU'ĀINA 'O HAWAI'I
DEPARTMENT OF LAND AND NATURAL RESOURCES
KA 'OIHANA KUMUWAIWAI 'ĀINA
LAND DIVISION

P.O. BOX 621
HONOLULU, HAWAII 96809

April 4, 2025

MEMORANDUM

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FROM: FOR Russell Y. Tsuji, Land Administrator

SUBJECT: **Draft Environmental Assessment for Fuel Storage Tank Improvements for the Lualualei Wastewater Pump Station**

LOCATION: Wai'anae, Island of O'ahu; TMK: 8-7-007:067

APPLICANT: Townscape, Inc. on behalf of the City and County of Honolulu, Department of Environmental Services

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BRIEF COMMENTS:

( ) We have no objections.
(X) We have no comments.
( ) We have no additional comments.
( ) Comments are included/attached.

Signed:
Print Name: Richard Howard
Division: DOBOR
Date: 4/7/2025

Attachments

STATE OF HAWAI'I
OFFICE OF PLANNING
& SUSTAINABLE DEVELOPMENT

JOSH GREEN, M.D.
GOVERNOR

SYLVIA LUKE
LT. GOVERNOR

MARY ALICE EVANS
DIRECTOR

235 South Beretania Street, 6th Floor, Honolulu, Hawai'i 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawai'i 96804

Telephone: (808) 587-2846
Fax: (808) 587-2824
Web: https://planning.hawaii.gov/

Coastal Zone Management Program

Environmental Review Program

Land Use Commission

Land Use Division

Special Plans Branch

State Transit-Oriented Development

Statewide Geographic Information System

Statewide Sustainability Branch

DTS202504011643HE

April 11, 2025

Ms. Gabrielle Sham
Townscape, Inc.
900 Fort Street Mall, Suite 1160
Honolulu, HI 96813

Dear Ms. Sham:

Subject: Early Consultation Environmental Assessment for the Proposed Fuel Storage Tank Improvements for the Lualualei Wastewater Pump Station at Waianae, Oahu; Tax Map Key (1) 8-7-007: 067

The Office of Planning and Sustainable Development (OPSD) is in receipt of your early consultation request, received April 1, 2025, on the preparation of an Environmental Assessment (EA), for the proposed fuel storage tank improvements for the Lualualei Wastewater Pump Station (WWPS).

The proposed project involves replacing the existing underground fuel storage tank with a new 2,000-gallon aboveground fuel storage tank. Additionally proposed is replacing the underground fuel piping, fuel monitoring panel, and all associated sensors. The aboveground storage tank will supply the fuel required for the emergency backup generator to service the WWPS. This project must be completed by July 15, 2028, the deadline set forth in Hawaii Administrative Rules (HAR) Section 11-280.1-21 that requires all underground storage tanks and piping installed before August 9, 2013, must be provided with secondary containment design.

The OPSD has reviewed the subject request and has the following comments to offer:

1. The EA shall discuss all triggers of the preparation of an EA set forth in Hawaii Revised Statutes (HRS) Chapter 343, and list all required permits and approvals from the state, federal, and county for the proposed fuel storage tank improvements.

2. The Hawaii Coastal Zone Management (CZM) Law, HRS Chapter 205A, requires all state and county agencies to enforce the CZM objectives and policies. The subject EA should include an assessment with mitigation measures, if needed, as to how the proposed project will conform to each of

the CZM objectives and supporting policies set forth in HRS section 205A-2, as amended.

3. The project is located within the City and County of Honolulu's designated Special Management Area (SMA). The Department of Planning and Permitting, City and County of Honolulu, should be consulted for the SMA permitting requirements and shoreline setbacks. As the supporting document for the SMA permit application, the OPSD suggests that the EA discuss compliance with the requirements of SMA use and shoreline setbacks pursuant to the county SMA and shoreline ordinances.

4. The OPSD recommends that the site-specific Best Management Practices shall be developed and implemented to prevent any runoff, sediment, soil and debris potentially resulting from associated construction activities from adversely impacting the coastal ecosystems and the State waters as specified in HAR Chapter 11-54.

5. To assess potential impacts of coastal erosion and flooding due to sea level rise on the project area, the OPSD suggests the EA refer to the findings of the Hawaii Sea Level Rise Vulnerability and Adaptation Report, 2017 as well as its 2022 update and Guidance for Using the Sea Level Rise Exposure Area in Local Planning and Permitting Decisions: all documents may be found at https://climate.hawaii.gov/hi-adaptation/state-sea-level-rise-resources/.

If you respond to this comment letter, please include DTS202504011643HE in the subject line. For any questions regarding this letter, please contact Rachel Beasley of our office at (808) 587-2831 or by email at rachel.e.beasley@hawaii.gov.

Sincerely,

Mary Alice Evans

Mary Alice Evans
Director

HONOLULU FIRE DEPARTMENT
KA 'OIHANA KINAI AHI O HONOLULU
CITY AND COUNTY OF HONOLULU

636 SOUTH STREET • HONOLULU, HAWAI'I 96813
PHONE: (808) 723-7139 • FAX: (808) 723-7111 • WEBSITE: honolulu.gov

RICK BLANGIARDI
MAYOR
MEIA

SHELDON K. HAO
FIRE CHIEF
LUNA NUI KINAI AHI

JASON SAMALA
DEPUTY FIRE CHIEF
HOPE LUNA NUI KINAI AHI

April 11, 2025

Ms. Gabrielle Sham, Associate Planner
Townscape, Inc.
900 Fort Street Mall, Suite 1160
Honolulu, Hawai'i 96813

Dear Ms. Sham:

Subject: Early Consultation Request for Draft Environmental Assessment
Fuel Storage Tank Improvements for the Lualualei Wastewater Pump Station
Wai'anae, Island of O'ahu
Tax Map Key: 8-7-007: 067

In response to your letter dated March 27, 2025, regarding the abovementioned subject, the Honolulu Fire Department (HFD) reviewed the submitted information and requires that this project follow all applicable requirements of the Revised Ordinances of Honolulu Chapter 20 that is in effect at the time the building permit application for this project is issued.

The requirement above is required by the HFD. This project may have additional requirements to be met as determined by other agencies.

Should you have questions, please contact Battalion Chief Pao-Chi Hwang of our Fire Prevention Bureau at 808-723-7151 or hfdfpb1@honolulu.gov.

Sincerely,

CRAIG UCHIMURA
Assistant Chief

CU/EO:sk

HONOLULU POLICE DEPARTMENT
KA 'OIHANA MĀKA'I O HONOLULU
CITY AND COUNTY OF HONOLULU
801 SOUTH BERETANIA STREET • HONOLULU, HAWAI'I 96813
TELEPHONE: (808) 529-3111 • WEBSITE: www.honolulupd.org

RICK BLANGIARDI
MAYOR
MEIA

ARTHUR J. LOGAN
CHIEF
KAHU MĀKA'I

KEITH K. HORIKAWA
RADE K. VANIC
DEPUTY CHIEFS
HOPE LUNA NUI MĀKA'I

OUR REFERENCE EO-SH

April 14, 2025

SENT VIA EMAIL

Ms. Gabrielle Sham
gabrielle@townscapeinc.com

Dear Ms. Sham:

This is in response to your correspondence dated March 27, 2025, requesting for comments on the Draft Environmental Assessment for the proposed City and County of Honolulu, Department of Environmental Services, Fuel Storage Tank Improvements for the Lualualei Wastewater Pump Station in Wai'anae.

Based on the information provided, the Honolulu Police Department does not have any concerns at this time.

If there are any questions, please call Major Gail Beckley of District 8 (Kapolei, Wai'anae) at (808) 723-8400.

Sincerely,

GLENN HAYASHI
Assistant Chief of Police
Support Services Bureau

From: Liu, Rouen <rouen.liu@hawaiianelectric.com>
Sent: Wednesday, April 16, 2025 3:03 PM
To: Gabrielle Sham <Gabrielle@townscapeinc.com>
Cc: Castillo, Carlos <carlos.castillo@hawaiianelectric.com>; Kuwaye, Kristen <kristen.kuwaye@hawaiianelectric.com>; Kakazu, Lisa <lisa.kakazu@hawaiianelectric.com>
Subject: Draft EA Early consultation - Fuel Storage Tank Improvements for the Lualualei Wastewater Pump Station

Dear Ms. Sham,

Thank you for the opportunity to review and comment on the subject project. Hawaiian Electric Company has no objections to the proposed project. Please note that if Hawaiian Electric has existing infrastructure on the subject property, continued access will be necessary for the maintenance of our infrastructure.

We greatly appreciate your efforts to keep us informed throughout the planning process. As the proposed Lualualei Wastewater Pump Station project comes to fruition, please continue to keep us informed.

Should you have any questions or require further clarification, please do not hesitate to contact me at (808) 772-2135.

Sincerely,
Rouen Liu (WA3 – PTA)
Permits Engineer
Hawaiian Electric Company
PO Box 2750
Honolulu, HI 96840-0001

BOARD OF WATER SUPPLY
KA ʻOIHANA WAI
CITY AND COUNTY OF HONOLULU

630 SOUTH BERETANIA STREET • HONOLULU, HAWAIʻI 96843
Phone: (808) 748-5000 • www.boardofwatersupply.com

RICK BLANGIARDI
MAYOR
MEIA

ERNEST Y. W. LAU, P.E.
MANAGER AND CHIEF ENGINEER
MANAKIA A ME KAHU WILIKĪ

ERWIN KAWATA
DEPUTY MANAGER
HOPE MANAKIA

April 16, 2025

Ms. Gabrielle Sham
Townscape, Inc.
900 Fort Street Mall, Suite 1160
Honolulu, Hawaiʻi 96813

Dear Ms. Sham:

Subject: Your Letter Dated March 27, 2025 Requesting Comments on the Draft Environmental Assessment Early Consultation for the Proposed Fuel Storage Tank Improvements for the Lualualei Wastewater Pump Station on Farrington Highway in Waiʻanae – Tax Map Key: 8-7-007: 067

Thank you for your letter regarding the proposed fuel storage tank improvements project.

The existing water system is adequate to accommodate the proposed development. However, please be advised that this information is based upon current data, and therefore, the Board of Water Supply (BWS) reserves the right to change any position or information stated herein up until the final approval of the building permit application. The final decision on the availability of water will be confirmed when the building permit application is submitted for approval.

When water is made available, the applicant will be required to pay our Water System Facilities Charges for resource development, transmission and daily storage.

Water conservation measures are required for all proposed developments. These measures include utilization of nonpotable water for irrigation using rain catchment, drought tolerant plants, xeriscape landscaping, efficient irrigation systems, such as a drip system and moisture sensors, and the use of Water Sense labeled ultra-low flow water fixtures and toilets.

The proposed project is subject to BWS Cross-Connection Control and Backflow Prevention requirements prior to the issuance of the Building Permit Applications.

The construction drawings should be submitted for our approval, and the construction schedule should be coordinated to minimize impact to the water system.

The on-site fire protection requirements should be coordinated with the Fire Prevention Bureau of the Honolulu Fire Department.

If you have any questions, please contact Daniel Koge, Project Review Branch of our Water Resources Division at (808) 748-5444.

Very truly yours,

for ERNEST Y. W. LAU, P.E.
Manager and Chief Engineer

DEPARTMENT OF PLANNING AND PERMITTING
KA 'OIHANA HO'OLĀLĀ A ME NĀ PALAPALA 'AE
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAI'I 96813
PHONE: (808) 768-8000 • FAX: (808) 768-6041 • WEBSITE: honolulu.gov/dpp

RICK BLANGIARDI
MAYOR
MEIA

DAWN TAKEUCHI APUNA
DIRECTOR
PO'O

BRYAN GALLAGHER, P.E.
DEPUTY DIRECTOR
HOPE PO'O

REGINA MALEPEAI
2ND DEPUTY DIRECTOR
HOPE PO'O KUALUA

April 17, 2025

2025/ELOG-577(SF)

Ms. Gabrielle Sham
Townscape, Inc.
900 Fort Street Mall, Suite 1160
Honolulu, Hawaii 96813

Dear Ms. Sham:

SUBJECT: Pre-Assessment Consultation
Draft Environmental Assessment (EA)
Lualualei Wastewater Pump Station (WWPS) Fuel Storage Tank Improvements
85-1581 Farrington Highway – Waianae
Tax Map Key 8-7-007: 067 (Parcel 67)

This letter responds to your request, received on April 1, 2025, for early consultation comments on the upcoming Draft EA for the proposed Lualualei Wastewater Pump Station Fuel Storage Tank Improvements. Pursuant to Hawaii Revised Statutes (HRS) Chapter, the Draft EA is required due to the use of county lands and funds.

Parcel 67 is currently developed with the Lualualei WWPS. The proposed work includes replacement of the existing underground fuel storage tank with a new 2,000-gallon aboveground fuel storage tank (Project). The Project also includes replacement of the underground fuel piping, fuel-monitoring panel, and all associated sensors, as well as connection of the new infrastructure to remote systems. The submittal states that this work must be completed by July 15, 2028, in compliance with Hawaii Administrative Rules 11-280.1, which mandates that all underground storage tanks and piping installed before August 9, 2013 provide secondary containment and utilize interstitial monitoring. The submittal also states that the new, proposed aboveground storage tank and associated improvements will supply the fuel required for the emergency backup generator to service the WWPS.

Parcel 67 is 10,065 square feet (0.231 acres) in area and is located within the P-2 General Preservation District (P-2 District), State Land Use Urban District, and Special Management Area (SMA).

Additionally, please address the following comments in the Draft EA:

1. Consistency with Long-Range Plans: Describe the Project's consistency with the Oahu General Plan and Waianae Sustainable Communities Plan. The Draft EA should address how the proposed Project is consistent, inconsistent, or implements each of the relevant statements from the respective plans.

2. Compliance with City and County of Honolulu Land Use Regulations: Discuss compliance with Revised Ordinances of Honolulu (ROH) Chapter 21, the Land Use Ordinance (LUO). The Draft EA should identify the Project's consistency with the development standards of the P-2 District and discuss the facility's designated use, per LUO Master Use Table 21-3, as well as any other applicable LUO regulations. The LUO is available online at:

   https://codelibrary.amlegal.com/codes/honolulu/latest/honolulu/0-0-0-18777

3. Compliance with HRS Chapter 205A and ROH Chapter 25: The proposed Project meets ROH Chapter 25 definition of "development," and requires an SMA Permit. If the cost valuation is less than $500,000, an SMA Minor Permit is required. If the cost valuation is or exceeds $500,000, an SMA Major Permit is required, including an EA, pursuant to ROH Section 25-5.3(a). In this case, it should be noted that the Draft EA is also being prepared pursuant to ROH Chapter 25.

   Describe compliance with the objectives and policies of HRS Chapter 205A, Coastal Zone Management, and ROH Chapter 25, the SMA Ordinance. The Draft EA should include in its analysis an assessment of whether an SMA Use Permit would be required as part of the proposed Project. HRS Chapter 205A and ROH Chapter 25 are available at:

   https://www.capitol.hawaii.gov/hrscurrent/Vol04_Ch0201-0257/HRS0205A/

   https://codelibrary.amlegal.com/codes/honolulu/latest/honolulu/0-0-0-35056

4. Shoreline Setbacks Ordinance: Parcel 67 is subject to yearly shoreline erosion and, per a Certified Shoreline Survey dated November 2, 2010, the current development is located in the shoreline area. The Draft EA should

describe how the Project complies with ROH Chapter 26, the Shoreline Setbacks Ordinance. ROH Chapter 26 is available online at:

https://codelibrary.amlegal.com/codes/honolulu/latest/honolulu/0-0-0-35456

5. Coastal Hazards: The Project site is susceptible to coastal hazards, such as sea-level rise (SLR), storm surge, wave action, tsunamis, and coastal erosion. Therefore, proposed development activities must be evaluated not only for potential impacts to sensitive SMA resources, but also for current and future susceptibility to these coastal hazards. According to the State of Hawaii SLR Viewer, the subject property may be affected by 2.0 feet of SLR by 2100. As such, we recommend the proposed development be designed to minimize potential risk of structure loss. The analysis in the Draft EA should evaluate the site's existing topographic, geologic, and shoreline environment, and propose mitigation measures, as appropriate, to reduce potential impacts related to coastal hazards.

6. Flood Zones: The subject property is located within Flood Zones AE and VE, as mapped by the Federal Emergency Management Agency. Flood Zone AE corresponds with areas subject to inundation by the one-percent-annual- chance flood event and Flood Zone VE correspond with areas subject to inundation by the one-percent-annual-chance flood event with additional hazards due to storm-induced velocity wave action. Properties within Flood Zones AE and VE are subject to compliance with ROH Chapter 21A, the Flood Hazards Area Ordinance, which is available online at:

https://codelibrary.amlegal.com/codes/honolulu/latest/honolulu/0-0-0-23327

7. Sensitive Species: Identify the presence or potential presence of any sensitive habitat, flora, or fauna. The DPP recommends reaching out to the U.S. Fish and Wildlife Service to obtain a list of species that are known to occur or may potentially occur in the Project vicinity.

8. Historic and Cultural Resources: Discuss the presence and/or potential impacts to cultural, historic, or archaeological resources, identify any related research conducted within the Project site and outlying areas, and propose mitigation measures, as necessary, to reduce potential impacts to these resources.

9. Early Public Outreach: In order to facilitate understanding of the current Project proposal within the surrounding community, the Applicant should contact the Nanakuli-Maili Neighborhood Board No. 36, as well as any relevant

neighborhood associations or commissions to request an opportunity to present the Project proposal at the board and association meeting(s). A summary of the outreach efforts and actions taken to address any community concerns should be included in the Draft EA.

The Department of Planning and Permitting (DPP) has instructions for the preparation of an EA, which can be found on our website at the link below. Please utilize this resource as you prepare the Draft EA:

https://www8.honolulu.gov/dpp/permitting/zoning-permits/

The DPP may have further comments regarding the Draft EA when more detailed plans and information are provided. Should you have any questions, please contact Shelby Frangk, of our Land Use Approval Branch, at (808) 768-8019 or via email at shelby.frangk@honolulu.gov.

Very truly yours,

for Dawn Takeuchi Apuna
Director

DEPARTMENT OF DESIGN AND CONSTRUCTION
KA 'OIHANA HAKULAU A ME KE KĀPILI
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 11TH FLOOR • HONOLULU, HAWAI'I 96813
PHONE: (808) 768-8480 • FAX: (808) 768-4567 • WEBSITE: honolulu.gov

RICK BLANGIARDI
MAYOR
MEIA

HAKU MILLES, P.E.
DIRECTOR
PO'O

MARK YONAMINE, P.E.
DEPUTY DIRECTOR
HOPE PO'O

April 21, 2025

SENT VIA EMAIL

Ms. Gabrielle Sham
gabrielle@townscapeinc.com

Dear Ms. Sham:

Subject: Early Consultation Request for Draft Environmental Assessment (DEA)
Fuel Storage Tank Improvements for the Lualualei Wastewater
Pump Station – Wai'anae, Island of O'ahu
Tax Map Key 8-7-007:067

Thank you for the opportunity to review and comment. The Department of Design and Construction has no comments to offer at this time.

Should you have any questions, please contact me at (808) 768-8480.

Sincerely,

Haku Milles, P.E., LEED AP
Director

HM:krn (937614)

DEPARTMENT OF PARKS AND RECREATION
KA ʻOIHANA MĀLAMA PĀKA A ME NĀ HANA HOʻONANEA
CITY AND COUNTY OF HONOLULU

1000 ULUʻŌHIʻA STREET, SUITE 309 • KAPOLEI, HAWAIʻI 96707
PHONE: (808) 768-3003 • FAX: (808) 768-3053 • WEBSITE: honolulu.gov/parks

RICK BLANGIARDI
MAYOR
MEIA

LAURA H THIELEN
DIRECTOR
PO'O

EDWARD "TED" HAYDEN
DEPUTY DIRECTOR
HOPE PO'O

April 22, 2025

Ms. Gabrielle Sham
Townscape, Inc.
900 Fort Street Mall, Suite 1160
Honolulu, Hawaiʻi 96813

Re: Early Consultation Request for Draft Environmental Assessment (DEA)
Fuel Storage Tank Improvements for the Lualualei Wastewater Pump Station – Waiʻanae, Island of Oʻahu
Tax Map Key 8-7-007:067

Dear Ms. Sham:

Thank you for your letter dated March 27, 2025 regarding the above-mentioned project.

The Lualualei Wastewater Pump station is surrounded by Uluhawa Beach Park, which operated by the Department of Parks and Recreation (DPR). If staging of equipment or vehicles is proposed on park property, coordination with DPR and a Right of Entry Permit, is needed.

Should there be any questions, please contact Jack Torres, Leeward Oahu District Manager at (808) 768-6876 or via email at jtorres2@honolulu.gov.

Sincerely,

Laura H Thielen
Director

(937588)

STATE OF HAWAI'I | KA MOKU'ĀINA 'O HAWAI'I
DEPARTMENT OF LAND AND NATURAL RESOURCES | KA 'OIHANA KUMUWAIWAI 'ĀINA
COMMISSION ON WATER RESOURCE MANAGEMENT | KE KAHUWAI PONO
P.O. BOX 621
HONOLULU, HAWAII 96809

Apr 24, 2025

REF: RFD.6413.3

TO: Mr. Russell Tsuji, Administrator
Land Division

FROM: Ciara W.K. Kahahane, Deputy Director
Commission on Water Resource Management

SUBJECT: Fuel Storage Tank Improvements for the Lualualei Wastewater Pump Station

FILE NO.: RFD.6413.3
TMK NO.: (1) 8-7-007:067

Thank you for the opportunity to review the subject document. The Commission on Water Resource Management (CWRM) is the agency responsible for administering the State Water Code (Code). Under the Code, all waters of the State are held in trust for the benefit of the citizens of the State, therefore all water use is subject to legally protected water rights. CWRM strongly promotes the efficient use of Hawaii's water resources through conservation measures and appropriate resource management. For more information, please refer to the State Water Code, Chapter 174C, Hawaii Revised Statutes, and Hawaii Administrative Rules, Chapters 13-167 to 13-171. These documents are available via the Internet at http://dlnr.hawaii.gov/cwrm.

Our comments related to water resources are checked off below.

- [ ] 1. We recommend coordination with the county to incorporate this project into the county's Water Use and Development Plan. Please contact the respective Planning Department and/or Department of Water Supply for further information.
- [ ] 2. We recommend coordination with the Engineering Division of the State Department of Land and Natural Resources to incorporate this project into the State Water Projects Plan.
- [ ] 3. We recommend coordination with the Hawaii Department of Agriculture (HDOA) to incorporate the reclassification of agricultural zoned land and the redistribution of agricultural resources into the State's Agricultural Water Use and Development Plan (AWUDP). Please contact the HDOA for more information.
- [X] 4. We recommend that water efficient fixtures be installed and water efficient practices implemented throughout the development to reduce the increased demand on the area's freshwater resources. Reducing the water usage of a home or building may earn credit towards Leadership in Energy and Environmental Design (LEED) certification. More information on LEED certification is available at http://www.usgbc.org/leed. A listing of fixtures certified by the EAP as having high water efficiency can be found at http://www.epa.gov/watersense.
- [X] 5. We recommend the use of best management practices (BMP) for stormwater management to minimize the impact of the project to the existing area's hydrology while maintaining on-site infiltration and preventing polluted runoff from storm events. Stormwater management BMPs may earn credit toward LEED certification. More information on stormwater BMPs can be found at http://planning.hawaii.gov/czm/initiatives/low-impact-development/
- [X] 6. We recommend the use of alternative water sources, wherever practicable.
- [ ] 7. We recommend participating in the Hawaii Green Business Program, that assists and recognizes businesses that strive to operate in an environmentally and socially responsible manner. The program description can be found online at http://energy.hawaii.gov/green-business-program.
- [ ] 8. We recommend adopting landscape irrigation conservation best management practices endorsed by the Landscape Industry Council of Hawaii. These practices can be found online at http://www.hawaiiscape.com/wp-content/uploads/2013/04/LICH_Irrigation_Conservation_BMPs.pdf.

- [X] 9. There may be the potential for ground or surface water degradation/contamination and recommend that approvals for this project be conditioned upon a review by the State Department of Health and the developer's acceptance of any resulting requirements related to water quality.
- [ ] 10. The proposed water supply source for the project is located in a designated water management area, and a Water Use Permit is required prior to use of water. The Water Use Permit may be conditioned on the requirement to use dual line water supply systems for new industrial and commercial developments.
- [ ] 11. The Hawaii Water Plan is directed toward the achievement of the utilization of reclaimed water for uses other than drinking and for potable water needs in one hundred per cent of State and County facilities by December 31, 2045 (§174C-31(g)(6), Hawaii Revised Statutes). We strongly recommend that this project consider using reclaimed water for its non-potable water needs, such as irrigation. Reclaimed water may include, but is not limited to, recycled wastewater, gray water, and captured rainwater/stormwater. Please contact the Hawai'i Department of Health, Wastewater Branch, for more information on their reuse guidelines and the availability of reclaimed water in the project area.
- [ ] 12. A Well Construction Permit(s) is (are) are required before the commencement of any well construction work.
- [ ] 13. A Pump Installation Permit(s) is (are) required before ground water is developed as a source of supply for the project.
- [ ] 14. There is (are) well(s) located on or adjacent to this project. If wells are not planned to be used and will be affected by any new construction, they must be properly abandoned and sealed. A permit for well abandonment must be obtained.
- [ ] 15. Ground-water withdrawals from this project may affect streamflows, which may require an instream flow standard amendment.
- [ ] 16. A Stream Channel Alteration Permit(s) is (are) required before any alteration can be made to the bed and/or banks of a steam channel.
- [ ] 17. A Stream Diversion Works Permit(s) is (are) required before any stream diversion works is constructed or altered.
- [ ] 18. A Petition to Amend the Interim Instream Flow Standard is required for any new or expanded diversion(s) of surface water.
- [ ] 19. The planned source of water for this project has not been identified in this report. Therefore, we cannot determine what permits or petitions are required from our office, or whether there are potential impacts to water resources.

- [ ] OTHER:

If you have any questions, please contact Ryan Imata of the Groundwater Regulation Branch at (808) 587-0225 or Katie Roth of the Planning Branch (808) 587-0216.

JOSH GREEN, M.D.
GOVERNOR | KE KIAʻĀINA

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIAʻĀINA

DAWN N. S. CHANG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

STATE OF HAWAIʻI | KA MOKUʻĀINA ʻO HAWAIʻI
DEPARTMENT OF LAND AND NATURAL RESOURCES
KA ʻOIHANA KUMUWAIWAI ʻĀINA
LAND DIVISION

P.O. BOX 621
HONOLULU, HAWAII 96809

May 21, 2025

Townscape, Inc.
Attn: Gabrielle Sham
900 Fort Street Mall, Suite 1160
Honolulu, HI 96813

via email: gabrielle@townscapeinc.com

SUBJECT: Early Consultation Request for Draft Environmental Assessment (DEA) Fuel Storage Tank Improvements for the Lualualei Wastewater Pump Station, located in Waiʻanae, Island of Oʻahu, TMK: (1) 8-7-007:067

Dear Ms. Sham:

Thank you for the opportunity to review and comment on the subject matter. In addition to our previous comments dated April 27, 2025, enclosed are comments from the Division of Forestry and Wildlife on the subject matter. Should you have any questions, please feel free to contact Dayna Vierra at (808) 587-0423 or email: dayna.k.vierra@hawaii.gov.

Sincerely,

Ian C. Hirokawa
Acting Land Administrator

Enclosure(s)

JOSH GREEN, M.D.
GOVERNOR | KE KIAʻĀINA

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIAʻĀINA

DAWN N. S. CHANG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

STATE OF HAWAIʻI | KA MOKUʻĀINA ʻO HAWAIʻI
DEPARTMENT OF LAND AND NATURAL RESOURCES
KA ʻOIHANA KUMUWAIWAI ʻĀINA
LAND DIVISION

P.O. BOX 621
HONOLULU, HAWAII 96809

April 4, 2025

MEMORANDUM

FROM: **DLNR Agencies:**
X Div. of Aquatic Resources (kendall.l.tucker@hawaii.gov)
X Div. of Boating & Ocean Recreation (richard.t.howard@hawaii.gov)
X Engineering Division (DLNR.ENGR@hawaii.gov)
X Div. of Forestry & Wildlife (rubyrosa.t.terrago@hawaii.gov)
__Div. of State Parks
X Commission on Water Resource Management (DLNR.CWRM@hawaii.gov)
X Office of Conservation & Coastal Lands (sharleen.k.kuba@hawaii.gov)
X Land Division – Oʻahu District (barry.w.cheung@hawaii.gov)
X Land Division – Ian C. Hirokawa (ian.c.hirokawa@hawaii.gov)
X Land Division – Rebecca L. Anderson (rebecca.l.anderson@hawaii.gov)
X Land Division – Planner (dayna.k.vierra@hawaii.gov)
X Land Division – Planner (lauren.e.yasaka@hawaii.gov)
X Aha Moku Advisory Committee (leimana.k.damate@hawaii.gov)

TO: FOR Russell Y. Tsuji, Land Administrator

SUBJECT: **Draft Environmental Assessment for Fuel Storage Tank Improvements for the Lualualei Wastewater Pump Station**

LOCATION: Waiʻanae, Island of Oʻahu; TMK: 8-7-007:067

APPLICANT: Townscape, Inc. on behalf of the City and County of Honolulu, Department of Environmental Services

Transmitted for your review and comment is information on the above-referenced subject matter.

Please submit comments by **April 24, 2025.** If no response is received by this date, we will assume your agency has no comments. Should you have any questions about this request, please contact Dayna Vierra at dayna.k.vierra@hawaii.gov. Thank you.

BRIEF COMMENTS:

( ) We have no objections.
( ) We have no comments.
( ) We have no additional comments.
(☑) Comments are included/attached.

Signed:
Print Name: JASON D. OMICK, Wildlife Prog. Mgr.
Division: Forestry and Wildlife
Date: May 20, 2025

Attachments

JOSH GREEN, M.D.
GOVERNOR | KE KIAʻĀINA

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIAʻĀINA

DAWN N.S. CHANG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

RYAN K.P. KANAKAʻOLE
FIRST DEPUTY

CIARA W.K. KAHAHANE
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

STATE OF HAWAIʻI | KA MOKUʻĀINA ʻO HAWAIʻI
DEPARTMENT OF LAND AND NATURAL RESOURCES
KA ʻOIHANA KUMUWAIWAI ʻĀINA

DIVISION OF FORESTRY AND WILDLIFE
1151 PUNCHBOWL STREET, ROOM 325
HONOLULU, HAWAII 96813

May 20, 2025

Log no. 4958

MEMORANDUM

TO: IAN HORIKAWA Acting Land Administrator
Land Division

FROM: JASON D. OMICK, Wildlife Program Manager
Division of Forestry and Wildlife

SUBJECT: Early Consultation Request for the Draft Environmental Assessment (DEA) Fuel Storage Tank Improvements for the Lualualei Wastewater Pump Station.

The Department of Land and Natural Resources, Division of Forestry and Wildlife (DOFAW) has received your request for early consultation on the draft environmental assessment (DEA) for the fuel storage tank improvements at the Lualualei wastewater pump station; impacting TMK (1) 8-7-007:067. The proposed project involves **1)** replacing the existing underground fuel storage tank with an aboveground fuel storage tank; **2)** replacing the underground fuel piping, fuel monitoring panel, and all associated sensors; and **3)** connecting the new fuel monitoring panel to the supervisory control and data acquisition (SCADA) system.

There are no Federally declared critical habitats in the vicinity of this project. Additionally, there are no other Federal administrated lands in the area. However, the worksite is ca. 1.9 miles from the State administrated Lualualei Forest Reserve. This reserve preserves and protects unique botanical assets that provide habitat for a variety of native wildlife species. Therefore, DOFAW requests that special attention is paid to the recommendations made at the end of this letter regarding fire prevention and planning, forest pathogens, and invasive species.

DOFAW has determined that several State listed species occur within the project area. These include: **1)** ʻōpeʻapeʻa, or Hawaiian hoary bat (*Lasiurus semotus*); **2)** several species of seabirds; **3)** honu or green sea turtle (*Chelonia mydas*); and **4)** ʻīlio holo i ka uaua or Hawaiian monk seal (*Monachus schauinslandi*).

The State listed ʻōpeʻapeʻa or Hawaiian hoary bat (*Lasiurus semotus*) could potentially

clearing should be timed to avoid disturbance to bats during their birthing and pup rearing season (June 1 through September 15). During this period woody plants greater than 15 feet (4.6 meters) tall should not be disturbed, removed, or trimmed. Barbed wire should also be avoided in any construction as bats can become ensnared and killed by such fencing material during flight.

Artificial lighting can adversely impact seabirds that may pass through the area at night by causing them to become disoriented. This disorientation can result in their collision with manmade structures or the grounding of birds. For nighttime work that might be required, DOFAW recommends that all lights used be fully shielded to minimize the attraction of seabirds. Nighttime work that requires outdoor lighting should be avoided during the seabird fledging season, from September 15 through December 15, when young seabirds make their maiden voyage to sea.

If nighttime construction is required during the seabird fledgling season (September 15 to December 15), we recommend that a qualified biologist be present at the project site to monitor and assess the risk of seabirds being attracted or grounded due to the lighting. If seabirds are seen circling around the area, lights should then be turned off. If a downed seabird is detected, please follow DOFAW's recommended response protocol by visiting https://dlnr.hawaii.gov/wildlife/seabird-fallout-season/.

Permanent lighting also poses a risk of seabird attraction, and as such should be minimized or eliminated to protect seabird flyways and preserve the night sky. For illustrations and guidance related to seabird-friendly light styles that also protect seabirds and the dark starry skies of Hawaiʻi please visit https://dlnr.hawaii.gov/wildlife/files/2016/03/DOC439.pdf.

The State endangered ʻīlio holo i ka uaua or Hawaiian monk seal (*Monachus schauinslandi*) and threatened honu or green sea turtle (*Chelonia mydas*) could potentially occur or haul out onshore within the vicinity of the proposed project site. Nesting season for honu is April through December and ʻīlio holo i ka uaua can give

the project area, all nearby construction operations should cease and not continue until the focal animal has departed the area on its own accord.

Due to arid climate, close proximity to fine fuel loads on adjacent parcels, and the risks of wildfire to listed species and native habitats, we recommend coordinating with the **Hawaiʻi Wildfire Management Organization at (808)-850-0900 or admin@hawaiiwildfire.org**

wielding in/near tall grass, it is recommended that you: **1)** wet down the area before starting your task, **2)** continuously wet down the area as needed, **3)** have a fire extinguisher on hand, and **4)** in the event that your vision is impaired, (i.e. welding

goggles) have a spotter to watch for fire ignitions. Additionally, do not park any vehicles in or near tall grass as heat from the engine/exhaust may ignite dry vegetation.

To prevent the spread of Rapid ʻŌhiʻa Death (ROD), DOFAW requests that removal, pruning/trimming, and potentially injury to ʻōhiʻa trees be avoided as much as possible. Wounds serve as entry points for ROD fungus and increase the odds that the tree will be infected and die. Also, clean gear/tools, clothes, footwear, and vehicles before and after use. Make sure to removal all loose soil from the aforementioned items, spray gear/tools with 70% rubbing alcohol, and wash clothes with hot water and soap. Wash tires and undercarriages of all vehicles/machinery with a high-pressure water source. If ʻōhiʻa trees must be removed or pruned/trimmed, please conduct these activities on a still day to minimize blown sawdust and use a sharp saw to create chips rather than dust. Seal all wounds to these trees with a stump seal product (e.g. Spectracide Pruning Seal, etc.). For more information, please consult https://cms.ctahr.hawaii.edu/rod.

We recommend consulting the **Oʻahu Invasive Species Committee (OISC) at (808) 266-7994** to help plan, design, and construct the project, learn of any high-risk invasive species in the area, and ways to mitigate their spread. Soil and plant material may contain detrimental fungal pathogens (like Rapid ʻŌhiʻa Death), vertebrate and invertebrate pests (e.g. Little Fire Ants, and Coconut Rhinoceros Beetle), or invasive plant propagules (e.g. Albizia, Pampas Grass, Fireweed, etc.) that will harm our native ecosystems, and the unique native found within them. Therefore, DOFAW advances the guidance that all equipment and personal items—to include clothing and foot ware should be cleaned of excess soil and debris to minimize the risk of spreading invasive species. Additionally, DOFAW recommends minimizing the movement of plant or soil material between worksites. Suspect pests should be reported through the statewide pest hotline. Photos, videos, and locations can be shared at www.643pest.org or call: 743-PEST. All equipment, materials, and personnel should be cleaned of excess soil and debris to minimize the risk of spreading invasive species.

The invasive coconut rhinoceros beetle (*Oryctes rhinoceros*) or CRB is widespread on the island of Oʻahu. CRB have been detected on other islands with moderate infestation on Kauaʻi, one incipient site on Hawaiʻi Island, and only one positive site on Maui in 2023. Hawaii Department of Agriculture interim rule 24-1 restricts the movement of CRB-host material from the island of Oʻahu, which is defined as the Quarantine Area. Regulated material (host material or host plants) is considered a risk for potential CRB infestation. Host material for the beetle specifically includes **1)** entire dead trees; **2)** mulch, compost, trimmings, fruit and vegetative scraps, and **3)** decaying stumps. CRB host plants include the live palm plants in the following genera: *Washingtonia*, *Livistona*, and *Pritchardia* (all commonly known as fan palms), *Cocos* (coconut palms), *Phoenix* (date palms), and *Roystonea* (royal palms). When such material or these specific plants are moved there is a risk of spreading CRB because they may contain CRB in any life stage. Inspection and/or treatment approved by HDOA is mandatory before inter-island transport. For more information regarding CRB, please visit https://dlnr.hawaii.gov/hisc/info/invasive-species-profiles/coconut-rhinoceros-beetle/.

DOFAW recommends using native plant species for landscaping that are appropriate for the area; e.g., plants for which climate conditions are suitable for them to thrive, plants that historically occurred there, etc. Please do not plant invasive species. DOFAW also recommends referring to www.plantpono.org for guidance on the selection and evaluation of landscaping plants and to determine the potential invasiveness of plants proposed for use in the project.

Mahalo for contacting our office to receive guidance regarding the conservation of our native species. These comments are general guidelines and should not be considered comprehensive for this site or project. It is the responsibility of the applicant to do their own due diligence to avoid any negative environmental impacts. Should the scope of the project change significantly, or should it become apparent that threatened or endangered species may be impacted, please contact our staff as soon as possible. If you have any questions, please contact Jesse W. Adams, Protected Species Habitat Conservation Planning Associate, at jesse.w.adams.researcher@hawaii.gov or call (808) 265-3276.

Sincerely,

JASON D. OMICK
Wildlife Program Manager