

**DEPARTMENT OF ENVIRONMENTAL SERVICES  
KA 'OIHANA LAWELawe KAIĀPUNI  
CITY AND COUNTY OF HONOLULU**

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IN REPLY REFER TO:  
WEC.PE 25-030

September 16, 2025

Ms. Mary Alice Evans, Director  
Office of Planning and Sustainability Development  
State of Hawai'i  
235 South Beretania Street, 6<sup>th</sup> Floor  
Honolulu, Hawai'i 96813

Dear Ms. Evans:


SUBJECT: Kāne'ohe Bay No. 3 Wastewater Pump Station - Fuel Storage Tank  
Improvement  
TMK 4-4-037: 014  
Kāne'ohe, O'ahu

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, Hawai'i Revised Statutes, and Chapter 11-200.1, Hawai'i 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  
12:02:03 -10'00'

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

Enclosure

cc: ENV/OAS

**From:** [dbedt.opsd.erp@hawaii.gov](mailto:dbedt.opsd.erp@hawaii.gov)  
**To:** [DBEDT OPSD Environmental Review Program](#)  
**Subject:** New online submission for The Environmental Notice  
**Date:** Wednesday, October 1, 2025 10:38:37 AM

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**Action Name**

Fuel Storage Tank Improvements Kāne'ohe Bay No.3 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

**Judicial district**

Ko'olaupoko, O'ahu

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

(1)4-4-037:014

**Action type**

Agency

**Other required permits and approvals**

SMA

**Proposing/determining agency**

Department of Environmental Services

**Agency jurisdiction**

City and County of Honolulu

**Agency contact name**

Audrey Uyema Pak

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[Map It](#)



**Is there a consultant for this action?**

Yes

**Consultant**

Townscape, Inc.

**Consultant contact name**

Gabrielle Sham

**Consultant contact email**

[gabrielle@townscapeinc.com](mailto:gabrielle@townscapeinc.com)

**Consultant contact phone**

(808) 536-6999

**Consultant address**

900 Fort Street Mall, Suite 1160  
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United States  
[Map It](#)

**Action summary**

The Kāneʻohe Bay No.3 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 1,000-gallon underground fuel storage tank with a new 1,000-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)**

- [Kaneohe-Bay-No.3-WWPS-EA\\_Submittal-to-ERP\\_ADA1.pdf](#)
- [WEC.PE-25-030\\_KB-No3\\_Ada\\_Final1.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-Kaneohe-Bay-WWPS1.zip](#)

**Authorized individual**

Gabrielle Sham

**Authorized individual email**

[gabrielle@townscapeinc.com](mailto: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  
Kāneʻohe Bay No.3 Wastewater Pump Station  
in Kāneʻohe, Island of Oʻahu, Hawaiʻi**



**Prepared For:**

City and County of Honolulu  
Department of Environmental Services



CITY AND COUNTY OF  
**HONOLULU**



**Prepared By:**



**TOWNSCAPE, INC.**  
Environmental & Community Planning

**September 2025**

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**Draft Environmental Assessment  
Fuel Storage Tank Improvements  
Kāneʻohe Bay No.3 Wastewater Pump Station  
in Kāneʻohe,  
Island of Oʻahu, Hawaiʻi**

**Tax Map Key (1) 4-4-037:014**

This environmental document has been prepared pursuant to  
Chapter 343, Hawaiʻi Revised Statutes.

**Prepared For:**

City and County of Honolulu  
Department of Environmental Services  
1000 Uluʻōhiʻa Street Suite 308  
Kapolei, Hawaiʻi 96707

**Prepared By:**

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

**September 2025**

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## **LIST OF ABBREVIATIONS**

<u>Abbreviation</u>	<u>Definition</u>
AST	Aboveground Storage Tank
ATS	Automatic Transfer Switch
BMPs	Best Management Practices
BWS	Board of Water Supply
CRB	Coconut Rhinoceros Beetle
CSH	Cultural Surveys Hawaiʻi, Inc.
CZM	Coastal Zone Management
DLNR	Department of Land and Natural Resources
DOFAW	Division of Forestry and Wildlife
DPP	Department of Planning and Permitting
EA	Environmental Assessment
ENV	Department of Environmental Services
FOR	Fuel Oil Return
FOS	Fuel Oil Supply
HAR	Hawaiʻi Administrative Rules
HECO	Hawaiian Electric Company, Inc.
HFD	Honolulu Fire Department
HPD	Honolulu Police Department
HRS	Hawaiʻi Revised Statutes
LUO	Land Use Ordinance
NFPA	National Fire Protection Association
OPSD	Office of Planning and Sustainable Development
OSHA	Occupational Safety and Health Administration
ROH	Revised Ordinances of Hawaiʻi
SCADA	Supervisory Control and Data Acquisition
SCP	Sustainable Communities Plan
SLR	Sea Level Rise
SLR-XA	Sea Level Rise Exposure Area
SMA	Special Management Area
UST	Underground Storage Tank
USFWS	U.S. Fish and Wildlife Service
WWPS	Wastewater Pump Station
WWTP	Wastewater Treatment Plant

## PROJECT SUMMARY

<b>Project Name:</b>	Kāneʻohe Bay No.3 Wastewater Pump Station
<b>Proposing and Determining Agency:</b>	City & County of Honolulu Department of Environmental Services 1000 Uluʻōhiʻa Street Suite 308 Kapolei, Hawaiʻi 96707
<b>HRS, Chapter 343 Trigger</b>	Use of County lands and funds
<b>Location:</b>	Kāneʻohe, Oʻahu, Hawaiʻi
<b>Tax Map Keys:</b>	(1) 4-4-037:014
<b>Project Address:</b>	44-003 Nohokai Pl Kāneʻohe, Hawaiʻi 96744
<b>Land Area:</b>	0.1198 acres (or 5,218 square feet)
<b>Recorded Fee Owner:</b>	City & County of Honolulu (Fee Owner)
<b>Existing Use:</b>	Wastewater Pump Station
<b>Proposed Use:</b>	Wastewater Pump Station
<b>Community Plan Region:</b>	Koʻolau Poko Sustainable Communities Plan
<b>Land Use Designations:</b>	
<b>State Land Use</b>	Urban
<b>County Zoning</b>	R-10 Residential
<b>Special Management Area:</b>	In Special Management Area
<b>Proposed Action:</b>	The proposed project involves replacing the existing underground fuel storage tank with a new 1,000-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 system.
<b>Agency Determination:</b>	Anticipated Finding of No Significant Impact

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## **1. SETTING AND PROJECT DESCRIPTION**

### **1.1. Background and Need**

The Kāneʻohe Bay No.3 Wastewater Pump Station (WWPS), owned and operated by the City and County of Honolulu, has been in service since 1969. The pump station serves a service area of approximately 179 acres, mostly consisting of residential homes, and receives flows from the Kāneʻohe Bay No. 4 WWPS. The facility has a 1,000-gallon Underground Storage Tank (UST) that supplies fuel to the backup generator. In the event of 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 (ENV) Division of Wastewater Engineering and Construction is proposing to upgrade the existing UST along with making other related improvements. Pursuant to Hawaiʻi 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 failures, corrosion, or spills and overfills.

Without the 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 fuel level sensors that provide real-time data on fuel levels within the storage tanks.

Environmental review of this project is required by Chapter 343, Hawaiʻi Revised Statutes. The statutory trigger for the preparation of this Environmental Assessment (EA) is the use of County funds and lands. Given the parcel's proximity to the shoreline, the proposed project must comply with Revised Ordinances of Honolulu (ROH) Chapter 25 (Special Management Areas). This project will require the preparation of a Special Management Area (SMA) Permit application.

## **1.2. Proposed Action**

To meet the State’s mandate, the City proposes replacing the existing 1,000-gallon underground fuel storage tank with a new 1,000-gallon Aboveground Storage Tank (AST). 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 system.

## **1.3. Site Location and Description**

The project site is located at 44-003 Nohokai Place in the ahupuaʻa of Kāneʻohe, district of Koʻolaupoko, on the island of Oʻahu in the state of Hawaiʻi. The site is located within a residential neighborhood at the end of a cul-de-sac, on the southern edge of Kāneʻohe Bay (see Figure 1).

Surrounded by a chain-link fence with a vehicle gate, the project site is approximately 0.1198 acres. Access to the project site is solely via a paved driveway from Nohokai Place, a City roadway.

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 an R-10 Residential District (See Figure 3). R-10 is the City’s residential district, as defined by the LUO Chapter 21-3.70 as intended, “to provide areas for large lot developments. These areas would be located typically at the outskirts of urban development and may be applied as a transitional district between preservation, agricultural or country districts and urban districts”.

## **1.4. Existing Facility**

### **1.4.1. Pump Station Description**

This section is based on information described in the Kāneʻohe Bay No.3 Operations Manual prepared by Fukunaga and Associates Inc. (2012) and the Draft Preliminary Engineering Report prepared by Okahara and Associates, Inc. (2025). An existing site plan for the WWPS facility is provided in Figure 4.

With an average design flow of 0.18 million gallons per day and a peak flow of 1.29 million gallons per day, the Kāneʻohe Bay No.3 WWPS collects wastewater from a low point of its service area and pumps it to a higher elevation. Wastewater is conveyed along Nohokai Place and Kāneʻohe Bay Drive through a 14-inch asbestos cement force main, which extends 1,813 linear feet to manhole #155595, where it then flows by gravity to Kāneʻohe Bay No.2 WWPS and eventually to the Kāneʻohe

Wastewater Pretreatment Facility and the Kailua Regional Wastewater Treatment Plant (WWTP).

The generator building, which houses the diesel standby generator, day tank, and fuel monitoring panel, is a single-story structure of approximately 216 square feet located near the southwest corner of the property. The finished floor elevation is approximately 7.62 feet above mean sea level.

#### **1.4.2. Power and Fuel System**

The Kāneʻohe Bay No. 3 WWPS facility has a backup power system in case normal service from Hawaiian Electric Company, Inc. (HECO) fails. The system has two main components: a standby generator and an automatic transfer controller.

The backup power system includes a 100 kW, 480-volt diesel standby generator. Its fuel system consists of a 50-gallon day tank located inside the generator building and a 1,000-gallon, double-walled fiberglass UST located between the generator building and the southern site fence. A remote fill port is installed next to the curb at the entrance to the generator building.

The UST is equipped with a sump leak sensor, a fuel inventory sensor, and a hydrostatic tank leak sensor. It is approximately 1.77 feet below mean sea level at its invert. A fuel monitoring control panel, discussed in more detail below, monitors the sensors inside the fuel storage tank. Fuel from the UST is pumped to the day tank (Simplex). Supply and return fuel piping runs underground from the UST to the outside of the generator building. From there, the fuel piping runs aboveground to the day tank, with the supply line passing through a fuel filter. Fuel piping from the day tank is concealed in a shallow covered trench in the generator building floor before connecting to the generator. Existing aboveground fuel oil piping is black steel, while underground fuel oil piping is double containment fiberglass.

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

#### **1.4.3. Electrical and Monitoring Systems**

The facility is powered by a motor control center (MCC) located on the first floor of the Motor Building. Power to the MCC is supplied by HECO. The MCC serves the sewage pumps, exhaust fans, and a 10kVA dry-type transformer.

A fuel monitoring panel (Veeder Root, Model TLS-300C) tracks the sensors inside the fuel storage tank to measure fuel levels and detect leaks. The Supervisory

Control and Data Acquisition (SCADA) cabinet, also on the first floor of the Motor Building, monitors signals from various equipment, including the fuel monitoring panel and the day tank in the pump station. The SCADA cabinet has an existing conduit path and wiring for the fuel monitoring control panel, but a path for the day tank could not be confirmed.

Both the existing fuel monitoring panel and day tank received power from Panel LAB, a 120/240V, 1-phase, 3-wire power panel with a 2P30A main circuit breaker.

## **1.5. Project Details**

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

### **Civil**

- Excavate area to remove the existing UST, including associated fuel lines, conduit, vent line and remote fill port. Backfill to the bottom of the surface restoration layer. The 18-inch concrete pad beneath the UST will be abandoned in place. Due to the narrow section of the UST with the adjacent building and fence, shoring will be required during the removal process.
- Remove the existing nine-inch concrete pad above the existing UST and replace it with a new four-inch layer of topsoil and grass to match the surrounding groundcover.
- Excavate area to install the new 1,000-gallon AST, housekeeping pad, and pipe bollards. Restore the surface of the excavated area to match the adjacent topsoil and grass, and other surfaces as needed.
- Install eight new concrete-filled steel pipe bollards to protect the AST from vehicular traffic.

### **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 new day tank. The AST requires 14-inch pedestals at the tank supports.
- Install a six-foot high, one-foot thick, reinforced concrete wall along the makai side of the AST to serve as a wave barrier. The wall will be designed to withstand a wave breaking three feet above 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 1,000-gallon UST with a new 1,000-gallon ConVault AST at the southwest edge of the property, which was selected as the most suitable location due to its compliance with the NFPA separation requirements and its ability to accommodate aboveground fuel piping without crossing driveways or introducing tripping hazards. The AST will be a double wall steel tank encased in concrete measuring 11 feet long, four feet four inches high, and five feet eight inches wide, weighing approximately 28,609 pounds at full tank.
- Remove existing underground fuel supply and fuel return piping and install new aboveground fuel supply and return piping (one-inch Type 316 Stainless Steel) from the AST to the day tank. Existing pipe penetrations will be reused where feasible, otherwise, a new penetration will be made.
- Install a temporary fuel storage solution near the existing UST during construction.
- Install a SCADA compatible fuel monitoring panel and connect to existing SCADA cabinet.
- Install interstitial monitoring and inventory sensors on the AST and integrated with the fuel monitoring panel.
- Replace the existing 50-gallon fuel oil day tank with a new 60-gallon day tank with two supply pumps, one return pump, and one hand pump.

Figure 1. Location and Vicinity





Figure 2. State Land Use Map

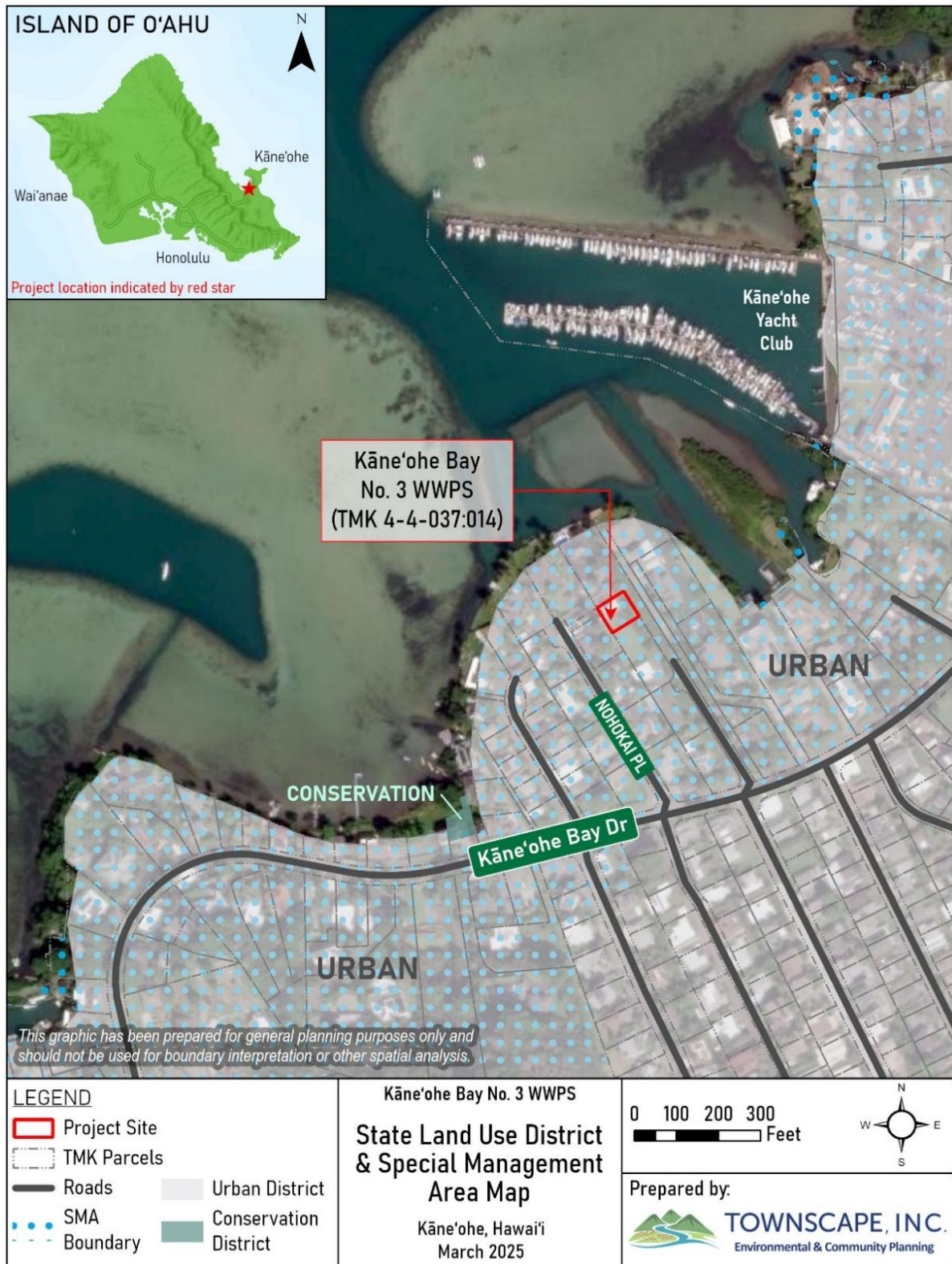


Figure 3. City and County of Honolulu Zoning

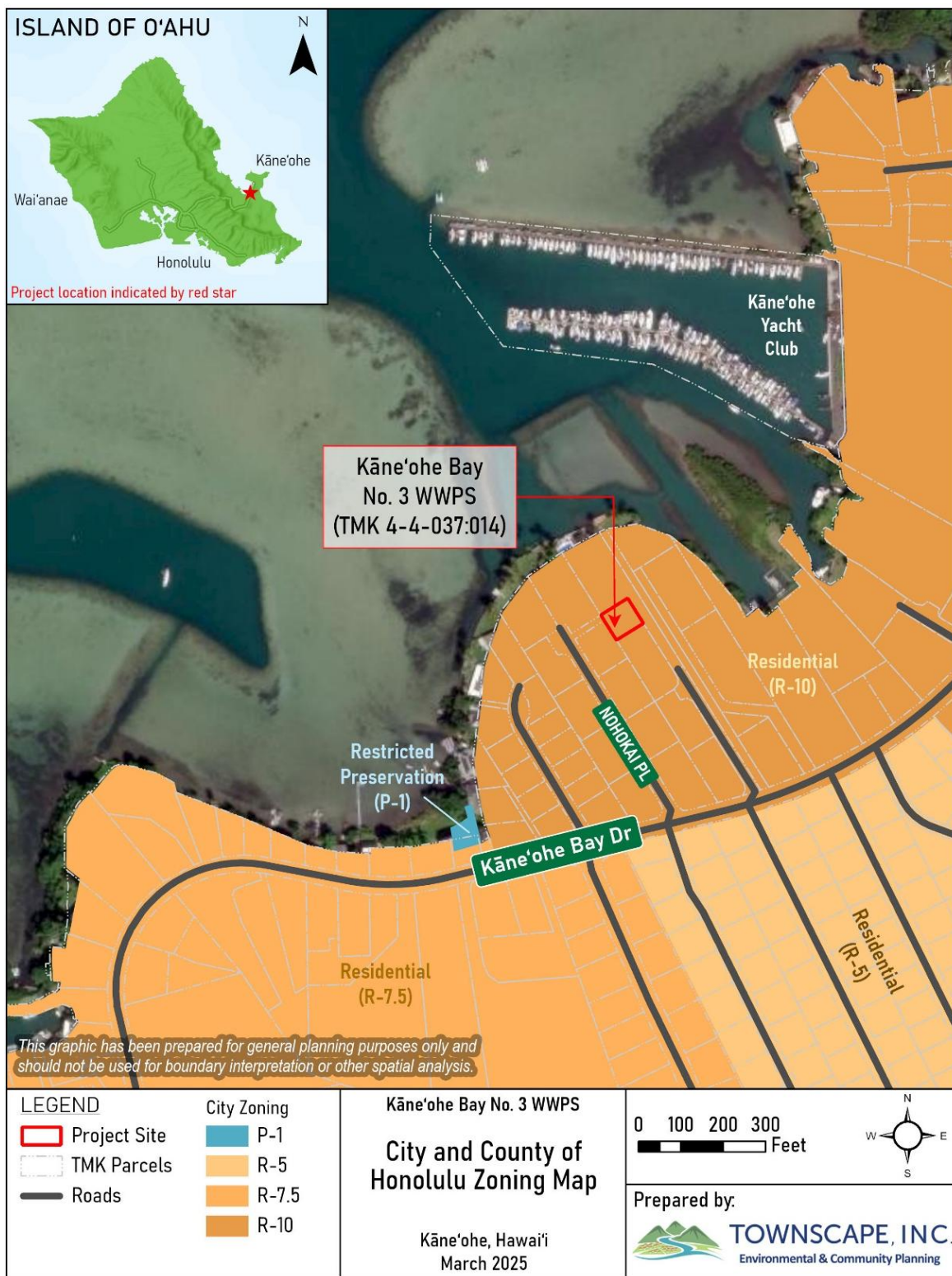




Figure 4. Existing Site Plan (Source: Fukunaga and Associates, Inc., 2012)

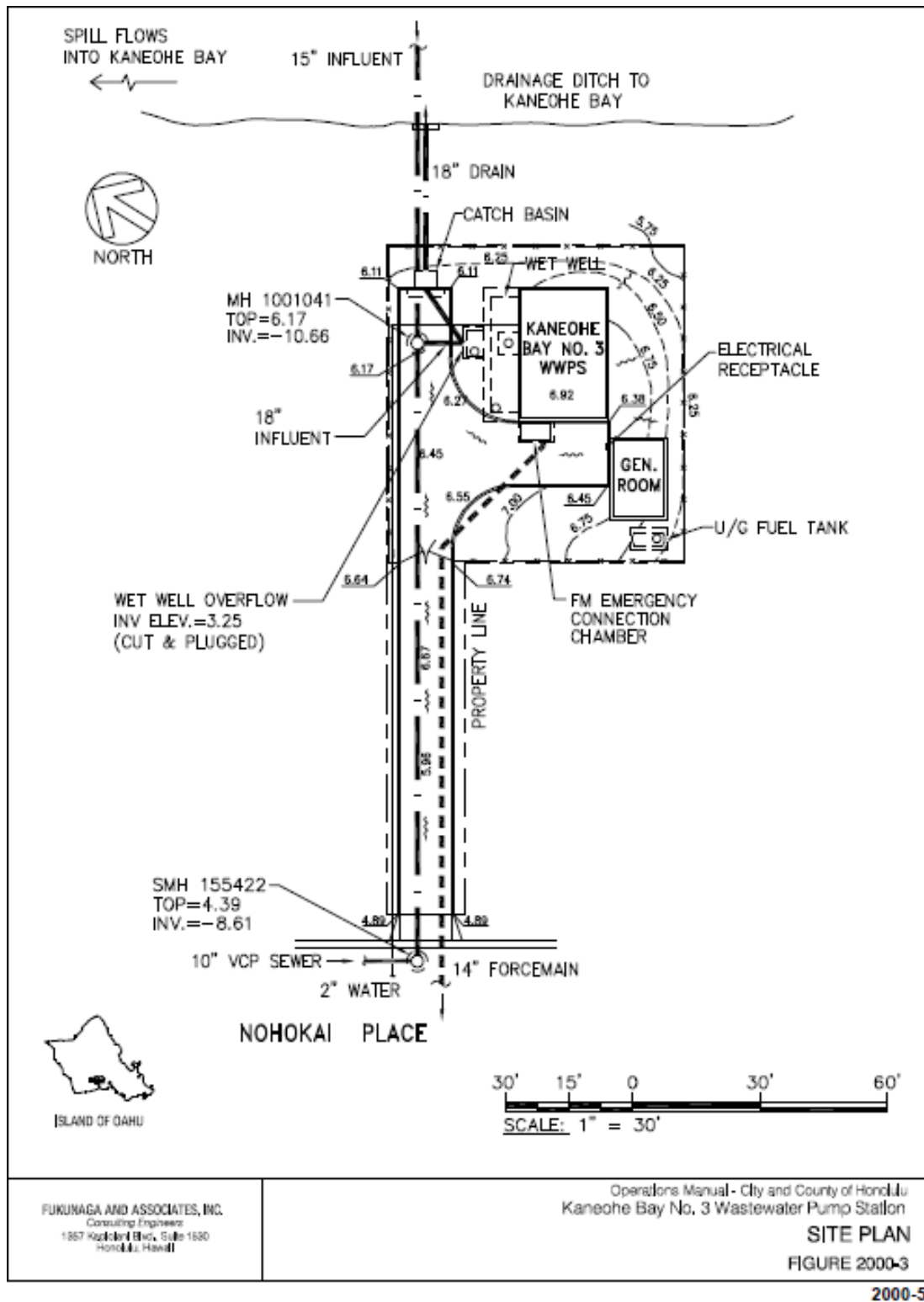


Figure 5. Mechanical Demolition Plan

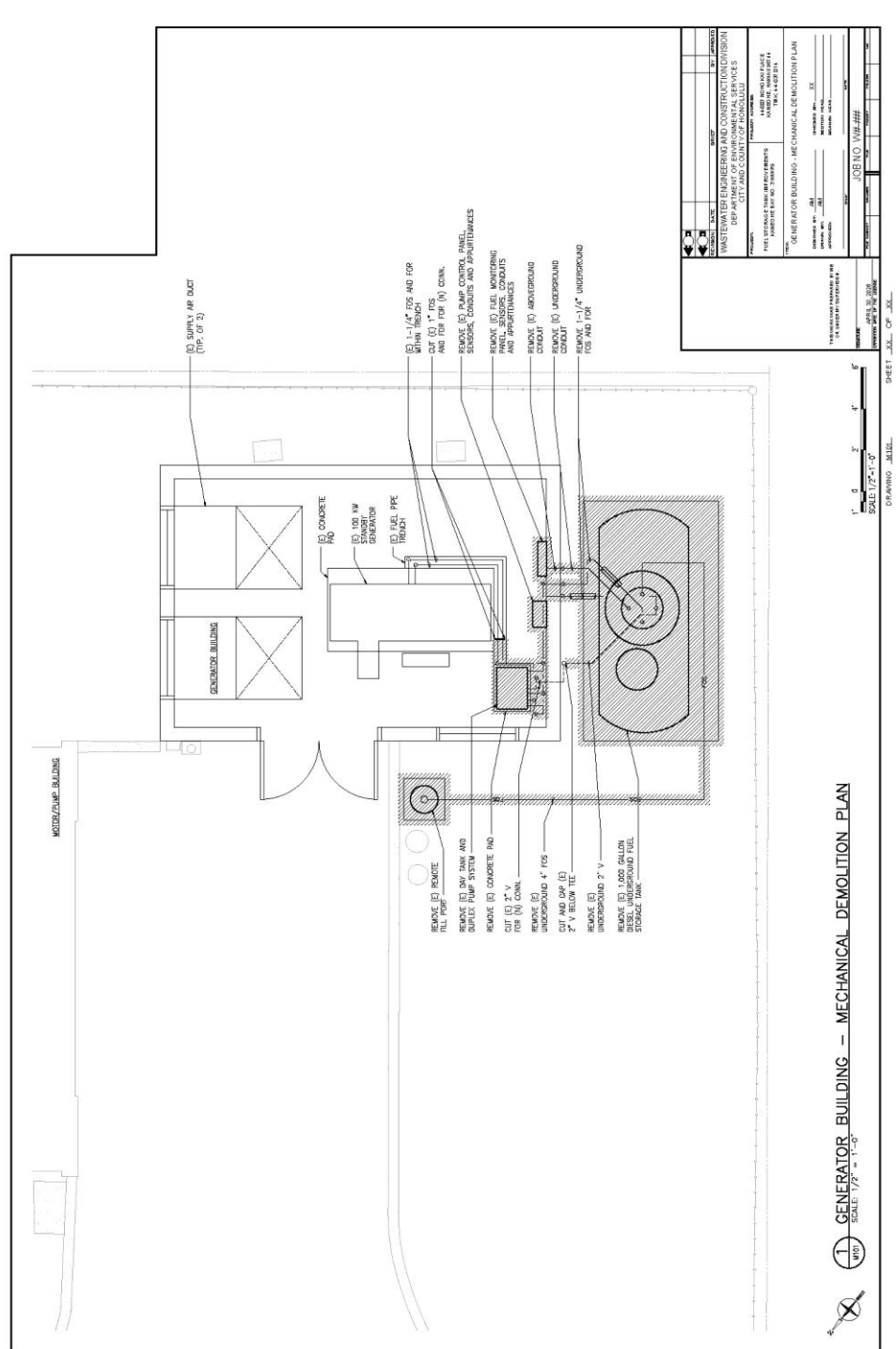


Figure 6. Demolition Floor Plan

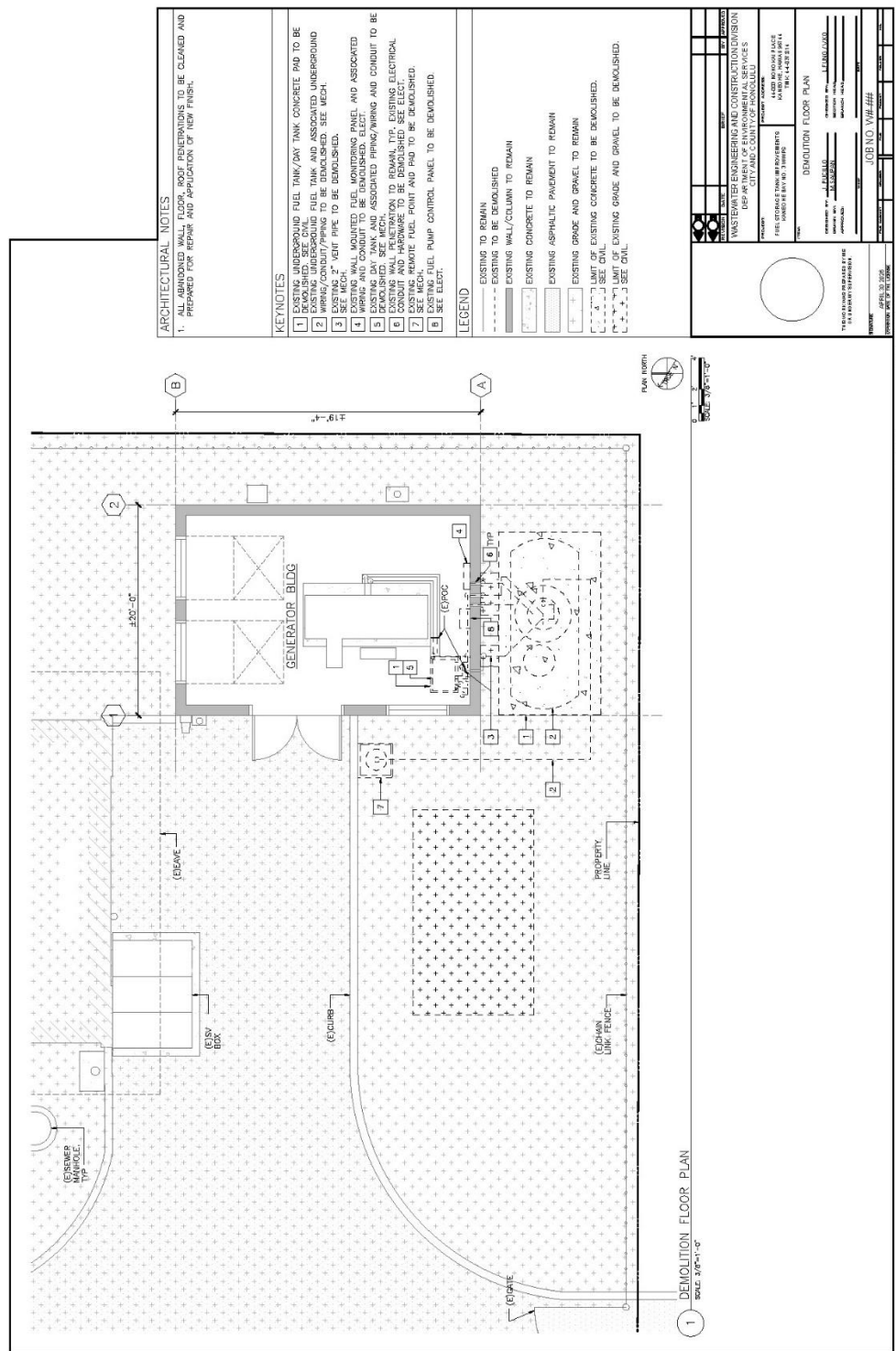


Figure 7. Generator Building Mechanical Plan

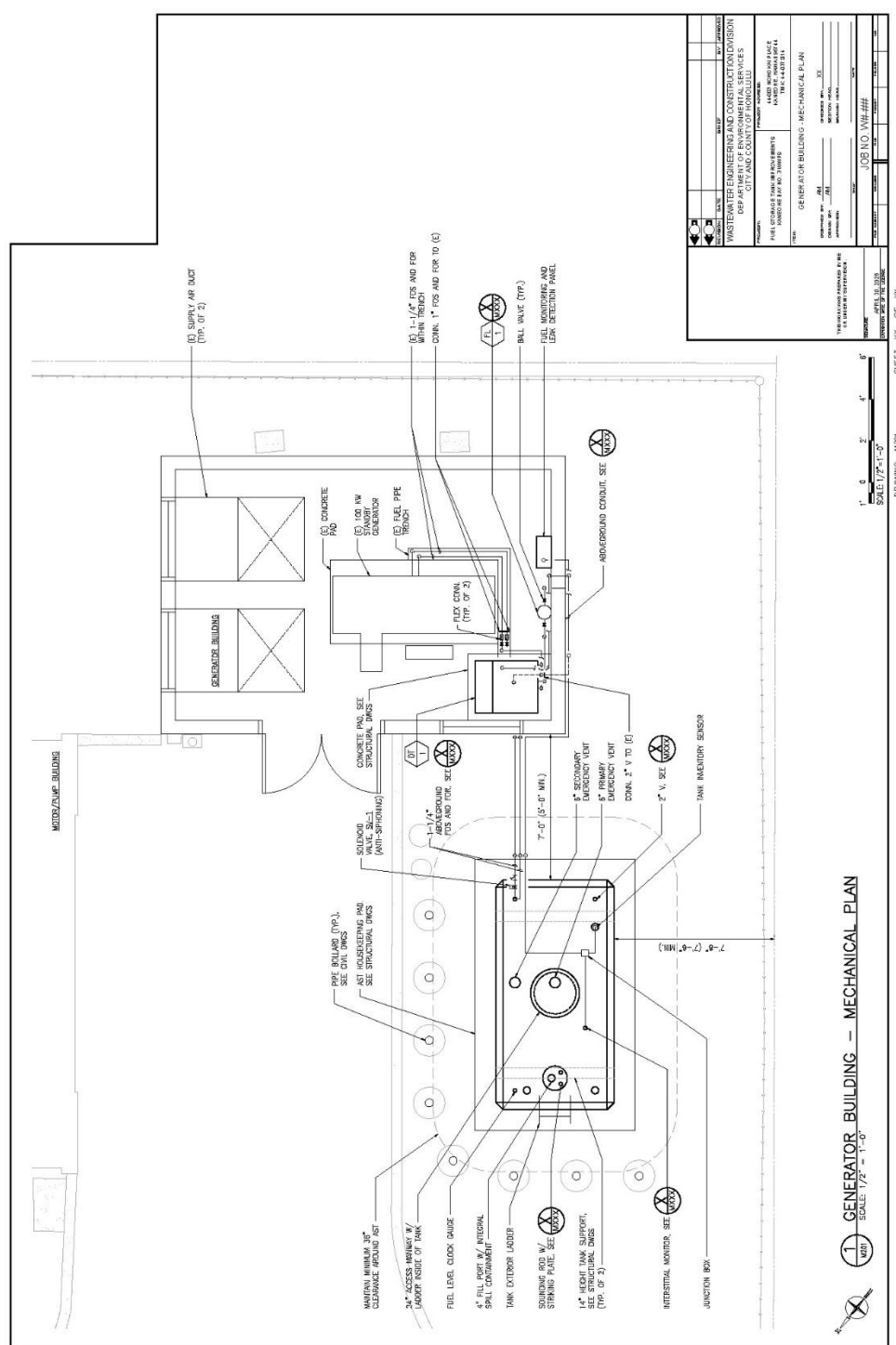




Figure 8. Floor Plan

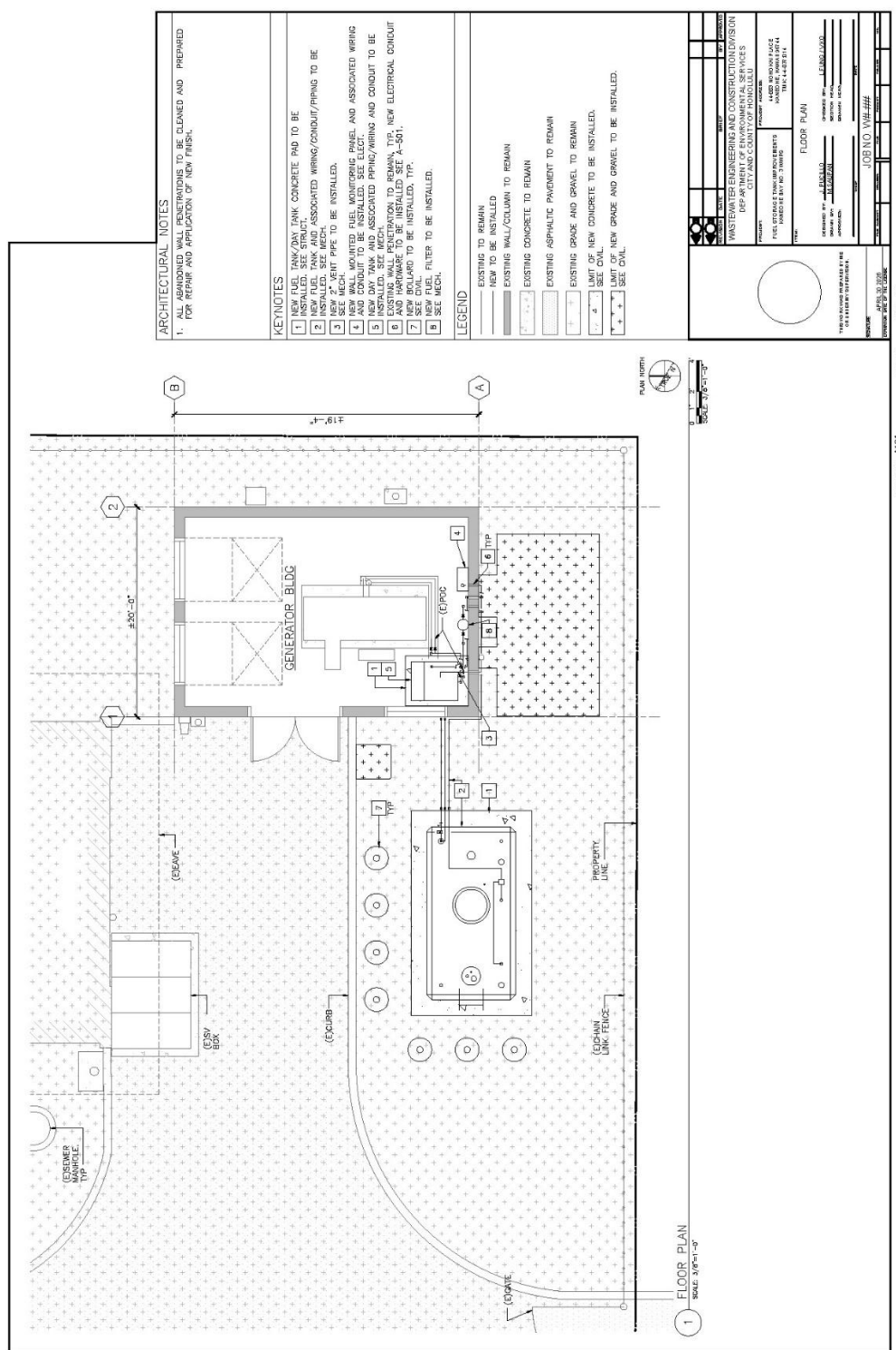
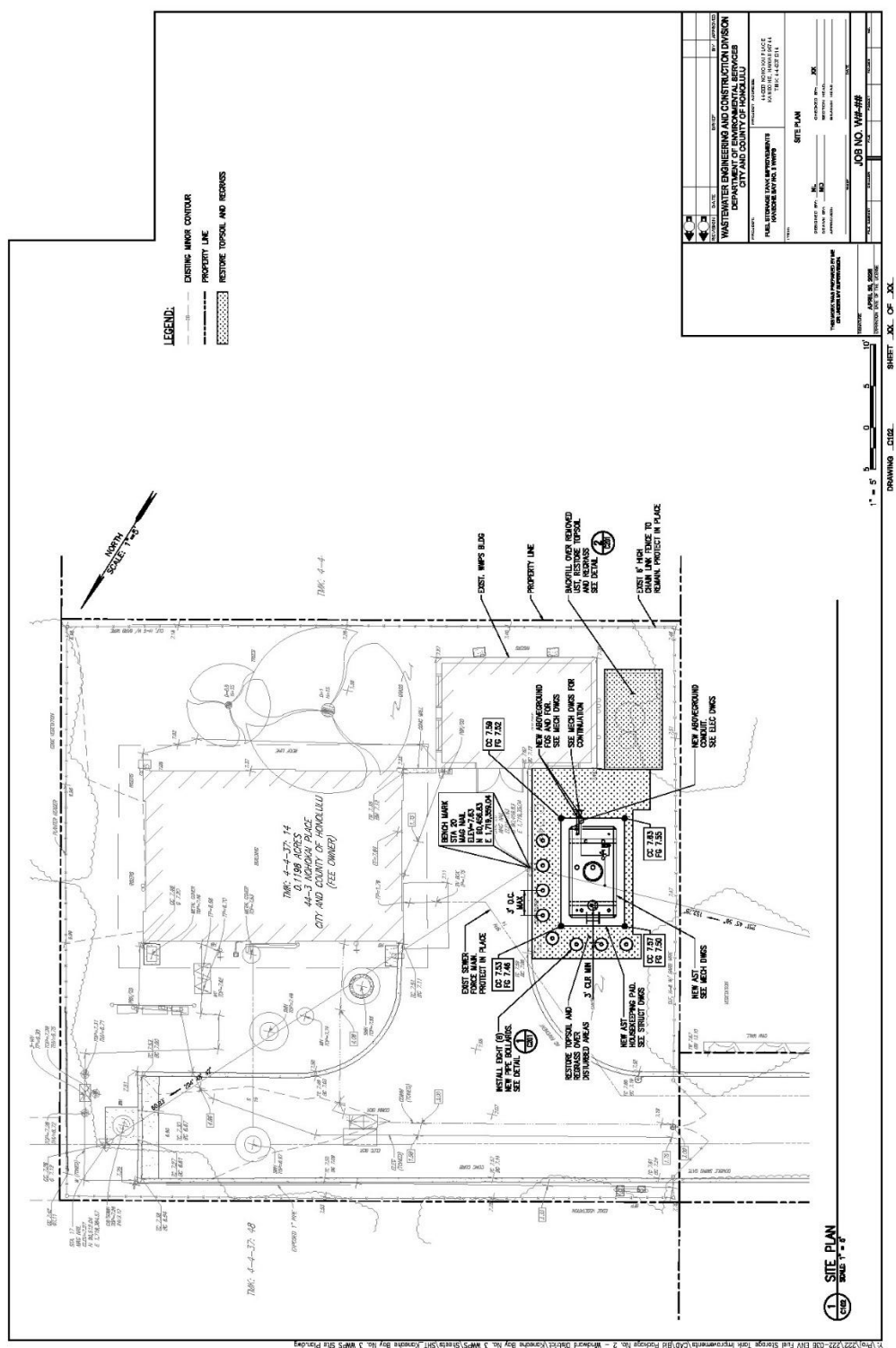


Figure 9. Detailed Site Plan with Proposed Action



## **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 the WWPS (from the driveway)**

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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, May to October, is warm and dry whereas the winter season, November to April, is cool and wet. Rainfall distribution across Hawai'i varies greatly according to geographic conditions, elevation, and long-term climatic cycles.

The project site is along the coast of Kāne'ohe, which has a mild semi-tropical climate similar to the rest of the State of Hawai'i. Temperatures at the project site range from 74°F to 80°F, while the average annual rainfall is estimated to be between 33.1 to 48.0 inches (Giambelluca et al., 2014). Trade winds in the project vicinity are generally from the northeast, except during winter months where trade winds are less frequent and are replaced by the lighter southwest Kona winds. Strong winds are known to occur in connection with storm systems that disrupt climatic patterns.

#### **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 contains 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. The younger Ko'olau mountain range extends for 37 miles in a northwest to southeast alignment across the eastern two thirds of the island.

The project site is located on the windward side of the Ko'olau mountain range at approximately 7 feet above mean sea level. It is relatively flat, and situated within a residential neighborhood. The project site ground surface primarily consists of topsoil and vegetative cover. Based on a site visit in January 2025, grass cover was observed to be moderate with patches of bare soil.

According to a soil survey completed by the U.S. Department of Agriculture in 1972, the project area consists of Kawaihapai stony clay loam (KlaB), with 2 to 6 percent slopes (see Figure 10). The soil is an alluvium found in areas ranging from 0 to 600 feet in elevation with 30 to 50 inches of rainfall. Kawaihapai stony clay loam is a well

draining soil with very low runoff, and it is considered prime farmland soil if irrigated. This type of soil is typically found in drainageways on mountain slopes or alluvial fans.

### **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. Twelve-inch compost filter socks will be installed to the southwest and east of the construction area to control runoff flow.

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.

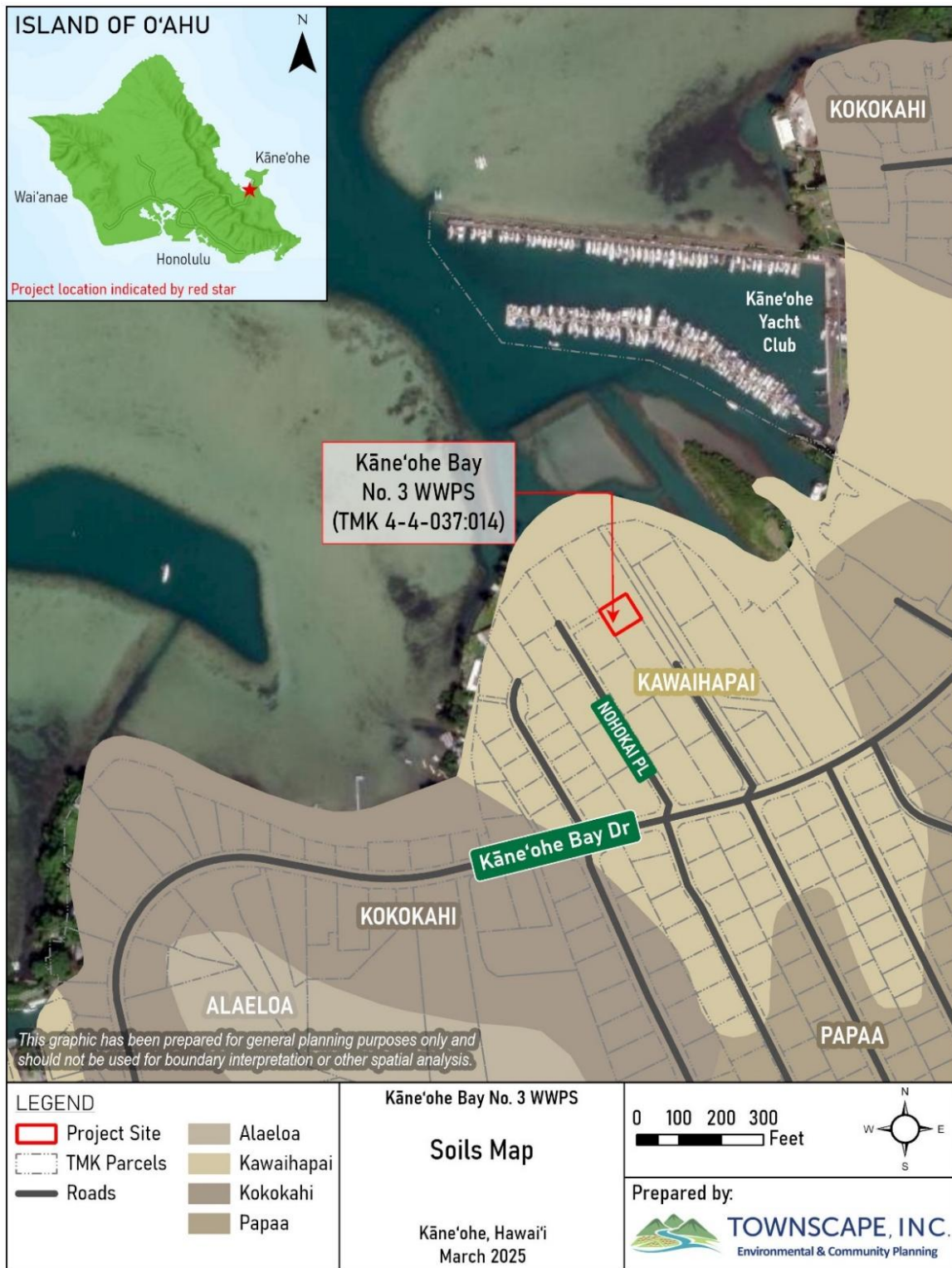
In addition, the following are erosion prevent best management practices (BMPs) to prevent any runoff, sediment, soil, and debris generated by construction activities from adversely impacting the coastal ecosystems and State waters:

- All exposed disturbed areas to be permanently stabilized with ground covering such as vegetation, gravel, or pavers.
- Sediment fences or barriers to be installed at the perimeter of all disturbed areas where runoff from the project site is possible.
- Environmentally inert construction materials to be used to the extent practicable.
- Construction is to be scheduled with consideration of weather conditions, preferably during low rain conditions. All work to halt during storm events or when storm conditions threaten the watershed. The site is to be secured during conditions to minimize runoff.

In a letter dated April 21, 2025, the Honolulu Police Department (HPD) recommended minimizing environmental impact by establishing a long-term plan to mitigate the tracking of dirt, gravel, and debris.



Figure 10. Soils and Topography



### 2.1.3. Natural Hazards

#### Tsunami

The project site lies within the Extreme Tsunami Evacuation Zone (see Figure 11), indicating that it is vulnerable to major tsunami events due to its proximity to the coast and elevation (Hawaiʻi 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. Note that “extreme” refers to areas that would be impacted only by an extreme tsunami event, not an area of extreme risk for inundation.

#### Hurricanes

The project area, similar to the rest of Hawaiʻi, is susceptible to hurricanes, particularly during the Pacific hurricane season from June through November. The State of Hawaiʻi has a 68.5 percent chance of a hurricane of any magnitude occurring within 60 nautical miles in any given year (Hawaiʻi 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) poses a potential threat to life and property in coastal and low-lying areas. According to the State of Hawaiʻi’s *Sea Level Rise Viewer*, the project site is not located in Sea Level Rise Exposure Area (SLR-XA) at 3.2 feet of SLR by 2100. However, it is in close proximity to areas that are within the SLR-XA.

A guidance document titled *Sea Level Rise II* developed by the City’s Climate Change Commission (2022) recommends that the City set the Intermediate High (which projects 5.9 feet of SLR by 2100) as a planning and policy benchmark for all planning and public infrastructure projects. Under this scenario, the Kāneʻohe Bay No.3 WWPS would be inundated, according to the Sea Level Rise Viewer tool provided by the National Oceanic and Atmospheric Administration (2025).

#### Flooding

According to the Flood Hazard Assessment Tool (Department of Land and Natural Resources, 2025), the project site is entirely located within Flood Zone D (see Figure 12). This flood zone is classified as an area of undetermined flood risk, meaning there is insufficient data to assess flood hazards at the site. Flooding is possible, but the risk has not yet been fully evaluated.



### Wildfires

The Fire Management Program created by the Division of Forestry and Wildlife (DOFAW) of the Department of Land and Natural Resources (DLNR) classifies the project area as having a medium wildfire risk (Division of Forestry and Wildlife, 2007).

### **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.

In a letter dated May 2, 2025, DOFAW responded to a request for comment with a list of recommendations for impacts and mitigation, which included coordinating with the Hawai'i Wildfire Management Organization, at (808) 850-0900 or [admin@hawaiiwildfire.org](mailto:admin@hawaiiwildfire.org) to address wildfire prevention in the project area. They list several BMPs for when engaging in activities that have a high risk of starting a fire in/near tall grasses:

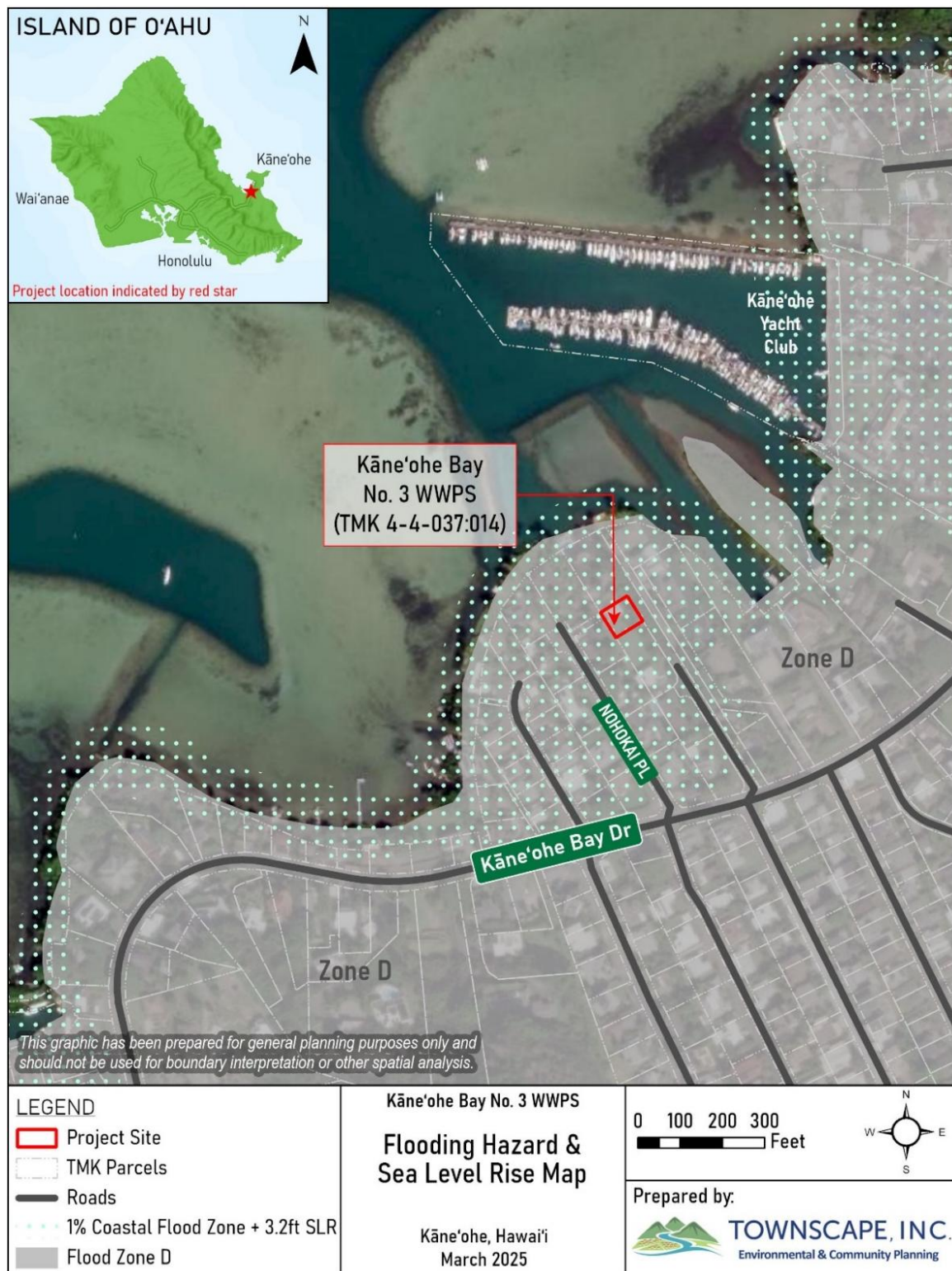
- 1) Wet down the area before starting your task
- 2) Continuously wet down the area as needed
- 3) Have a fire extinguisher on hand
- 4) In the event that your vision is impaired (i.e. welding goggles) have a spotter to watch for fire ignitions

Additionally, it is recommended not to park vehicles in or near tall grass as heat from the engine or exhaust may ignite vegetation.

Figure 11. Tsunami Evacuation Zones



Figure 12. Flooding and SLR





## **2.2. Archaeological, Architectural and Cultural Resources**

The Kāneʻohe Bay No. 3 WWPS project site is situated on the Mōkapu peninsula within the ahupuaʻa of Kāneʻohe in the Koʻolaupoko district of Oʻahu. The readily available freshwater sources and fertility of the land on the windward side of Oʻahu made it the choice location for the earliest settlement of Hawaiians to the island. Historically, Kāneʻohe and the greater Koʻolaupoko district was densely populated and extensively cultivated with loʻi kalo (pondfield taro patches) and loko iʻa (fishponds). The loʻi were irrigated by the many perennial streams and springs throughout the district, which also provided freshwater and nutrients to the ocean fish ponds (Handy and Handy, 1972). Thus, there are many sites of cultural and historical significance surrounding the project vicinity. The Mōkapu peninsula in particular also has spiritual significance for Hawaiians, as an Oʻahu-based creation story identifies Mōkapu as the site where man was first created.

During the Māhele of 1848, the ahupuaʻa of Kāneʻohe was awarded to Queen Kalama, the wife of Kauikeauoli. As was common for the records of ahupuaʻa awarded to chiefs, detailed descriptions of the landscape during this period are missing. However, it is known that several fishponds in the area were retained by Queen Kalama. Besides the production of fish and kalo (taro), pollen samples indicate that other vegetation in the area prior to Western contact included the native loulou palm, sedges, grasses, and fruit trees.

Although the Kāneʻohe area was traditionally one of the main population centers of Oʻahu, not many previous archaeological findings have been identified due to the area being transformed prior to the development of historic preservation laws. By the 1950s, the landscape in Kāneʻohe transformed from a well-watered agricultural community to a drier, infilled residential area. The main archaeological findings surrounding the project vicinity include a heiau (temple), a freshwater spring, and fishponds. The Ahukini heiau (altar for many blessings) was identified 150 meters southeast of the project vicinity (McAllister, 1933; Pukui et al., 1974). The low stone walls of the heiau are still present today (McIntosh and Cleghorn, 2013). On the north side of the Kāneʻohe WWPS No. 3 project site, a former spring was identified 150 meters away. Situated between this heiau and the project site were three fishponds—Mikiola (active and alive), Kapuʻu (the hill), and Mahinui (great champion) (McAllister, 1933; Pukui et al., 1974). To the east of the project site were two more fishponds, Hanalua (named for the land division), and Pāpaʻa (secure enclosure) (McAllister, 1933; Pukui et al., 1974). However, each pond was filled in by the 1950s when more roads and a subdivision of a hundred homes were developed.

The Kāneʻohe Bay No. 3 WWPS site itself is directly located on a former three-acre fishpond called Keaʻalau (the many roots), located within the broader Keaʻalau land division. While the Kāneʻohe Bay No. 3 WWPS project site is situated within the former Keaʻalau fishpond, which is designated as a historic property, the WWPS sits on infill material in the center of the pond and thus does not encounter the pond walls.

### **Impacts and Mitigation Measures**

A literature review and field inspection was completed by Cultural Surveys Hawaiʻi (CSH) on March 14, 2025 to identify the likelihood of historic properties being present within the project area. No historic properties were observed at the Kāneʻohe Bay No. 3 WWPS except potentially the WWPS facility itself since it was built in 1969. No remnant of the fishpond was observed. CSH concluded that the potential for significant subsurface archaeological deposits or structures above the water table at the project area or in the vicinity is very low. The report supports a City determination as per HAR §13-275- 7(a)(1) of “No historic properties affected” and for no further historic preservation study.

A historic property evaluation was completed by FAI Architects (July 2025) and concluded that, while the WWPS is defined as a historic property under HAR §13-275-2, it does not meet the Criteria of Significance for listing in the Hawaiʻi State Register of Historic Places or the National Register of Historic Places. Therefore, the WWPS is not eligible for listing.

## **2.3. Floral and Faunal Resources**

The project site previously has been disturbed for the construction of the WWPS. According to the web service provided by the U.S. Fish and Wildlife Service’s (USFWS) Information for Planning and Consultation, the impact area contains no critical habitats for endangered species (USFWS, 2025).

The USFWS lists several species which may occur or pass through the vicinity of the project area:

- Hawaiian Hoary Bat (‘Opeʻapeʻa)– *Lasiurus cinereus semotus*
- Band-Rumped Storm-petrel – *Hydrobates castro*
- Hawaiian Common Gallinule (‘Alae ‘ula) – *Gallinula galeata sandvicensis*
- Hawaiian Coot (Keʻokeʻo) – *Fulica alai*
- Hawaiian Duck – *Anas wyvilliana*
- Hawaiian Petrel – *Pterodroma sandwichensis*
- Hawaiian Stilt (Aeʻo)– *Himantopus mexicanus knudseni*

- Newell's Shearwater – *Puffinus newelli*
- Green Sea Turtle (Honu) – *Chelonia mydas*
- Hawksbill Sea Turtle – *Eretmochelys imbricata*

The USFWS map also identifies the following flora species for this region:

- 'Akoko– *Euphorbia celastroides* var. *kaenana*
- 'Ena'ena– *Pseudognaphalium sandwicense* var. *molokaiense*
- Carter's Panicgrass – *Panicum fauriei* var. *carteri*
- Ihi – *Portulaca villosa*
- Kamanomano – *Cenchrus agrimonioides*
- Ohai – *Sesbania tomentosa*
- Palapalai – *Microlepia strigosa* var. *mauiensis*

### **Impacts and Mitigation Measures**

In a letter dated May 2, 2025, DOFAW responded to a request for comment on the proposed project with a list of recommendations for impacts and mitigation:

- For the Hawaiian Hoary Bat ('Ope'ape'a), any required site clearing should be timed to avoid disturbance to bats during the birthing and pup rearing season (June 1 to September 15). During this period, woody plants greater than 15 feet tall should not be disturbed. Barbed wire should be avoided in construction.
- To avoid adverse impacts to seabirds, artificial lighting should be avoided at night or mitigated through full shielding of the lights. Nighttime work should be avoided if possible during the seabird fledging season (September 15 to December 15), and if necessary should take place accompanied by a qualified biologist. If seabirds are seen circling the area, lights should be shut off. If a downed seabird is detected, site workers should follow DOFAW's recommended response protocol (<https://dlnr.hawaii.gov/wildlife/seabird-fallout-season/>). Permanent lighting fixtures should be avoided.
- For state-listed waterbirds such as ae'o or Hawaiian stilt (*Himantopus mexicanus knudseni*), 'alae ke'oke'o or Hawaiian coot (*Fulica alai*), and the 'alae 'ula or Hawaiian gallinule (*Gallinula chloropus sandwicensis*) it is against the law to harm or harass. If any species are viewed in the vicinity of the construction, it is required to pause all activities within 100 feet and not approach. If a nest is discovered at any point, contact the O'ahu Branch DOFAW Office at (808) 973-9778.

- DOFAW recommends action be taken to minimize predator presence, i.e., remove cats, place bait stations for rodents and mongoose, and provide covered trash receptacles. This is to reduce the potential for harm to vulnerable bird species that may be drawn to the area.
- For the endangered pueo or Hawaiian short-eared owl (*Asio flammeus sandwichensis*) a high level of consideration is required if habitat or nesting area is located within the project area. If existent, it is necessary to notify DOFAW staff of any nests or adult breeding behavior. Pueo nest on the ground and have been observed year round. If spotted, various precautions must be taken in removing predators from the site and bringing on a qualified biologist to conduct surveys of the site.
- For any landscaping work, it is recommended that native plants are used as opposed to non-native or invasive species. Appropriate species for the area may be found on [www.plantpono.org](http://www.plantpono.org)
- DOFAW recommends consulting the O'ahu Invasive Species Committee at (808)266-7994 to help plan, design, and construct the project. To prevent the transportation of pests, invasive species, or pathogens, DOFAW recommends the BMPs of cleaning all tools and equipment with 70% rubbing alcohol, washing clothes with hot water and soap, tire and undercarriages of vehicles with high-pressure water, and avoiding movement of soil between sites.
- To prevent the spread of Rapid 'Ōhi'a Death (ROD), DOFAW requests that removal, pruning/trimming, and potentially injury to 'ōhi'a 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. If 'ōhi'a trees must be removed or pruned/trimmed, it should be conducted on a still day to minimize blown sawdust and use a sharp saw to create chips rather than dust. Seal all wounds with a stump seal product (e.g. Spectricide, etc.). More information at <https://cms.ctahr.hawaii.edu/rod>.
- The invasive Coconut Rhinoceros Beetle (CRB) is widespread on O'ahu. The Hawai'i Department of Agriculture interim rule 24-1 restricts the movement of CRB-host material from the island of O'ahu. When such material is moved there is a risk of spreading CRB. Inspection and/or treatment is mandatory before inter-island transport.

## **2.4. Environmental Quality**

### **2.4.1. Visual Resources**

The project site is located within a residential neighborhood and is fronted by houses on the north and west sides of the property. It is surrounded by a six-foot high chain-link fence and on some sides by light foliage. It is separated from the street (Nohokai Place) by a narrow access road and is relatively obscured by surrounding structures.

#### **Impacts and Mitigation Measures**

No significant impacts on the area's visual resources are anticipated. From the street, the project site is largely screened by the surrounding landscape and adjacent properties. Construction activities will take place within the project parcel. In the short-term, the presence of workers and equipment may create minor visual impacts during the construction period.

### **2.4.2. Acoustic Characteristics**

The project site is located within a relatively quiet residential neighborhood. The nearest environmental source of noise is Kāneʻohe Bay Drive, which is used by area residents and commuters. The road is located approximately 480 feet away from the site.

#### **Impacts and Mitigation Measures**

Noise from the removal and installation process is expected to be intermittent and unavoidable due to the usage of construction vehicles, heavy equipment, and impact tools which generate noise as part of normal operations. Ambient noise levels are expected to briefly increase during construction, primarily from work vehicles and machinery.

To mitigate anticipated temporary noise impacts, construction work will be scheduled during daytime hours, thereby avoiding noise during nighttime hours. 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 consistent with ambient conditions typical of the Kāneʻohe Bay area, where prevailing trade winds typically help disperse odors and maintain good air circulation. Because the WWPS is located in a residential neighborhood, it is exposed to lower concentrations of air pollutants, with minimal influence from major roadways or industrial activities.



### **Impacts and Mitigation Measures**

No significant impacts to air quality are anticipated from the project in the long-term. 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 because 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 1,000 gallons of diesel fuel for the WWPS facility operations. Stored fuel is regulated under 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 Code of Federal Regulations 112).

### **Impacts and Mitigation Measures**

A response letter dated April 21, 2025 from HFD requested that the project follow all applicable codes in the ROH Chapter 20 regarding Flammable and Combustible Liquid Storage Tanks.

The primary tank will be constructed out of steel and encased by a secondary tank to provide secondary containment with interstitial monitoring in compliance with regulatory requirements. A minimum of 36 inches of clearance will be maintained around the AST. The double-walled tank will be encased in concrete to ensure corrosion, fire, and impact resistance. The secondary containment serves as a barrier between the steel and concrete.

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, Code of Federal Regulations 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.

Eight steel pipe bollards will be installed around the AST to protect it from accidental vehicle collisions to reduce the risk of spills, leaks, or structural damage. The bollards will be constructed of Schedule 40 steel pipe filled with 2,500 psi concrete to provide structural strength and impact resistance and will be painted in OSHA approved safety yellow. Pipe bollards will be sized and spaced with proper clearances to meet the minimum NFPA requirements, including:

- Three feet minimum horizontal clearance between the edge of the AST and the outer edge of the pipe bollard.
- Three feet maximum spacing, on-center, between adjacent pipe bollards.
- Three feet minimum height of bollard, as measured from finish grade to the top of the bollard.

## **2.5. Public Infrastructure & Services**

### **2.5.1. Site Access, Circulation and Traffic**

Vehicular access to the project site is via a locked gate accessible from Nohokai Place by an asphalt driveway. Nohokai Place is a narrow neighborhood road used by the area's surrounding residents. Access to the site is restricted for security and operational purposes. The parcel is fully enclosed with a chain-link fence and secured by a locked, double swing 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 temporarily increase traffic along Nohokai Place during the construction period. To minimize disruption to nearby residents, construction traffic should avoid peak hours.

In a letter dated April 21, 2025, HPD recommended that the contractor install and maintain necessary lights, signs, and barricades during construction. HPD also advised notifying area businesses and residents in advance of any road closures or traffic disruptions.

### **2.5.2. Potable Water and Wastewater**

Water service is supplied by the Board of Water Supply (BWS). It provides potable water for the facility, which is used for sink and restroom, hose connections, and air gap flushing. There is a backflow preventer on the western edge of the property and a single one-inch curb line runs towards the north end of the site.

Wastewater from the Kāneʻohe Bay No.3 WWPS is conveyed via a 14-inch sewer force main along Nohokai Place. Influent to the WWPS flows from an 18-inch gravity sewer main at the north end of the WWPS building flowing southbound.

#### **Impacts and Mitigation Measures**

Both the waterline and sewer utilities are outside the limits of disturbance and are not anticipated to be impacted by the proposed project. Therefore, no mitigation measures are proposed.

In a letter dated April 28, 2025, the BWS 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 project is subject to the BWS Cross-Connection Control and Backflow Prevention requirements prior to issuance of the Building Permit Applications, and the BWS requests the submission of construction drawings for prior approval.

### **2.5.3. Power and Communications**

HECO provides power to the pump station. Electrical and communications lines run parallel within the access road entering the site and continue north along the asphalt pavement before turning south towards the WWPS building. A transformer is pad-mounted on the East corner of the property. It is HECO owned and maintained.

The emergency power system, which the proposed project aims to support, 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 (as discussed in Section 1.4).

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 25, 2025 from HECO during the early consultation process, HECO requested early engagement during the design process to ensure adequate planning for electrical infrastructure. 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 existing UST to the new AST fuel system, the standby generator will be without a diesel fuel source. A temporary 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 to use fuel from the temporary tank to provide backup power.

### **2.5.4. Emergency Service Facilities**

Law enforcement services are provided by HPD. The nearest police station is the Kāneʻohe Police Station, located at 45-270 Waikalua Road, approximately 3.1 miles from the project site.

The Honolulu Fire Department (HFD) provides fire protection and first responder emergency services. The nearest fire station is Aikahi Fire Station 19, located at 45 Kaneohe Bay Drive, approximately two miles from the project site.

The Adventist Health Castle Hospital, located at 640 Ulukahiki Street, is approximately 5.0 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 Kāneʻohe Bay No.3 WWPS.

### **2.5.5. Recreational Resources**

The project is not located near any public recreational facilities, such as parks or beaches. Kāneʻohe Bay is not accessible directly from the Nohokai Place neighborhood. Nearby access points include the Kāneʻohe Yacht Club small boat harbor to the northeast and YWCA Kokokahi to the southwest.

### **Impacts and Mitigation Measures**

The project is not anticipated to result in substantial impacts on the functionality or quality of existing recreational resources in the area.

## **2.6. Socio-Economic Characteristics**

The census-designated place of Kāneʻohe as of 2023 is listed as having a population of 35,945 (Datausa, 2023). It has a median household income of \$124,632 compared to \$98,317 in the State overall, and a poverty rate of 8.99%. The area is characterized by a mix of urban and suburban uses in an area that is heavily developed on the southern shores of Kāneʻohe Bay, as opposed to the more rural areas found on the western and northern ends.

### **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. 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.

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### **3. RELATIONSHIP TO PLANS, POLICIES, AND CONTROLS**

#### **3.1. Hawai'i State Plan**

The Hawai'i State Plan, found in Chapter 226 (Land Use Commission, 2010) of the Hawai'i Revised Statutes (HRS), 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 needed upgrades to essential public infrastructure and enhancing its resiliency against future disruptions. Eight pipe bollards will be installed on the makai side of the AST to prevent vehicles from accidentally hitting it. A reinforced concrete wall will be constructed to serve as a wave barrier. The wall is designed to withstand a wave breaking three feet above existing grade. These measures are intended to enhance structural stability and reduce the risk of displacement or failure during extreme weather events. 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 (Chapter 205, HRS) 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 (CZM) Program, to carry out the state's CZM policies and regulations. It is administered by the State of Hawai'i OPSD. The CZM program provides for the beneficial use, protection, and development of the State's coastal zone. 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 §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 restoration of coastal resources that have significant recreational and ecosystem value, including but not limited to coral reefs, surfing sites, fishponds, sand beaches and coastal dunes, when these 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 WWPS is located on a parcel that is in close proximity to the coastline, 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:**

While the Kāneʻohe Bay No. 3 WWPS site itself is directly located on a former three-acre fishpond called Keaʻalau, the WWPS sits on infill material in the center of the pond and thus does not encounter the pond walls. CSH concluded that the potential for significant subsurface archaeological deposits or structures above the water table at the project area or in the vicinity of very low.

### **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 UST with an AST, which will be located within a visually enclosed space screened from the primary public view corridor.

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 designated and used for that development and permit reasonable long-term growth at those areas, and permit coastal dependent development outside of 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 low-lying surrounding neighborhood to the Kailua Regional WWTP. 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 reinforced concrete wall will be constructed to serve as a wave barrier. The wall is designed to withstand a wave breaking three feet above existing grade, exerting a force of 1,500 pounds per linear foot of wall or a hydrostatic pressure of 550 pounds per square foot. In addition, eight new concrete-filled steel pipe bollards will be installed to protect the AST from vehicular traffic. Together, these measures are intended to reduce hazards to the AST from tsunamis, storm waves, erosion, and pollution.

### **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 review 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 participation by promoting communication and engagement through the EA review process. Additional opportunities for public participation will be provided through the SMA permitting process.

**Beach and Coastal Dune Protection**

Objective:

- (A) Protect beaches and coastal dunes for: 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 or impact public access to beaches for public use and recreation.

**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 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 §205A). Any action defined as “development,” pursuant to HRS §205A-22, requires an SMA (minor or major) Use Permit. On O‘ahu, the SMA permit is administered by Department of Planning and Permitting (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. This project is not located within the Shoreline Setback Area.

### **3.6. City and County of Honolulu General Plan**

The *O'ahu General Plan* (2021, Resolution 21-23, CD1) 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 goals, objectives, policies, and actions 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 Kāneʻohe Bay No.3 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. Koʻolau Poko Sustainable Communities Plan**

The City and County of Honolulu has divided Oʻahu into eight planning areas by ordinance, each with a Development Plan or Sustainable Community 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 Koʻolau Poko SCP, updated in 2017, encompasses the windward coast Oʻahu from Makapuʻu Point to Kaʻōʻio Point, which includes the Kāneʻohe Bay No.3 WWPS. The key elements of the vision for the 2017 Koʻolau Poko SCP are summarized below:

- Adapt the concept of ahupuaʻa in land use and natural resource management;
- Preserve and promote open space and agricultural uses;
- Preserve and enhance scenic, recreational and cultural features that define Koʻolau Poko's sense of place;

- Emphasize alternatives to the private passenger vehicle as modes for travel;
- Protect and enhance residential character while adapting to changing needs;
- Define and enhance existing commercial and civic districts; and
- Maintain the Community Growth Boundary to protect agricultural, open space, and natural resources.

The plan outlines several policies principles for sustainability to promote the long-term health of the land, people, and 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.
- Strive for balance between economic prosperity, social and community well-being, and economic stewardship.
- 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 Ko'olau Poko's natural, cultural, and historic resources, working in tandem with members of the community. It also seeks to accommodate very little population growth and preservation of the character and lifestyle of the Ko'olau Poko District's people.

**Discussion:**

The Kāne'ohe Bay No.3 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, particularly in Kāne'ohe Bay. The AST allows for easier access to the fuel tanks for necessary maintenance and repairs, while also avoiding 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 R-10 Residential District, and is considered a public use and structure, which is permitted in the R-10 District. No discretionary land use permit is required for uses conducted by or structures owned or managed by the

federal government, the State of Hawaiʻi or the city to fulfill a government function, activity or service for public benefit and in accordance with public policy.

Wastewater system infrastructure is a utility installation that is a permitted use. The definition of utility installations includes uses or structures, including all facilities, devices, equipment, or transmission lines, used directly in the distribution of utility services, such as water, gas, electricity, telecommunications other than broadcasting antennas, and refuse collection other than facilities included under waste disposal and processing. Pursuant to §21-2.130 of the City's LUO, the Director of DPP may waive the strict application of development or design standards for public or public/private uses and structures, and utility installations.

## **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 demanded by the passage of HAR Chapter 11-280.1, this option is not feasible. The city is legally required to upgrade the WWPS. To forestall the recommended improvements would increase the risk over long periods of time of harm to environment and public health from equipment deterioration or malfunction.

### **4.2. Delayed Action**

A delayed action implies that a project of similar scope and size to the proposed action would occur at an unspecific future date. As with the “no action” alternative, this 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 are set to 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
- Noise Permit
- Non-Covered and/or Covered Source 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
- Grubbing, Grading, and Stockpiling Permit
- Erosion Control Plan/Best Management Practices
- Flammable/Combustible Liquid Permit
- 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 ENV 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 UST to an AST 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 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 tank will occur on 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;*

No major impact on rare, threatened, or endangered species, or critical habitats is expected. The project area is not located within any critical habitats. 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 a tsunami evacuation zone; however, the proposed project is necessary to ensure reliable service from the existing facility located in the area. To mitigate potential impacts from storm surges, a six-foot high, one-foot thick, reinforced concrete wall along the makai side of the AST will be constructed to serve as a wave barrier. The wall will be designed to withstand a wave breaking three feet above existing grade with a force of 1,500 pounds per linear foot of wall, or a hydrostatic pressure of 550 pounds per square foot.

*(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 are expected as a result of the project. The AST will not obstruct any scenic vistas and view planes identified in the Ko'olau Poko SCP.

*(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, the permanent fuel tank system infrastructure will support the ongoing operation of the facility.

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## 7. PUBLIC AGENCY REVIEW AND CONSULTATION

An Early Consultation Letter and Handout was sent on April 1, 2025 to initiate the environmental review process. A list of consulted agencies, organizations, and interest groups are listed below. There were 9 formal responses to the early consultation letter, as indicated by the ✓ below. A copy of the Early Consultation Letter and Handout are included in Appendix B.

### State of Hawai'i

Department of Hawaiian Homelands

Department of Land and Natural Resources

Aha Moku Advisory Committee

Commission on Water Resource Management

Division of Forestry and Wildlife ✓

Engineering Division ✓

Land Division

Department of Health

Department of Transportation

Hawai'i Emergency Management Agency

Office of Hawaiian Affairs

Office of Planning and Sustainable Development ✓

Senate District 24 (Senator Jarret Keohokalole)

House District 50 (Representative Mike Lee)

### 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 Land Management

Department of Facilities Maintenance

Department of Planning & Permitting ✓

Department of Transportation Services

Honolulu Fire Department ✓

Honolulu Police Department ✓

Honolulu City Council District 3 (Esther Kiaʻāina)

Kāneʻohe Neighborhood Board No. 30

Office of the Mayor (Mayor Rick Blangiardi)

### **Organizations and Associations**

Hawaiian Electric Company ✓

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## **Appendix A**

Archaeological Literature Review and Field Inspection

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**Draft**

**Archaeological Literature Review and Field Inspection  
for the Kaneohe Bay No. 3 Wastewater Pump Station  
Improvements Project,  
Kāneʻohe Ahupuaʻa, Koʻolaupoko District, Oʻahu  
TMK: (1) 4-4-037:014**

**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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Hallett H. Hammatt Ph.D**

**Cultural Surveys Hawaiʻi, Inc.  
Kailua, Hawaiʻi  
(Job Code: KANEOHE 82)**

**April 2025**

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## Management Summary

<b>Reference</b>	Archaeological Literature Review and Field Inspection for the Kaneohe Bay No. 3 Wastewater Pump Station Improvements Project, Kāneʻohe Ahupuaʻa, Koʻolaupoko District, Oʻahu, TMK: (1) 4-4-037:014 (Shideler and Hammatt 2025)
<b>Date</b>	April 2025
<b>Project Number(s)</b>	Cultural Surveys Hawai'i, Inc. (CSH) Job Code: KANEOHE 82
<b>Investigation Permit Number</b>	CSH completed the fieldwork component of this literature review and field inspection (LRFI) 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.
<b>Agencies</b>	SHPD, City and County of Honolulu (C&C) Department of Environmental Services (ENV)
<b>Project Proponent</b>	C&C ENV
<b>Project Funding</b>	C&C
<b>Project Location</b>	<p>The project is located at the Kaneohe Bay No. 3 Wastewater Pump Station (WWPS) at 44-003 Nohokai Place, Kāneʻohe, Hawaiʻ 96744 in Kāneʻohe Ahupuaʻa, Koʻolaupoko District in south windward Oʻahu (TMK: [1] 4-4-037:014). The project is located at the southeast end of Kāneʻohe Bay. The Kaneohe Bay No. 3 WWPS is depicted on portions of the 2017 Kaneohe and Mokapu Point U.S. Geological Survey (USGS) 7.5-minute series topographic quadrangles (Figure 1), a tax map plat (Figure 2), and a 2022 aerial photograph (Figure 3). The very small Kaneohe Bay No. 3 WWPS, defined by a roughly square perimeter chain-link fence, constitutes the study area for this LRFI study.</p> <p>The very small project area is in the south corner of the facility where an existing underground storage tank (UST) is to be removed and in the middle of the southwest side of the facility where the new above ground storage tank (AST) is to be placed (Figure 4 and Figure 5).</p>
<b>Land Jurisdiction</b>	C&C
<b>Project Acreage</b>	The Kaneohe Bay No. 3 WWPS is approximately 0.12 acres (0.05 hectares). The actual project area of disturbance is estimated at approximately 25 square meters (sq m).
<b>Project Description and Ground Disturbance</b>	The C&C ENV will be replacing the existing fuel UST with a new AST. The existing UST is in the south corner of the Kaneohe Bay No. 3 WWPS in a narrow space between the southwest side of the generator building and the southwest fence of the facility (Figure 4 and Figure 5). The excavation to remove the UST will be approximately 2 m by 6 m and will of course be largely within the previous excavation for the UST. The new 1,000-gallon AST will be placed within the middle of the southwest side of the facility,

	likely on a new concrete slab and cradle structure. The fuel piping will connect the new AST to the generator building largely extending over the previously disturbed location of the present UST (Figure 4 and Figure 5).
<b>Historic Preservation Regulatory Context</b>	This is a state/municipal “governmental” project needing review under Hawai'i Revised Statutes (HRS) §6E-8 and HAR §13-275
<b>Document Purpose</b>	<p>This investigation was designed—through detailed historical, cultural, and archaeological background research and a field inspection of 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 and environmental review compliance. This investigation does not fulfill the requirements of an archaeological inventory survey investigation, per HAR §13-276.</p> <p>For the purposes of this archaeological LRFI study, the study area is the Kaneohe Bay No. 3 WWPS (fieldwork focused on the specific project area).</p>
<b>Natural and Built Environment</b>	<p>The Kaneohe Bay No. 3 WWPS is approximately 50 m south of the coast of southeastern Kāneʻohe Bay, was built on the former Keaʻalau fishpond, and is understood to have been impounded ocean water until ca. 1950.</p> <p>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 project area (Figure 6) are Kawaihapai stony clay loam, 2 to 6% slopes (KlaB).</p> <p style="padding-left: 40px;">This series consists of well-drained soils in drainageways and on "alluvial fans on the coastal plains on the islands of Oahu and Molokai. These soils formed in alluvium derived from basic igneous rock in humid uplands. [...] These soils are used for sugarcane, truck crops, and pasture. The natural vegetation consists of kiawe, koa haole, lantana, and bermudagrass. [Foote et al. 1972:64]</p> <p>KlaB soils have “enough stones to hinder, but not prevent, cultivation. Runoff is slow, and the erosion hazard is slight” (Foote et al. 1972:64). Again, it is understood that the soil within the project area is fill deposited for subdivision development ca. 1950.</p> <p>The project area receives approximately 960 mm (37.8 inches) annual rainfall (Giambelluca et al. 2013) which is suggested to be marginal for non-irrigated agriculture.</p>
<b>Background Research Methods</b>	Background research included a review of previous archaeological studies on file at the SHPD; review of documents at Hamilton Library of the

	<p>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).</p>
<b>Cultural Context</b>	<p>The Kaneohe Bay No. 3 WWPS is in the land area of Kea‘alau, literally “the many roots” (Pukui et al. 1974:100). The <i>ahupua‘a</i> (traditional land division) of Kāne‘ohe was prosperous and densely populated in the traditional Hawaiian period. With fresh water from <i>mauka</i> (toward the uplands) springs and perennial streams, as well as a well-developed fishpond system, Kāne‘ohe was rich in agricultural and aquacultural productivity. It was one of the primary population centers on O‘ahu:</p> <p style="padding-left: 40px;">These taro lands were irrigated from both streams and springs. Along the shores thereabouts were also some very large salt-water fishponds. This whole region must have supported a dense population [...] what is now Kane‘ohe and Kailua, which was rich in fishponds and tillable lands, was the seat of the ruling chiefs of Ko‘olaupoko (Short Ko‘olau) which was the southern portion of the windward coast. [Handy and Handy 1972:271–272]</p> <p>The Kaneohe Bay No. 3 WWPS is within the former Kea‘alau fishpond (designated State Inventory of Historic Places or SIHP # 50-80-11-00361). J. Gilbert McAllister (1933:182) provides a very brief description of the fishpond (his designated Site 361): “Keaalau fishpond, covering 3 acres, is adjacent to Keaalau.”</p>
<b>Land Commission Awards (LCAs)</b>	<p>In the Māhele land division of 1848 the 9,500-acre <i>ahupua‘a</i> of Kāne‘ohe was awarded to Queen Kalama as Land Commission Award (LCA) 4452. The present project area and immediate vicinity was not a place of native tenant LCAs but there was a large LCA (LCA 7587:2 to L. Kealoha at Puahu‘ula) approximately 120 m to the east and another (LCA 6400 to Kapu at Mahinui) approximately 400 m to the southwest (Figure 7). Both these LCA lands were received by lesser chiefs from Kamehameha III at the time of the Māhele, great division of lands in 1848. As is typical of chiefly claims, no details of land use are provided for these large lands fronting Kāne‘ohe Bay. The fact that the project area was within the Kea‘alau fishpond suggests this valuable property was retained by Queen Kalama as many fishponds were. While Kāne‘ohe Ahupua‘a was a populated <i>ahupua‘a</i>, it appears most of the population was located well to the west as indicated in Coulter’s (1931:18) map reconstructing population distribution (Figure 8).</p>



<b>Historical Background Focused on a Review of Historic Maps and Aerial Photographs</b>	<p>The 1876 Lyons map (Figure 9) shows land divisions, ownership, LCA claim numbers, roads, fishponds, and cultivated areas. The map indicates the project area was in the central portion of a fishpond extending offshore of “Keaalau (Part of Waikalua)” indicated as Crown land. A trail ran along the coast just inland.</p> <p>The 1882 Jackson map (Figure 10) is much more focused on mapping Kāneʻohe Bay but shows much the same scene.</p> <p>The 1899 Wall map (Figure 11) consistently indicates the Kaneohe Bay No. 3 WWPS area was in the middle of a fishpond of the 66.55-acre Keaala land divisions with other coastal fishponds with adjacent inland taro patches to the northeast and southwest.</p> <p>The 1913 Monsarrat map (Figure 12) again indicates the Kaneohe Bay No. 3 WWPS area was in the middle of a fishpond within the “Keaalau Fishery” adjacent. The many small fisheries of the bay indicate productivity of marine resources. Many of the fisheries are owned by parties with Caucasian names (Irwin and Banning seem to own a few). B.R. Banning is indicated as the owner of Grant 4938 for Keaalau.</p> <p>The 1919 U.S. Army map (Figure 13) has no text in the vicinity. The overlay suggests the Kaneohe Bay No. 3 WWPS area was on the northeast wall of the fishpond but this is thought to be slightly skewed (all other map overlays place the WWPS facility in the middle of the 3-acre fishpond). Small windmills (assumed to be for drawing freshwater) are indicated along the coast just to the northeast and southwest.</p> <p>The 1928 USGS map (Figure 14) reflects a world little changed in the past 300 years with the only structures being fishponds (with the Kaneohe Bay No. 3 WWPS area in the middle of Keaʻalau fishpond), unimproved roads along traditional paths, and a fence line on the margin of Kawainui marsh.</p> <p>The 1936 (Figure 15) and 1946 (Figure 16) U.S. Army maps show much the same scene with only two or three homes scattered along a 1.0-km margin of Kāneʻohe Bay. Kāneʻohe Bay Drive is now indicated as paved and by 1943 a few short unimproved roads extend inland. The Kaneohe Bay No. 3 WWPS area is in the middle of Keaʻalau fishpond.</p> <p>By 1952 (Figure 17) the vicinity has changed radically with many spur roads and a hundred homes developed. Keaʻalau fishpond and five other neighboring fishponds have been recently filled in and homes are rapidly beginning to be built over these former fishpond waters. The Kaneohe Bay No. 3 WWPS area is now dryland.</p> <p>The 1959 aerial photograph (Figure 18), although only five years later, shows that Hulakai Place, Nohokai Place, and Malukai place have been built over the former Keaʻalau fishpond with homes rapidly infilling these new residential streets. The Kaneohe Bay No. 3 WWPS lot appears</p>
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	<p>undeveloped. Significant offshore dredging is evident (for a yacht club basin). A parallel subdivision has been developed just upslope.</p> <p>The 1965 USDA aerial photograph (Figure 19) is quite pixilated but appears to show structures in the Kaneohe Bay No. 3 WWPS area.</p> <p>The 1968 USGS map (Figure 20) shows the southeast margin of Kāneʻohe Bay within a pink wash indicating extensive suburban development. The Kaneohe Yacht Club is prominent just to the northeast indicative of the generally upscale nature of the residents. The 1968 USGS aerial photograph (Figure 21) clearly shows the Kaneohe Bay No. 3 WWPS area dominated by a single large rectangular structure.</p> <p>The 1978 USGS aerial photograph (Figure 22) and the 1998 USGS map (Figure 22) show the Kaneohe Bay No. 3 WWPS vicinity much as it is today with a large condominium complex and the John A. Burns Freeway (Interstate H-3) to the east.</p> <p>The City and County ENV web site for wastewater management facilities in the Windward Region lists the “Year in service” for the Kaneohe Bay # 3 Wastewater Pump Station as 1969.</p>
<b>Synopsis of Previous Archaeological Work in the Vicinity</b>	<p>Previous archaeological studies within approximately 1.2 km of the Kaneohe Bay No. 3 WWPS are depicted in Figure 24 and summarized in Table 1. Previously identified historic properties within approximately 1.2 km of the Kaneohe Bay No. 3 WWPS are located on Figure 25 and summarized in Table 2.</p> <p>As noted above, the Kaneohe Bay No. 3 WWPS is within the central portion of former Keaʻalau fishpond (designated SIHP # 50-80-11-00361) that was infilled for the creation of a subdivision between 1943 (Figure 16) and 1952 (Figure 17).</p> <p>McAllister’s (1933) site documentation in the vicinity appears relatively complete. In addition to McAllister Site 361 (the 3-acre Keaʻalau fishpond at the present project area), he identified five other fishponds, a storied spring (Site 353), and a <i>heiau</i> (pre-Christian place of worship) (Ahukini Heiau, Site 352) indicating a high level of traditional Hawaiian activity</p> <p>The subsequent level of archaeological documentation has been rather light, largely reflecting that construction of most properties was completed before contemporary historic preservation laws. A Hunkin et al. (2010) archaeological monitoring report for a Kāneʻohe Bay Drive Trunk Sewer Reconstruction project addressed portions of Nohokai Place and Hulakai immediately adjacent to the present project area in the “Area B” portion of their project area but this largely involved a cured-in-place technology that did not require excavation. No cultural material was observed and no remnants of Keaʻalau fishpond were observed (Hunkin et al. 2010:ii). However, given the seemingly near total absence of excavation in the vicinity this is no surprise.</p>

<b>Fieldwork Effort</b>	<p>A brief field inspection of the Kaneohe Bay No. 3 WWPS focused on the project area was conducted by CSH archaeologist David W. Shideler, M.A., on 14 March 2025. An archaeologist's track log with a key to the following photographs (showing approximate location and orientation) is provided (Figure 26). The field inspection was completed to identify the likelihood of historic properties being present within the project area.</p> <p>Representative photographs were taken of the Kaneohe Bay No. 3 WWPS focusing on the project area. Photographs are provided of the entry driveway off of Nohokai Place (Figure 27) and at the entry gate into the fenced Kaneohe Bay No. 3 WWPS facility (Figure 28). Views are provided from the corners of the facility looking toward the center starting at the west corner by the entry gate (Figure 29) and proceeding clockwise to the north corner (Figure 30), east corner (Figure 31), and south corner (Figure 32).</p> <p>Views are provided of the front (southwest side, Figure 33) and northwest side (Figure 34) of the utilitarian concrete Pump Station building in order to facilitate any consideration of the Pump Station building as a potential historic property or the project's potential visual impact to this building. Similarly, a view is provided of the front of the Generator building in the south corner of the facility (Figure 35).</p> <p>Figure 36 provides a view of the indicated location for the new 1,000-gallon AST (with the existing UST visible at the concrete slab in the background). Figure 37 shows the location for the new above ground fuel piping largely at the present UST location (see provided Figure 4 plan and Figure 5 mock-up).</p> <p>No historic properties (other than potentially the WWPS facility itself, built in 1969) were observed at the Kaneohe Bay No. 3 WWPS. The ambiance was evaluated as consistent with the interior of a former fishpond (Kea'alau fishpond, SIHP # -00361) but no remnant of the fishpond was observed. It was evaluated in the field that the potential for significant subsurface archaeological deposits or structures above the water table at the project area or anywhere within the Kaneohe Bay No. 3 WWPS facility is very low.</p> <p>It was evaluated in the field that the primary view planes for the Kaneohe Bay No. 3 WWPS Pump Station Building and Generator Building are from the access driveway and that the proposed location of the new AST along the southwest side of the WWPS would be minimally intrusive on the facility as a potential historic property (Figure 36 and Figure 37).</p>
<b>Historic Properties Potentially Affected</b>	<p>It seems beyond a reasonable doubt that the entire Kaneohe Bay No. 3 WWPS (TMK: [1] 4-4-037:014) facility is within a historic property, Kea'alau fishpond (designated SIHP # -00361). It does, however, appear that the WWPS facility was not adjacent to the perimeter wall of the 3-acre fishpond but rather was in a central portion of the pond that was embayed</p>

	<p>seawater, infilled for subdivision development sometime between 1943 (Figure 16) and 1952 (Figure 17). No in situ deposits or structures above the water table would be anticipated pre-dating 1943 within the entire Kaneohe Bay No. 3 WWPS. A review of historic maps and the results of the fieldwork lead to the evaluation that the probability of significant subsurface archaeological deposits or structures above the water table at the project area or anywhere within the Kaneohe Bay No. 3 WWPS facility is very low.</p> <p>The potential for significant intact paleoenvironmental data in the form of pollen within a stratified deposit was evaluated but it was concluded that the 1940s filling episode would likely have disturbed this pollen record. The history of paleoenvironmental research in fishponds that have been far less disturbed than Kea'alau fishpond has proven disappointing with inversions in the acquired dating sequence common (see Athens et al. 2000). Another factor here is that the pollen depositional environment of this coastal windward site may have been less than ideal for capturing a record of change in terrestrial vegetation located largely downwind.</p>
<b>Historic Preservation Next Steps</b>	<p>This study would support a C&amp;C ENV determination as per HAR §13-275-7(a)(1) of "No historic properties affected" and for no further historic preservation study.</p> <p>Early consultation with the SHPD archaeology and architecture branches (with submittal of this study to the SHPD's Hawai'i Cultural Resources Information System or HICRIS system) is recommended.</p>

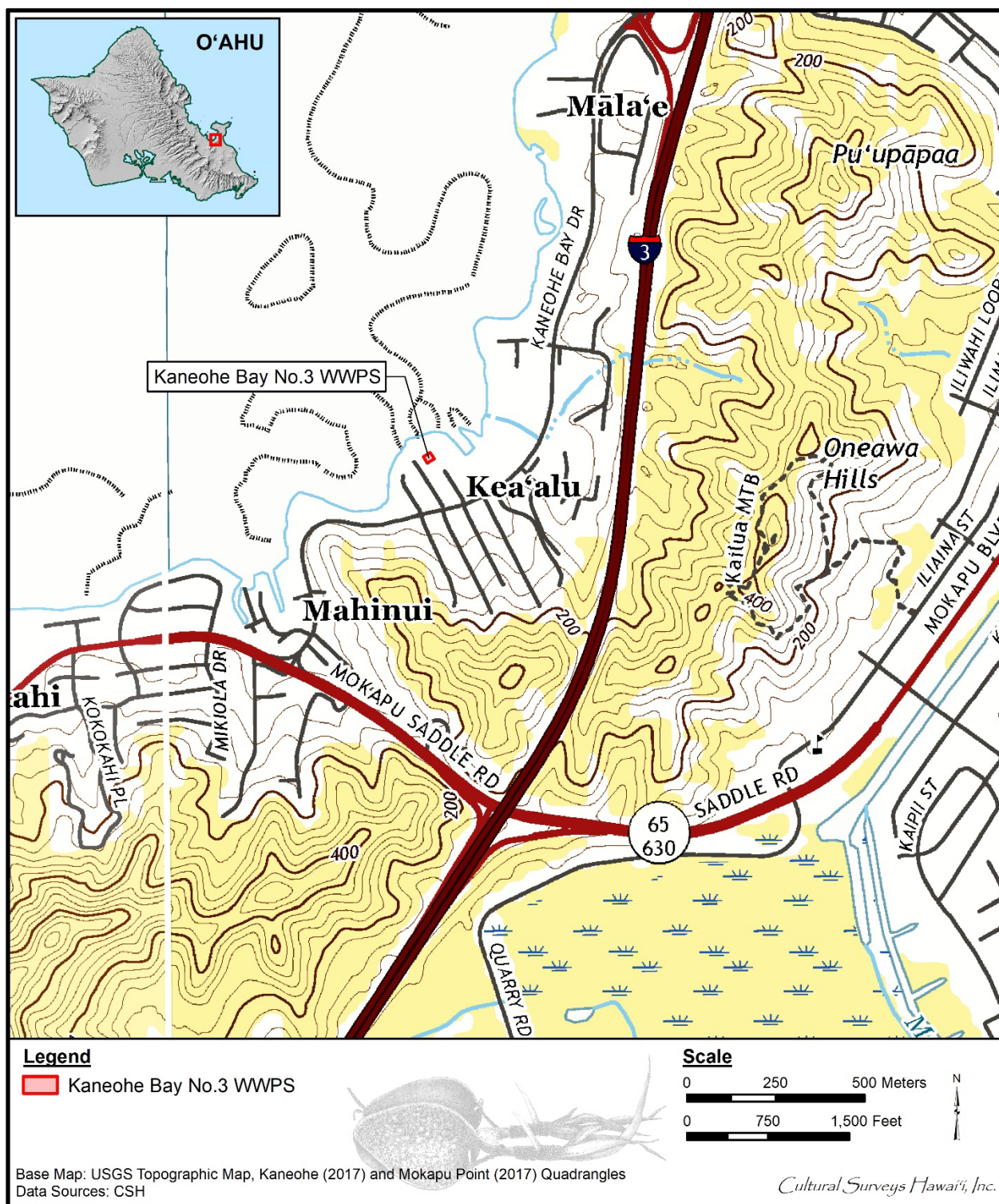


Figure 1. Portion of a 2017 Kaneohe and Mokapu Point USGS 7.5-minute topographic quadrangles showing the Kaneohe Bay No. 3 WWPS

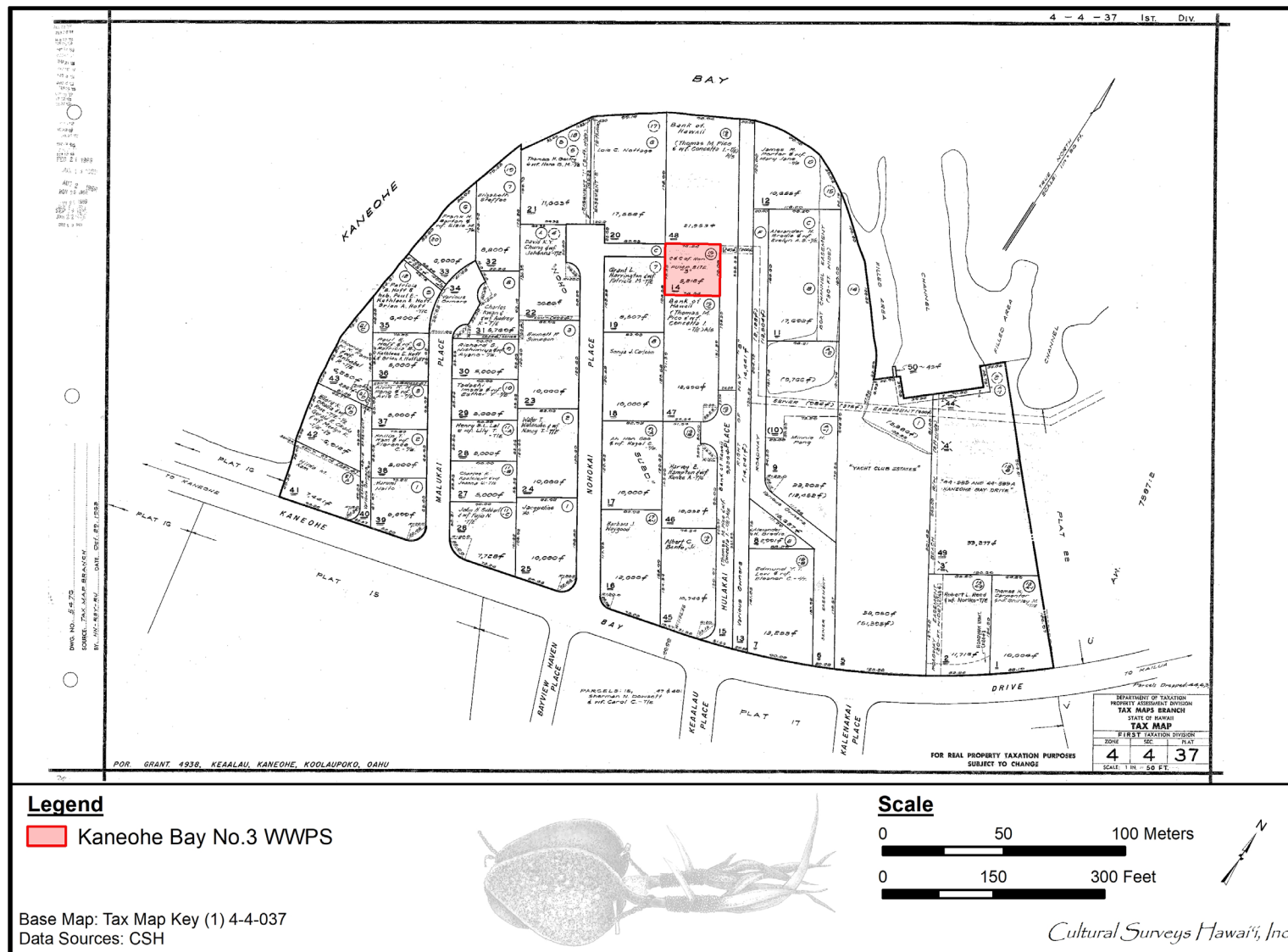


Figure 2. TMK: (1) 4-4-037 showing the Kaneohe Bay No. 3 WWPS (Hawai'i TMK Service 2019)

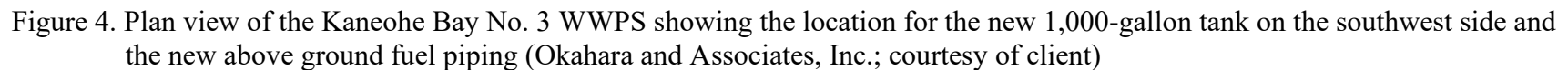
LRFI for the Kāneʻohe Bay No. 3 Wastewater Pump Station Improvements Project, Kāneʻohe, Koʻolaupoko, Oʻahu

TMK: (1) 4-4-037:014





Figure 3. 2022 ESRI aerial photograph showing the Kaneohe Bay No. 3 WWPS





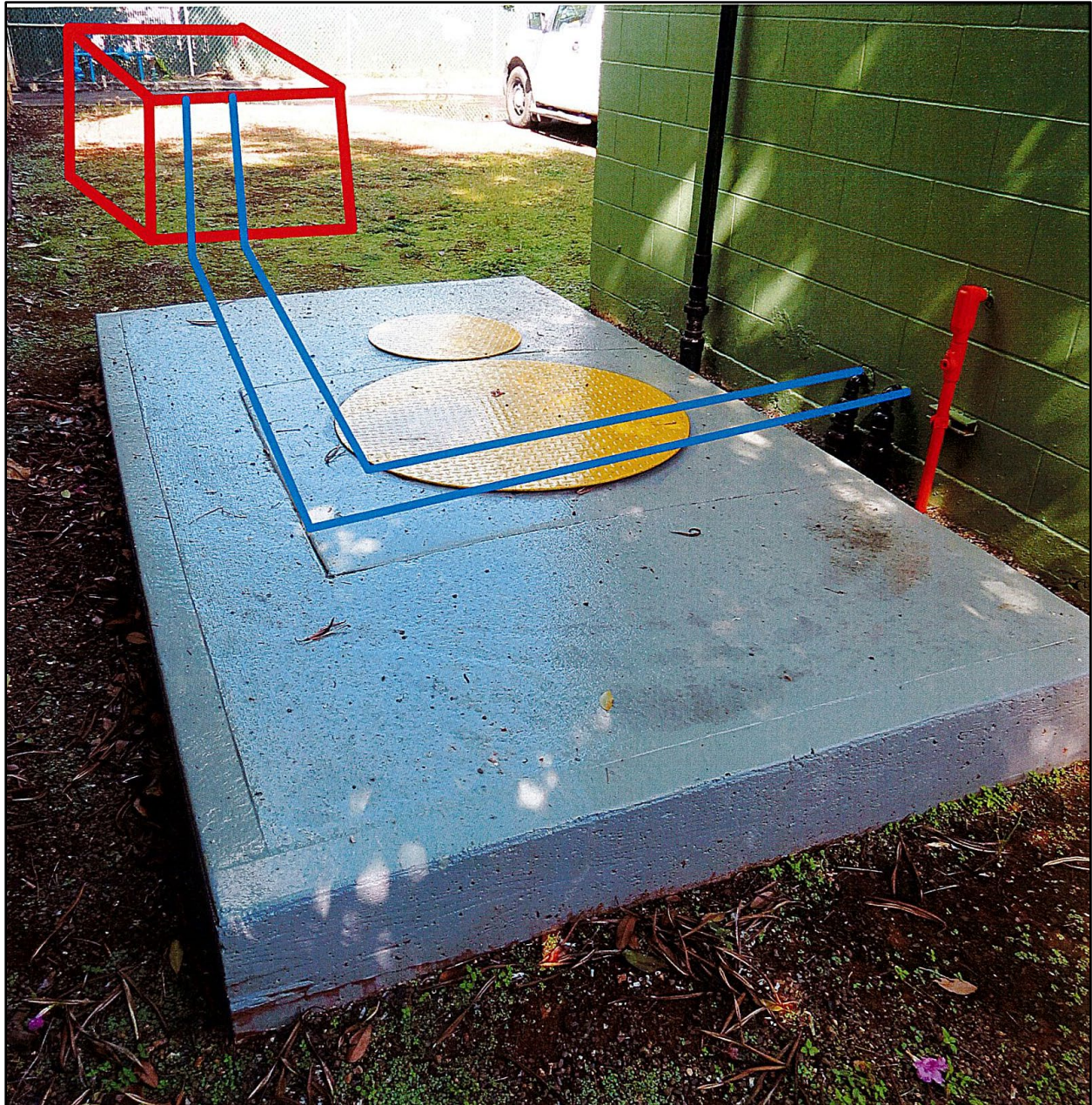


Figure 5. Photo of the southwest side of the Kaneohe Bay No. 3 WWPS showing the location of the new above ground fuel piping and the area for construction of the new 1,000-gallon tank, view to north (Okahara and Associates, Inc.; courtesy of client)



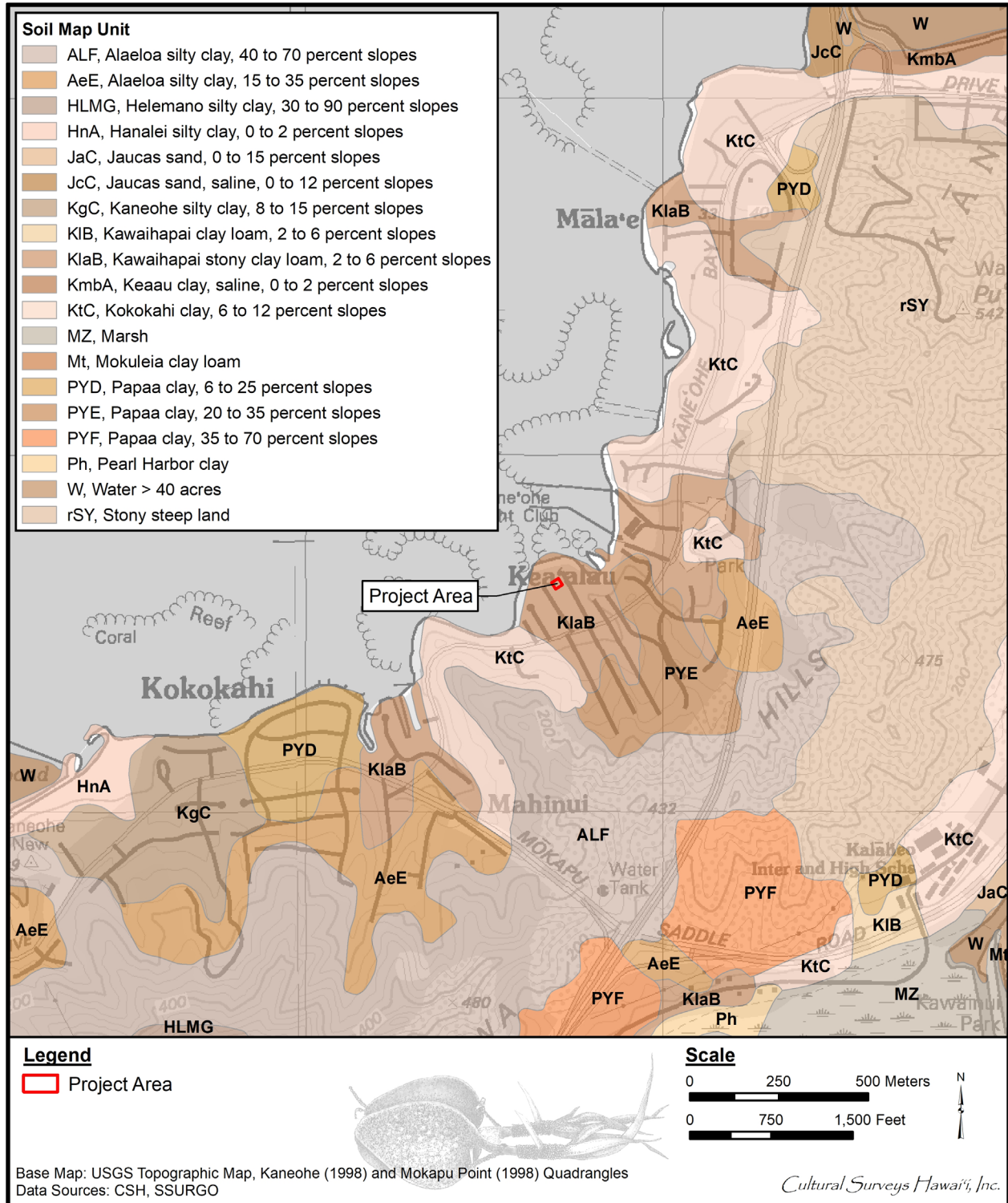


Figure 6. Overlay of *Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii* (Foote et al. 1972; USDA SSURGO 2001), indicating soil types within and surrounding the Kaneohe Bay No. 3 WWPS (base map: 1998 Kaneohe and Mokapu Point USGS topographic quadrangles)

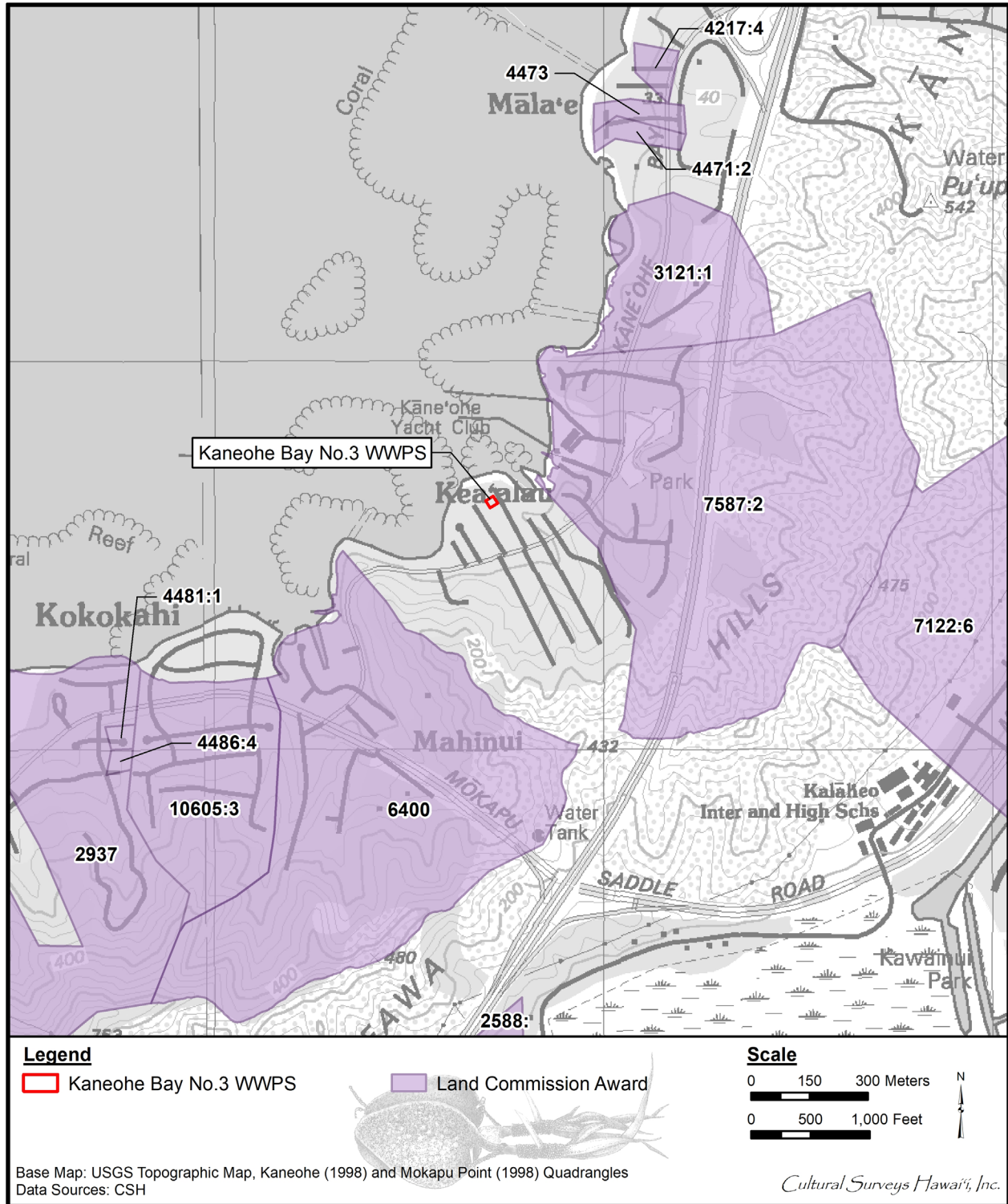


Figure 7. LCA parcels in the vicinity of Kaneohe Bay No. 3 WWPS overlaid on portions of 1998 Kaneohe and Mokapu Point USGS topographic quadrangles

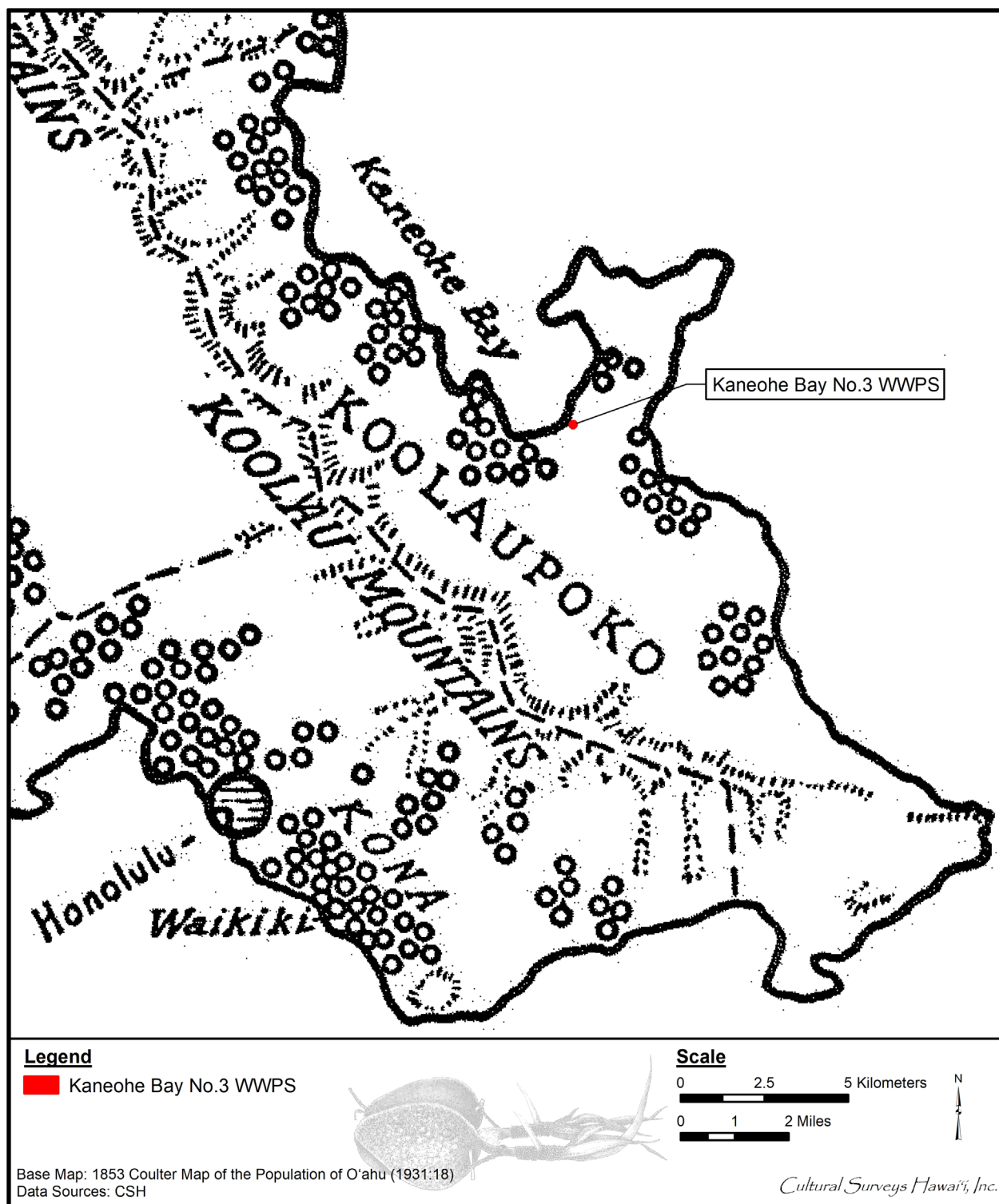


Figure 8. Coulter (1931:18) map of the population of O'ahu ca. 1853 showing the location of the Kaneohe Bay No. 3 WWPS



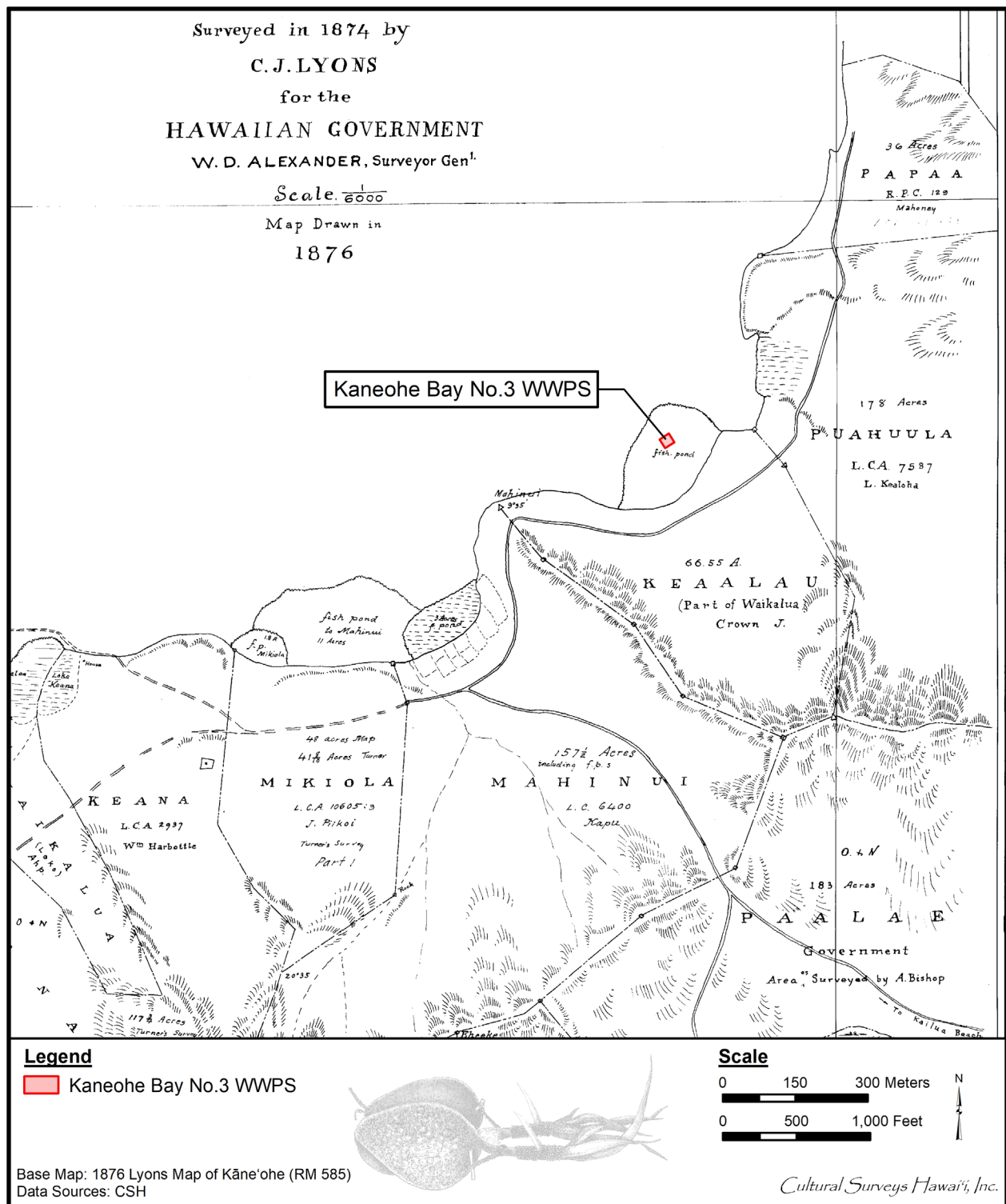


Figure 9. Portion of the 1876 Lyons map of Kāne‘ohe and West Kailua (RM 585) showing the location of the Kaneohe Bay No. 3 WWPS

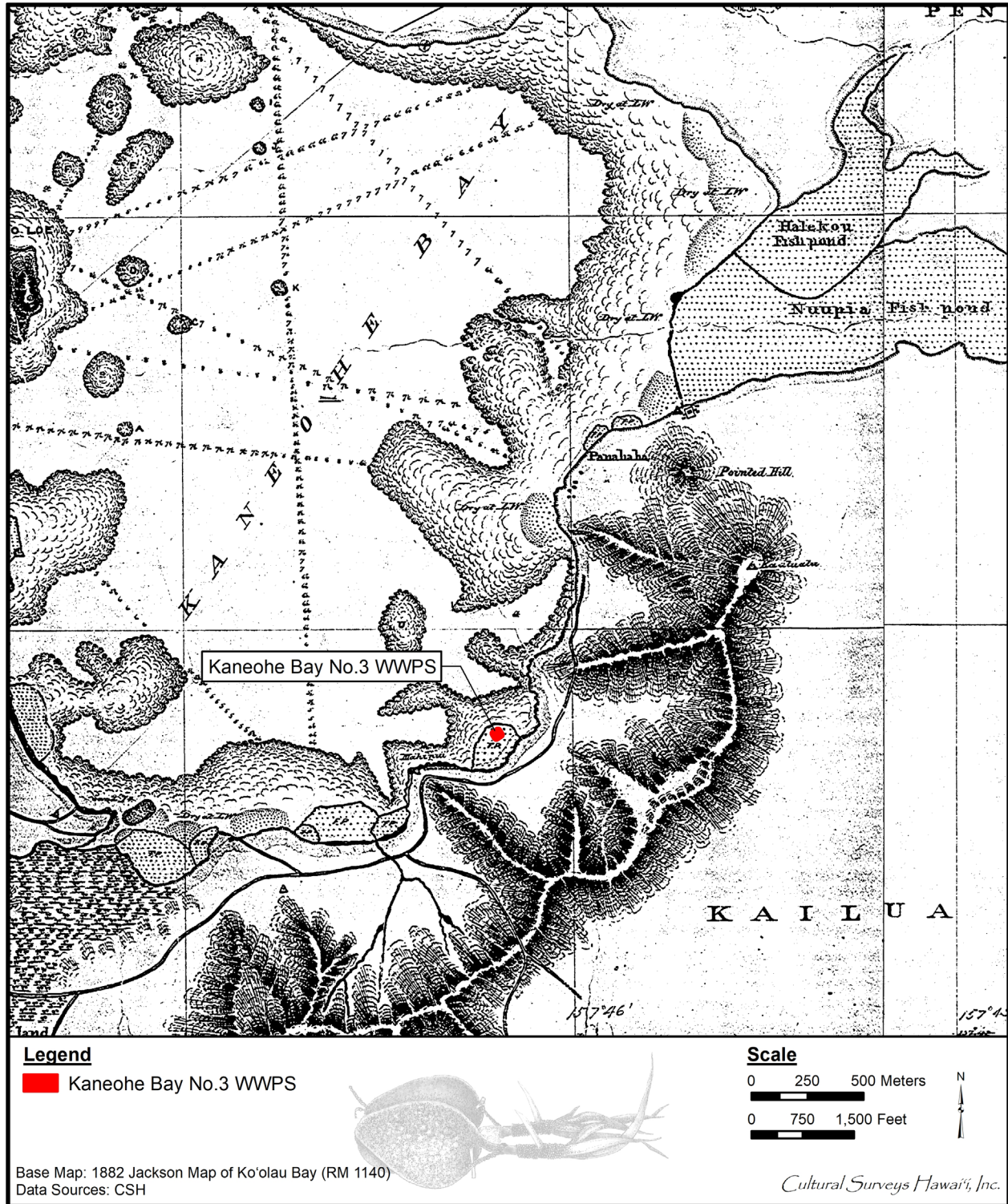


Figure 10. Portion of the 1882 Jackson map of Koʻolau (Kāneʻohe) Bay (RM 1140) showing the location of the Kaneohe Bay No. 3 WWPS

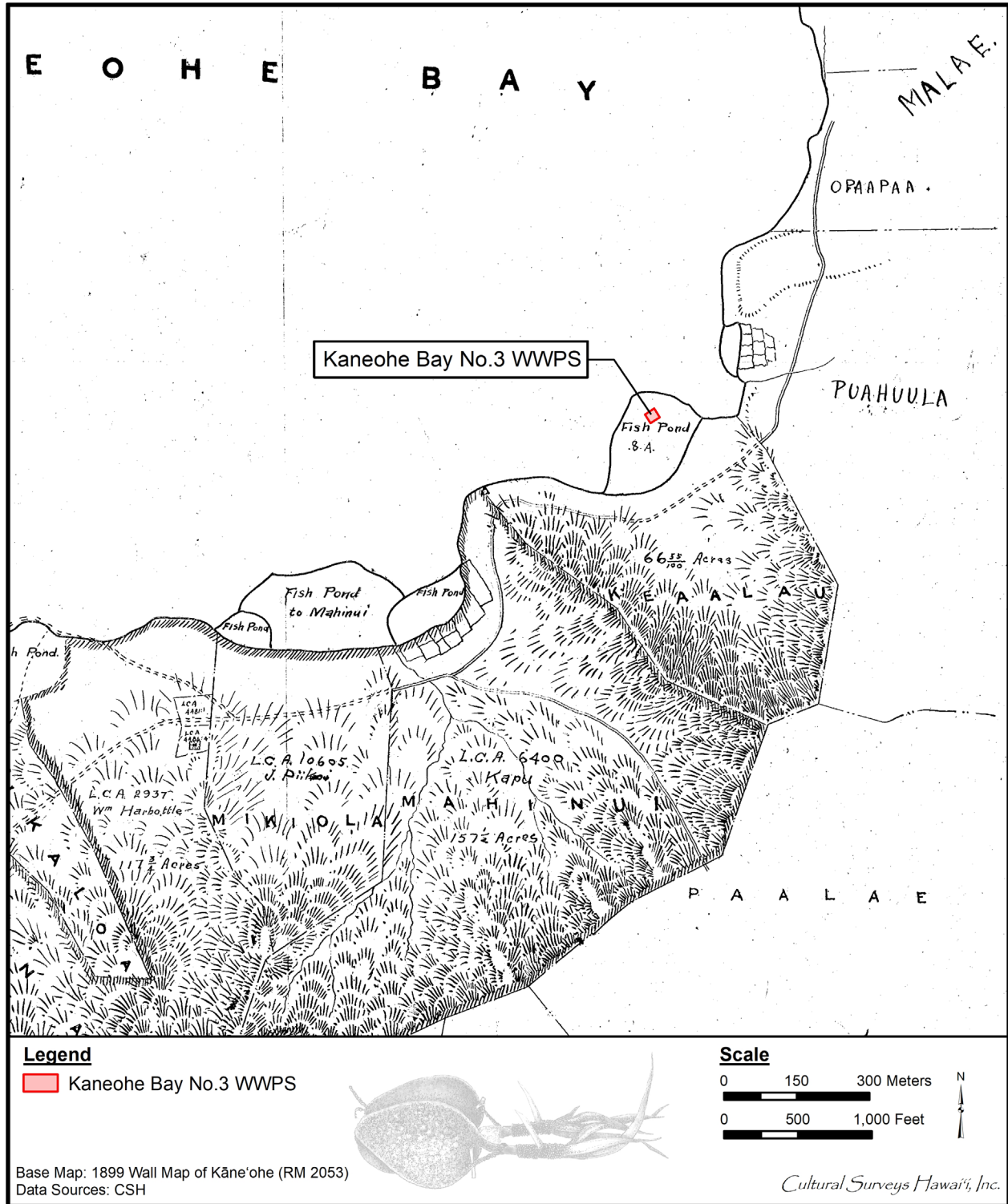


Figure 11. Portion of the 1899 Wall map of Kāneʻohe (RM 2053) showing the location of the Kaneohe Bay No. 3 WWPS; note the two native tenant house sites (LCA 4481:1 to Honuaiwa and LCA 4486:4 to Kane) located 500 m to the west



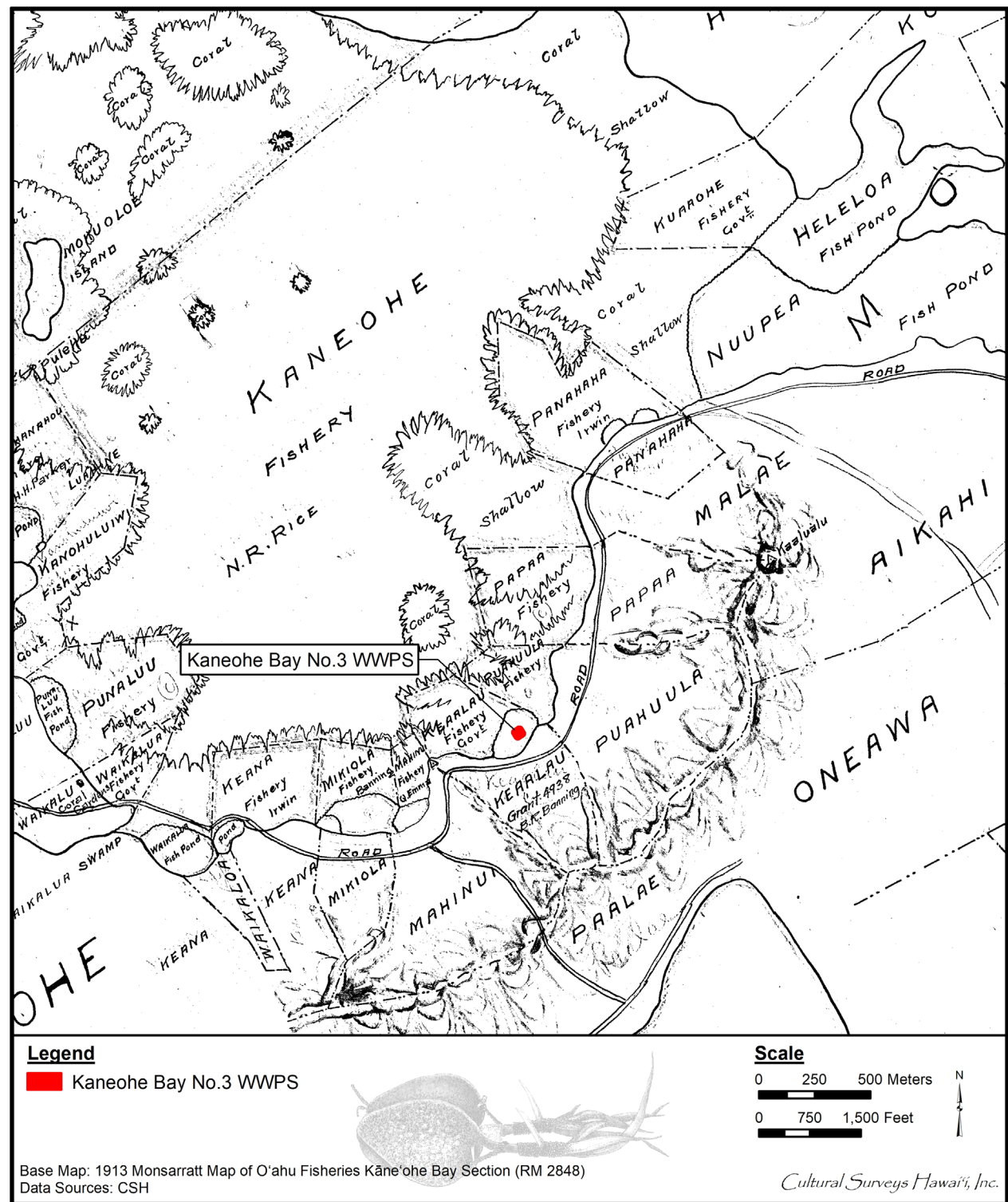


Figure 12. Portion of the 1913 Monsarrat map of O‘ahu Fisheries, Kāne‘ohe Bay Section (RM 2848) showing the location of the Kaneohe Bay No. 3 WWPS



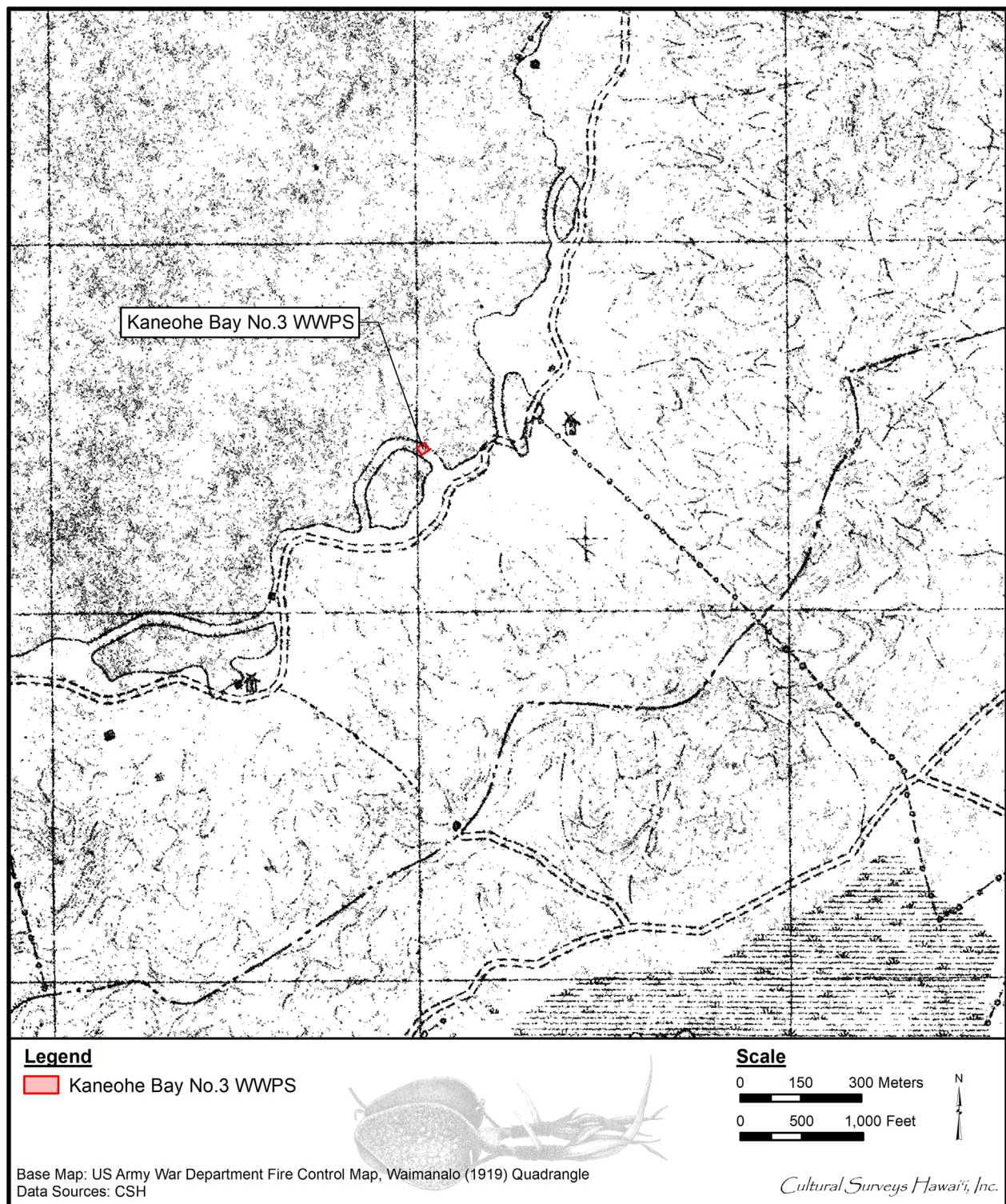


Figure 13. Portion of the 1919 U.S. Army War Department fire control map, Waimanalo quadrangle showing the location of the Kaneohe Bay No. 3 WWPS

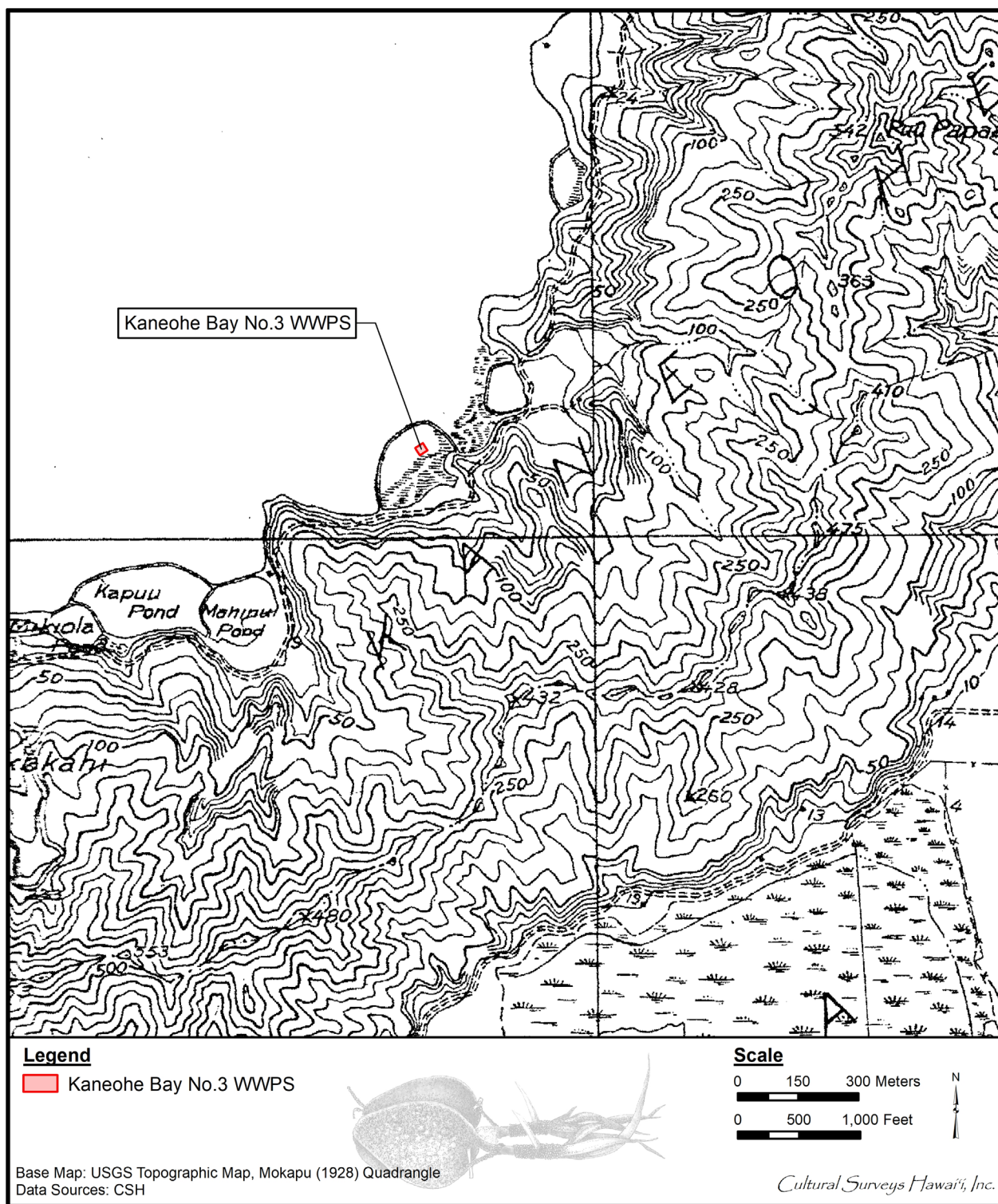


Figure 14. Portion of the 1928 Mokapu USGS topographic quadrangle showing the location of the Kaneohe Bay No. 3 WWPS



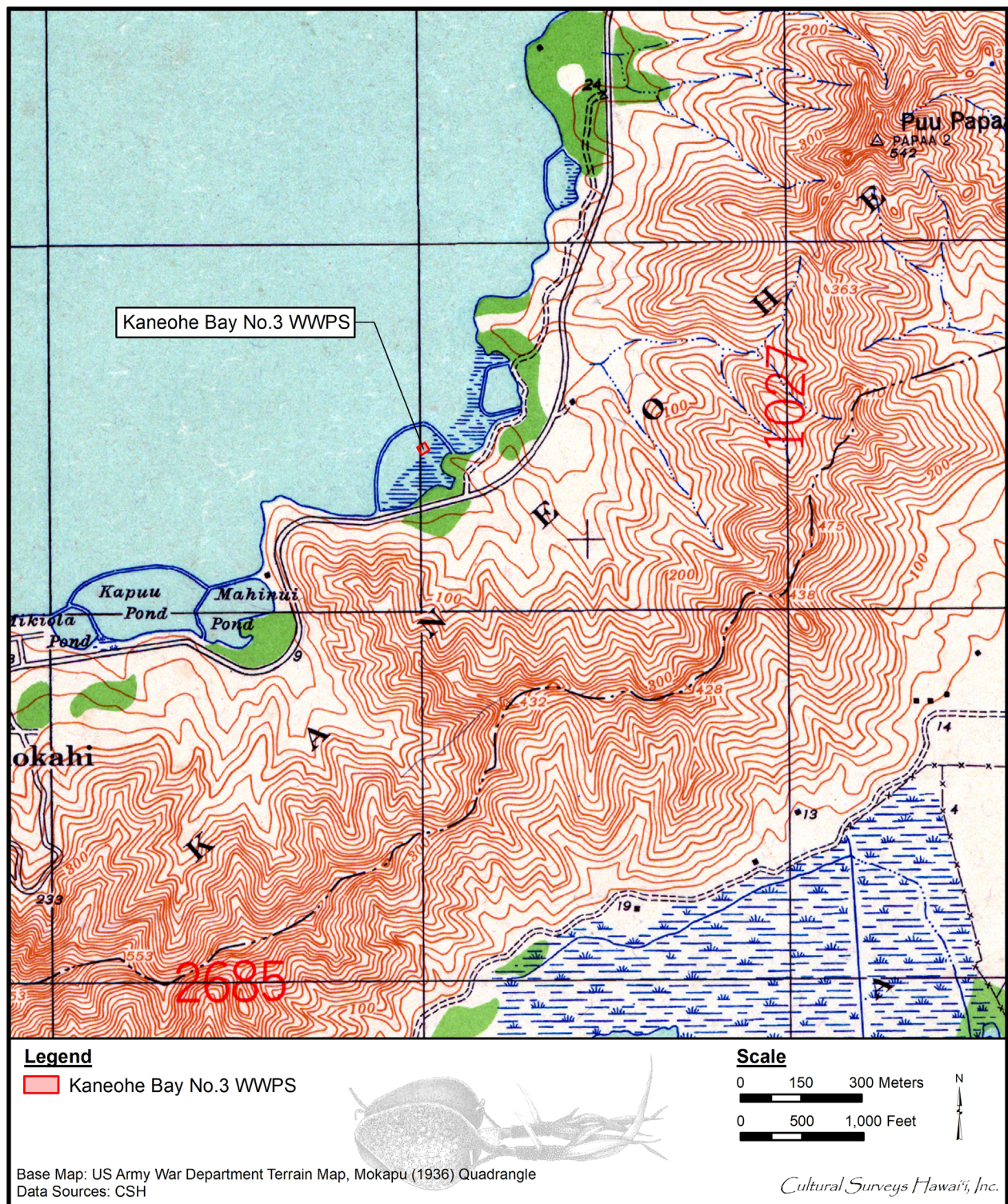


Figure 15. Portion of 1936 U.S. Army War Department terrain map, Mokapu quadrangle showing the location of the Kaneohe Bay No. 3 WWP



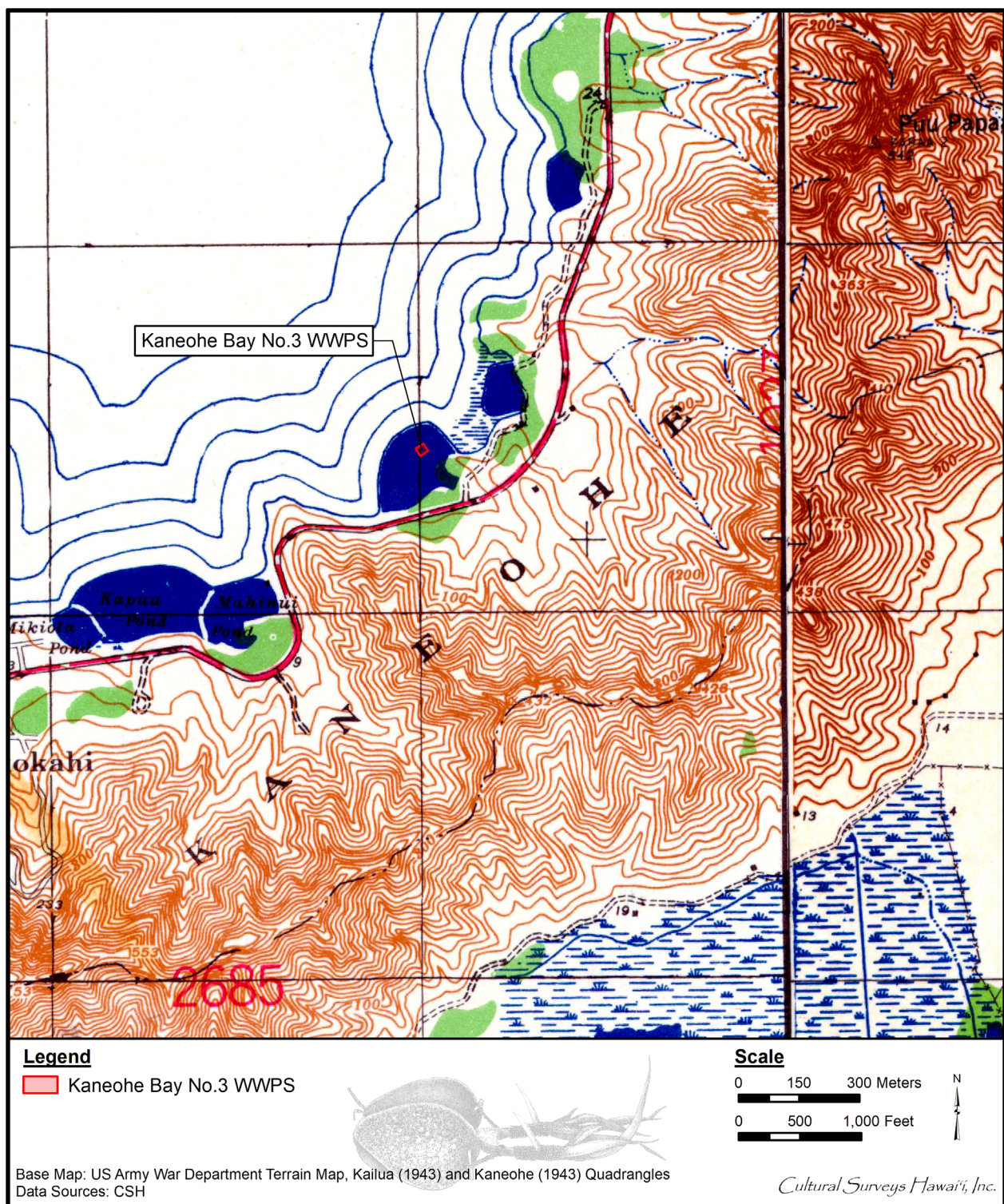


Figure 16. Portion of 1943 U.S. Army War Department terrain map, Kailua and Kaneohe quadrangles showing the location of the Kaneohe Bay No. 3 WWPS (note the abundance of coastal fishponds depicted in dark blue)



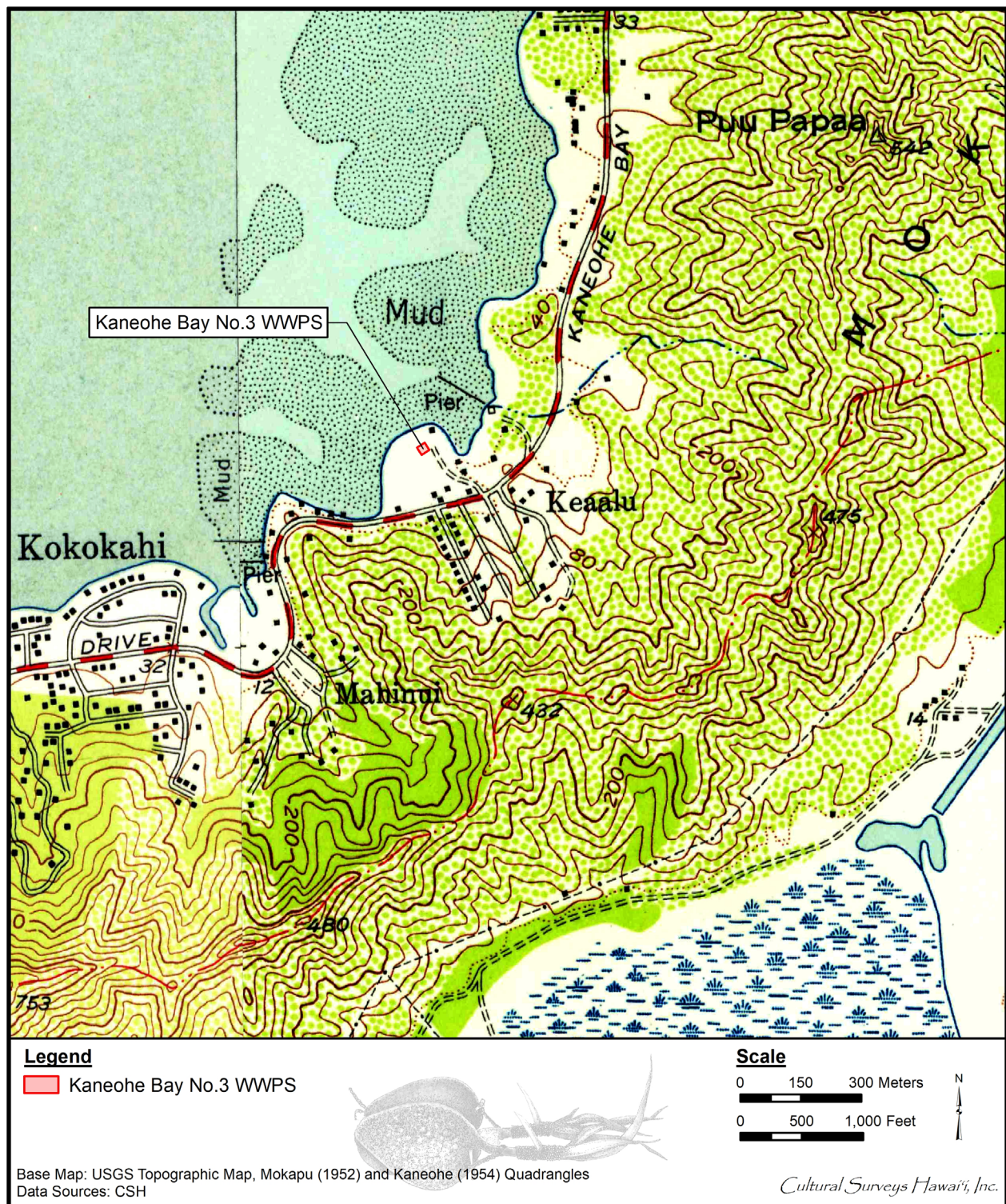


Figure 17. Portion of 1952 Mokapu and 1954 Kaneohe USGS topographic quadrangles showing the location of the Kaneohe Bay No. 3 WWPS





Figure 18. 1959 USGS aerial photograph of Kāneʻohe (UH MAGIS) showing the location of the Kaneohe Bay No. 3 WWPS



Figure 19. 1965 USDA aerial photograph of Kāneʻohe (UH MAGIS) showing the location of the Kaneohe Bay No. 3 WWPS



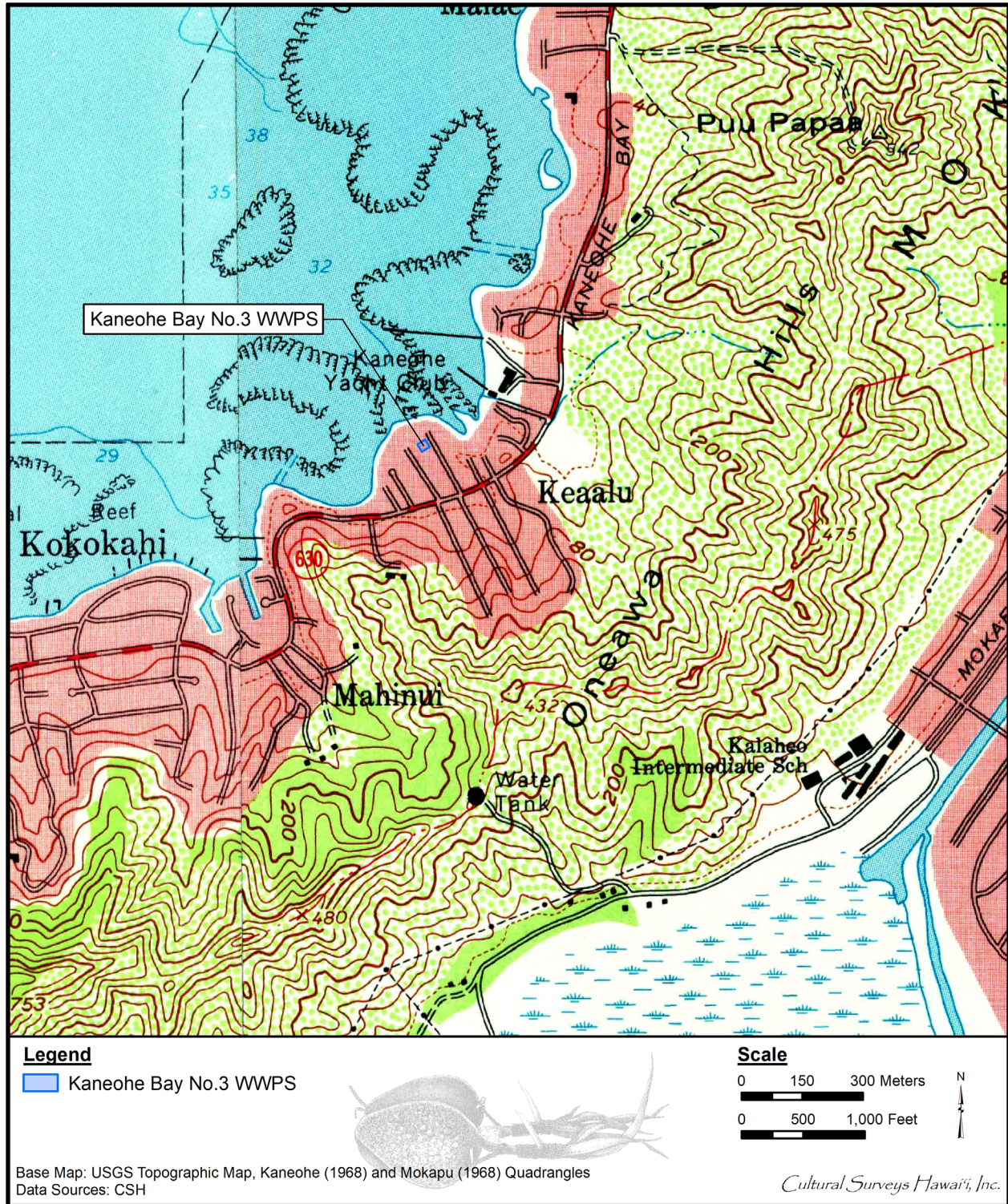


Figure 20. Portion of 1968 Kaneohe and Mokapu USGS topographic quadrangles showing the location of the Kaneohe Bay No. 3 WWPS



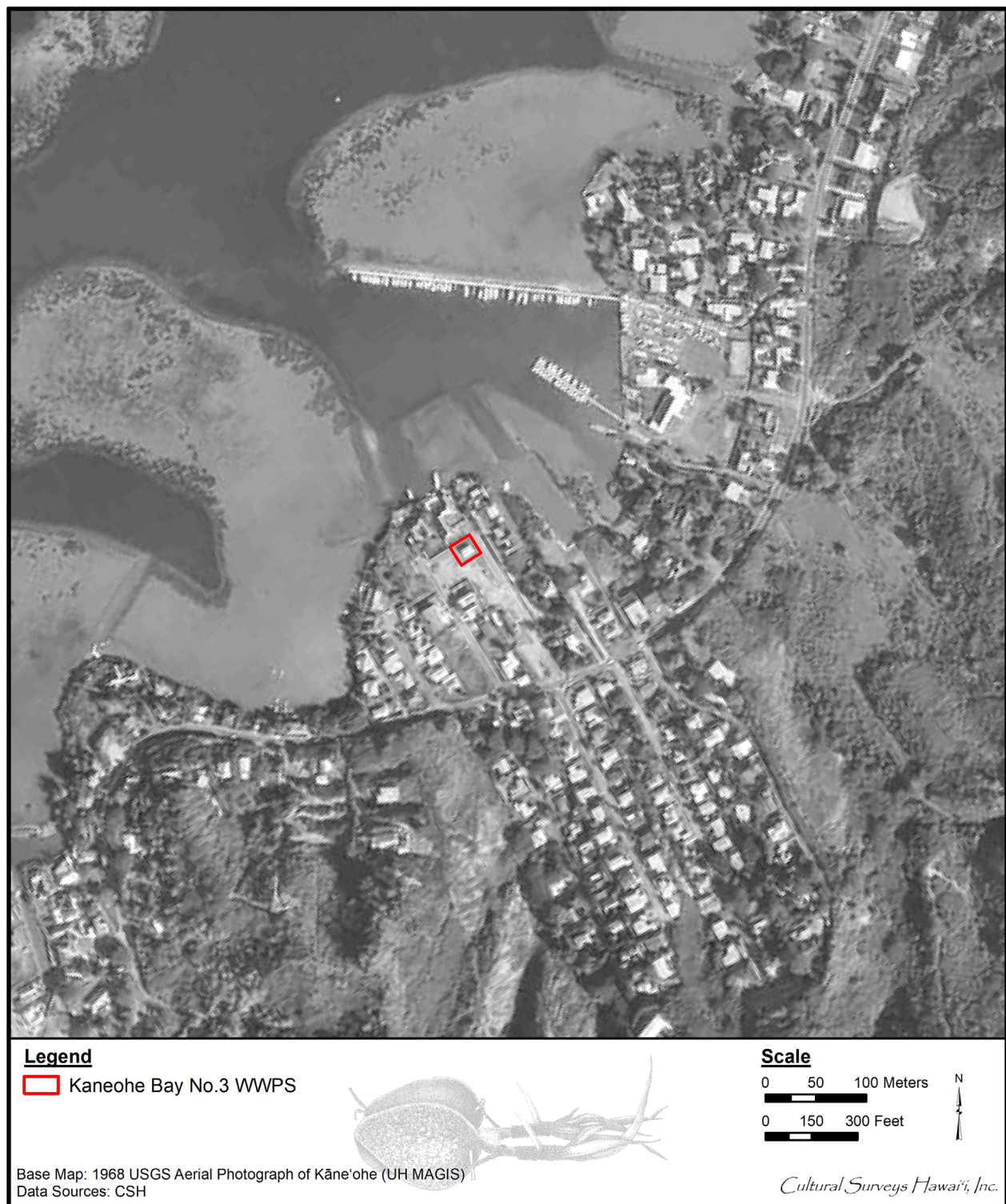


Figure 21. 1968 USGS aerial photograph of Kāneʻohe (UH MAGIS) showing the location of the Kaneohe Bay No. 3 WWPS



Figure 22. 1978 USGS orthophotoquad aerial photograph, Mokapu quadrangle, showing the location of the Kaneohe Bay No. 3 WWP



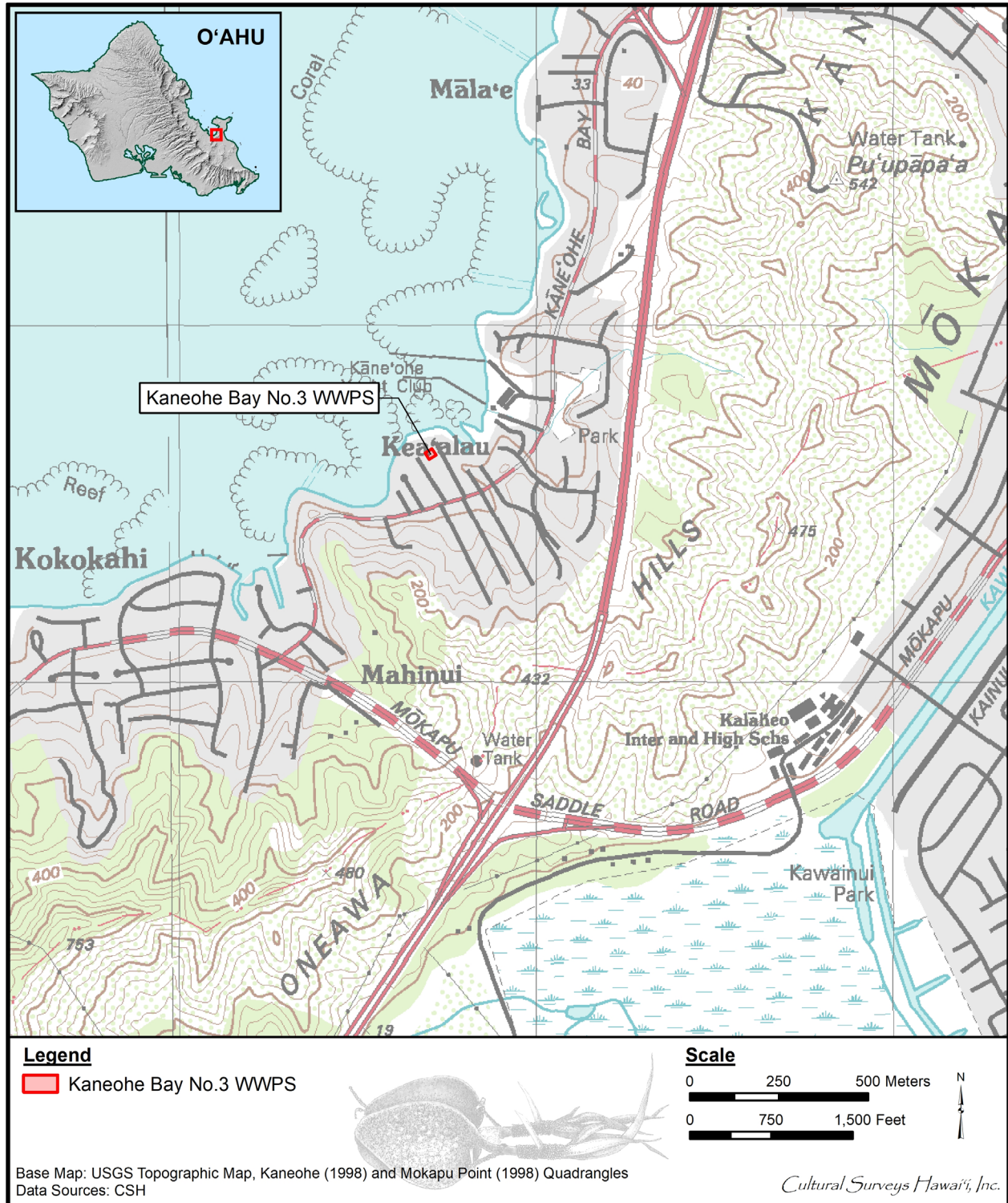


Figure 23. Portion of the 1998 Kaneohe and Mokapu Point USGS topographic quadrangles showing the Kaneohe Bay No. 3 WWPS

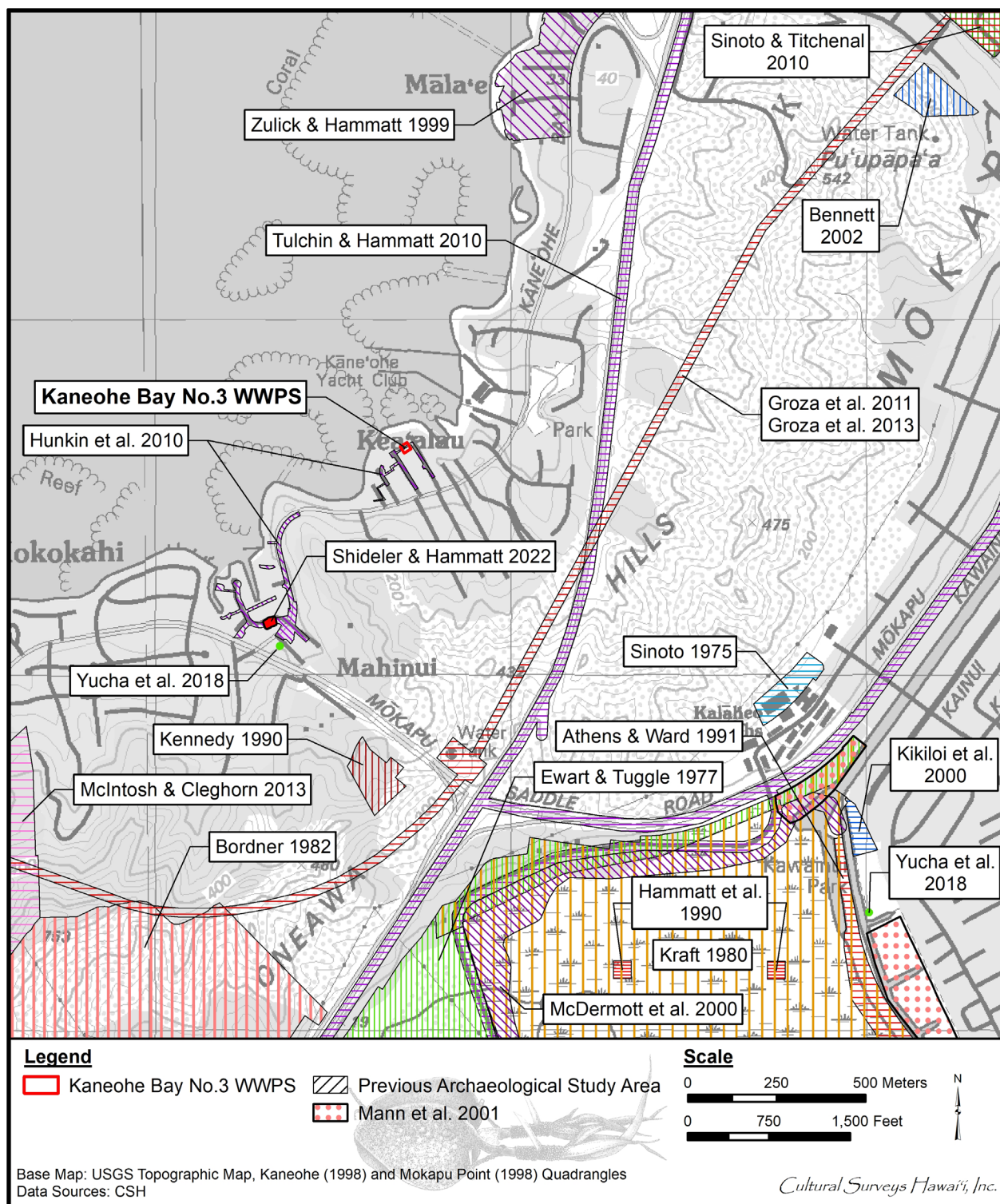


Figure 24. Previous archaeological studies within approximately 1.2 km of the Kaneohe Bay No. 3 WWS (base map: 1998 Kaneohe and Mokapu Point USGS topographic quadrangles)

Table 1. Previous archaeological studies in the vicinity of the Kaneohe Bay No. 3 WWPS

Reference	Type of Study	Location	Results (SIHP # 50-80-XX) (not all within scope of Figure 25)
McAllister 1933	Island-wide survey	Island-wide	In addition to McAllister Site 361 (Kea'alau fishpond, now SIHP # 11-00361 at the present project area), identified five other fishponds, a storied spring (McAllister Site 353) and a <i>heiau</i> (Ahukini Heiau, McAllister Site 352, now SIHP # 10-00352) indicating high level of traditional Hawaiian activity
Sinoto 1975	Archaeological reconnaissance	Kalāheo High School (expansion area)	Describes modern graves constructed of concrete and hollow tiles; foundation of one grave found, two other graves nearby evidenced by shallow depressions and broken concrete; urn built into base directly under missing headstone of remaining grave foundation, indicating cremation; headstones and urns (or their contents) appeared to have been removed
Ewart and Tuggle 1977	Archaeological literature review and field inspection	Most of study area at south end of Kawainui but also included study Area B north of Kapa'a Quarry	Briefly mentions two recently abandoned house sites designated Sites 8 and 9 (no details provided)
Kraft 1980	Geological study	Kawainui	Concluded Kailua barrier between embayment and open reef tract of Pacific Ocean first began to form less than 2,800 years before present and that "until about 400 to 500 years ago the entire area of the Kawainui marsh was and remained an open lagoon"
Bordner 1982	Archaeological reconnaissance	Proposed Kalāheo Sanitary Landfill	Discusses small garbage dump and twentieth century house site but no historic property designated

Reference	Type of Study	Location	Results (SIHP # 50-80-XX) (not all within scope of Figure 25)
Hammatt et al. 1990	Sediment coring	Kawainui Marsh	Pollen recovery in 30 samples ranging from around 4,000 BC showed predominance of mixed mesic forest dominated by Loulu palm with no major changes until ca. AD 1400 when forest species declined rapidly in favor of grasses and sedge; posited dominance of lowland Loulu palm, fruits of some species edible, may have supplied large, easily available food supply to early Hawaiians but humans, pigs, and rats may have aided dramatic decrease around AD 1400
Kennedy 1990	Archaeological inventory survey	Parcel west of intersection of H-3 and Mōkapu Saddle Rd	No historic properties identified
Athens and Ward 1991	Paleo-environmental and archaeological investigations	Kawainui Marsh	No archaeological remains found anywhere within project area but wealth of new paleoenvironmental data obtained particularly regarding change in plant communities over time
Zulick and Hammatt 1999	Archaeological literature review and field inspection	Containing up to 69 individual properties in Māla'e area of SE Kāne'ohe Bay	Concluded possibility that evidence of Panahaha fish ponds present below fill layers at north end of project area; fish ponds significant for information on Hawaiian history and prehistory that they are likely to yield; if construction excavations exceed depth of fill materials in location of fish ponds, these activities could impact fishpond sites; also possibility cultural deposits or evidence of habitation, or human burials present within original soil matrix below existing fill materials throughout project area
Kikiloi et al. 2000	Archaeological inventory survey	<i>Mauka</i> end of Kaha St, on margin of Kawainui Marsh	No historic properties identified; notes extensive reworking of this area in association with drainage engineering projects for Kawainui Marsh and associated (and adjacent) Oneawa Drainage Canal



Reference	Type of Study	Location	Results (SIHP # 50-80-XX) (not all within scope of Figure 25)
McDermott et al. 2000	Archaeological literature review and field inspection	Proposed circle-Kawai Nui Marsh trail project Segment 6 designated NW corner of marsh	Discusses SIHP # 11-03964, Kaeleuli House site (described in Ewart and Tuggle 1977) noting report of historic rice mill in vicinity but concluding “no remnants of a rice mill were located. As with SIHP # 50-80-11-03964, it is likely that the historic rice mill remnants were removed or covered by recent land disturbance.”
Mann et al. 2001	Archaeological literature review and field inspection	Two locations for (proposed) Kawai Nui Gateway Park just south of Kalāheo Intermediate School	Posits possibility of human burials and other features, such as hearths, stone alignments, and midden and artifact concentrations related to traditional Hawaiian habitation and recommended AIS with subsurface testing
Bennett 2002	Coastal Defense Study Group	Battery Robert E. DeMerritt, northeast slope of Pu‘u Pāpa‘a, Kailua	Documents part of Harbor Defenses of Kāne‘ohe Bay in WWII, equipped with two ex-naval 8-inch MkVIM3A2 guns
Hunkin et al. 2010	Archaeological monitoring	Kāne‘ohe Bay Dr Trunk Sewer Reconstruction	No historic properties identified
Sinoto and Titchenal 2010	Archaeological literature review and field inspection	‘Aikahi Land Segment at NE end of proposed 13,500-ft Kāne‘ohe-Kailua Force Main No. 2	No surface indications of any archaeologically or culturally sensitive areas encountered during surface assessment at ‘Aikahi Land Segment
Tulchin and Hammatt 2010	Archaeological literature review and field inspection	HECO Big Wind Interconnection O‘ahu East Shore project incl. segments from Marine Corps Base Hawaii up H-3	Areas of archaeological concern focused in vicinity of Nu‘upia Pond and Kawainui Marsh
Groza et al. 2011	Archaeological literature review and field inspection	Kaneohe/Kailua Wastewater Conveyance and Treatment Facilities and 3-mile long corridor between them	No historic properties identified; recommendations given for specific portions of project area including for AIS with subsurface testing at Kāne‘ohe wastewater treatment plant (WWTP), TMK: (1) 4-5-030:001 por.

Reference	Type of Study	Location	Results (SIHP # 50-80-XX) (not all within scope of Figure 25)
Groza et al. 2013	Archaeological assessment (no finds AIS)	Kaneohe/Kailua Wastewater Conveyance project, including portions of 15-acre Kaneohe Wastewater Pre-Treatment Facility	Pedestrian inspection and four backhoe assisted test excavations identified no historic properties
McIntosh and Cleghorn 2013	Archaeological inventory survey	56-acre parcel at 45-234A Kokokahi Place, in Kāneʻohe, TMK: (1) 4-5-032:001	Only previously identified SIHP # 10-00352, Ahukini Heiau identified
Yucha et al. 2018	Archaeological evaluation and archaeological monitoring plan	Siren Modernization Program, 14 Oʻahu locations including Mōkapu Saddle Rd	No further archaeological work recommended for Mōkapu Saddle Rd Siren location
Shideler, and Hammatt 2022	Archaeological literature review and field inspection	Kaimalu Place right-of-way, Mahinui (Kokokahi)	No historic properties identified



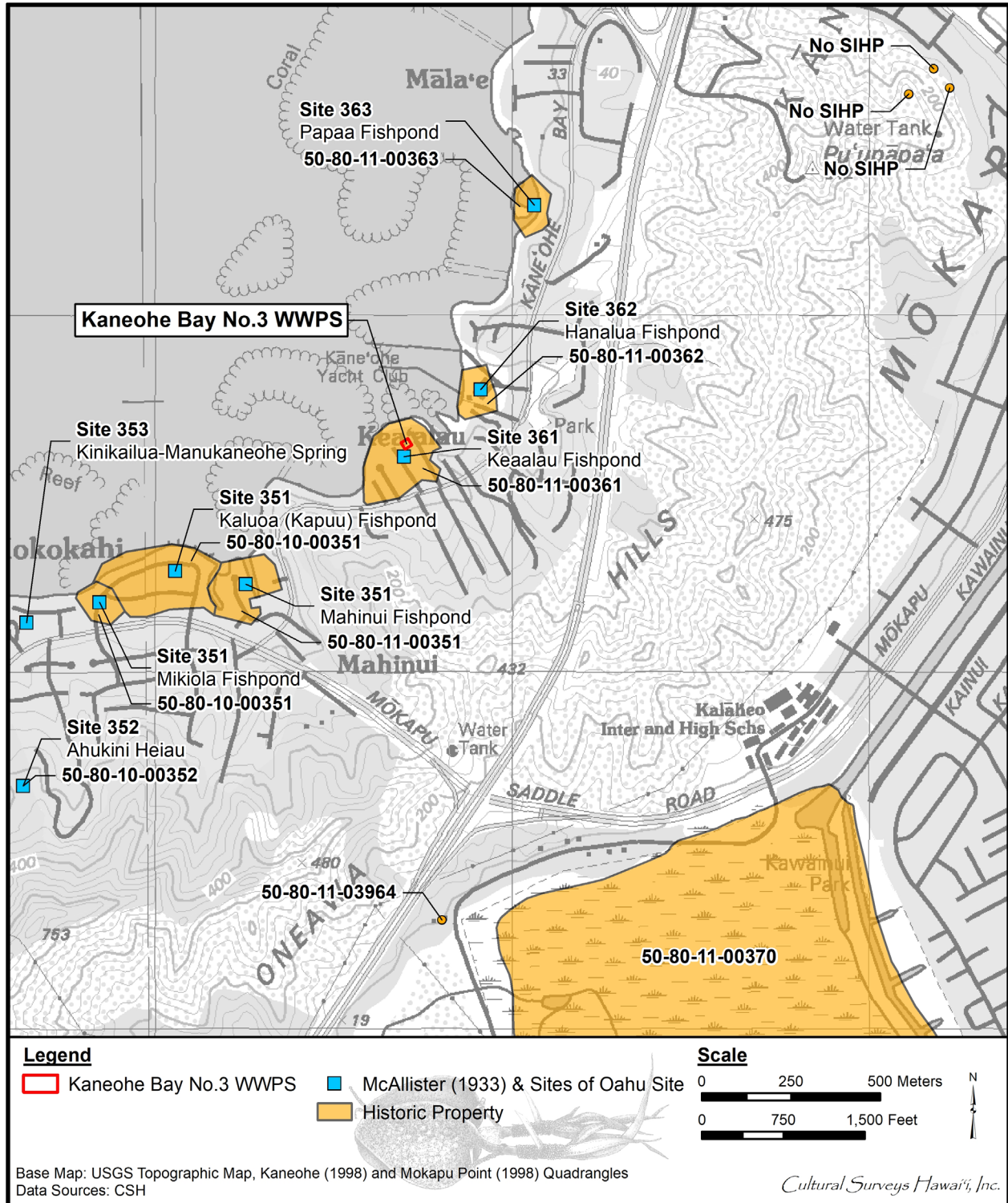


Figure 25. Previously identified historic properties within approximately 1.2 km of the Kaneohe Bay No. 3 WWPS (base map: 1998 Kaneohe and Mokapu Point USGS topographic quadrangles)

Table 2. Previously identified historic properties within approximately 1.2 km of the Kaneohe Bay No. 3 WWPS

SIHP # (50-80-XX-)	Formal Type	Source	Comment
Site 351 (McAllister designated site) SIHP #s 10-00351 and 11-00351	Fishpond (three adjacent ponds)	McAllister 1933:179	Three adjacent ponds, located off the lands of Mikiola and Mahinui in Kaneohe. The two end ponds were probably built first, the middle pond being added later so as to take advantage of the walls of the other two. The pond on the east is known as Mahinui and that on the west as Mikiola. The name of the middle pond is Kaluoa, according to John Bell, but appears as Kapuu on a map in the Bishop Estate office. The wall of Mikiola is broken. 250 m northeast of the project area.
Site 352 (McAllister designated site)	<i>Heiau</i> (Ahukini Heiau)	McAllister 1933:179; McIntosh and Cleghorn 2013	A small structure, 70 by 127 feet, built on the top of an elevation 1200 feet from the sea. The ground slopes away from the heiau in all directions. The only features remaining are the low walls, unusual because they are built of stones a few inches in size. Here and there at the bottom larger stones have been used, and at a few places the wall stands 1 foot in height, but most of the remains are scattered, for it is very easy for the cattle to disturb the small stones. 150 m SE of the project area.
Site 353 (McAllister designated site)	A spring (Kinikailua-Manukaneohe)	McAllister 1933:179	A spring on the land known as Keana (now Kokokahi), called Kinikailua-Manukaneohe, as it is said that the people from both Kailua and Kaneohe died in great numbers from drinking its waters. 150 m north of the project area.
361 (McAllister designated site) SIHP # 11-00361	Fishpond (Keealau Fishpond)	McAllister 1933:182	Keealau fishpond, covering 3 acres, is adjacent to Keealau. 1.0 km northeast of the project area.
362 (McAllister designated site) SIHP # 11-00362	Fishpond (Hanalua Fishpond)	McAllister 1933:182	Hanalua fishpond takes its name from the adjacent land. It is a small pond a few acres in size and marks off an inlet.

SIHP # (50-80-XX-)	Formal Type	Source	Comment
Site 363 / SIHP # 11-00363	Fishpond (Papaa Fishpond)	McAllister 1933:182	Named for the land to which it is adjacent, it is a small pond.
370 (McAllister designated site) SIHP # 11-00370	Kawainui pond, once a large inland fishpond, Kailua	McAllister 1933:186 and many subsequent studies	The pond belonged to the <i>ali</i> 'i. Any person coming from this section, particularly Waiauaia, which is near the small bridge near the sea side of the Mackay radio and telegraph station, had royal blood in his veins and could go where he wished, apparently taking precedence over <i>ali</i> 'i from other sections. My informants, John Bell and Mahoe, were both much impressed with this fact. Hauwahine was the goddess ( <i>mo</i> 'o) of this pond, as well as of Paeo pond, Laie (McAllister Site 277), where she stayed only when leaves and other refuse ( <i>amoo</i> ) covered that pond. At other times she departed to Kailua. The old Hawaiians at Kailua, however, insist that she never left Kawainui.
11-3964	Two twentieth century house sites	Ewart and Tuggle 1977, McDermott et al. 2000	Ewart and Tuggle (1977:24) make a passing reference to "[...] two recently abandoned house sites were located, Sites 8 and 9. Judging from surface remains which included a great number of metal and plastic objects, these houses were occupied until quite recently." McDermott et al. (2000:81–82) clearly associate this reference with SIHP # 50-80-11-03964, "the Kaeleuli House site" and two houses indicated on a 1983 Mokapu USGS quadrangle.  No remnants of Site 50-80-11-03964 were found, however, it was noted that the area had been greatly disturbed by bulldozing and dumping of construction materials. It is likely that these house remnants have been removed since the work of Ewart and Tuggle in the 1970s. [McDermott et al. 2000:82]



Figure 26. Archaeologist's track log with a key to the following photographs (showing approximate location and orientation) on a 2022 ESRI aerial photograph





Figure 27. Photo A: View of the entry driveway to the Kaneohe Bay No. 3 WWPS facility off Nohokai Place (in foreground), view to northeast



Figure 28. Photo B: View of the entry gate to the Kaneohe Bay No. 3 WWPS facility, view to northeast





Figure 29. Photo C: View of the Kaneohe Bay No. 3 WWPS facility from the west corner, view to east



Figure 30. Photo D: View of the Kaneohe Bay No. 3 WWPS facility from the north corner, view to south





Figure 31. Photo E: View of Kaneohe Bay No. 3 WWPS facility from the east corner, view to west



Figure 32. Photo F: View of the Kaneohe Bay No. 3 WWPS facility from the south corner, view to north





Figure 33. Photo G: View of the front (southwest side) of the Kaneohe Bay No. 3 WWPS Pump Station building, view to northeast



Figure 34. Photo H: View of the northwest side of the Kaneohe Bay No. 3 WWPS Pump Station building, view to southeast





Figure 35. Photo I: View of the front (northwest side) of Kaneohe Bay No. 3 WWPS Generator Building, view to southeast



Figure 36. Photo J: View of the location for the new 1,000-gallon AST project area (foreground) and of the existing UST (background, at concrete slab) on the southwest side of the Kaneohe Bay No. 3 WWPS, view to southeast





Figure 37. Photo K: View of the location for the new above ground fuel piping project area in the south corner of the Kaneohe Bay No. 3 WWPS facility, largely at the location of the existing UST (concrete slab in foreground), Generator Building at right, view to northwest

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## **Appendix B**

Early Consultation Letter and Handout



**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](http://www.townscapeinc.com)

April 1, 2025

Subject: Early Consultation Request for Draft Environmental Assessment (DEA)  
Fuel Storage Tank Improvements for the Kāne'ohe Bay No.3 Wastewater Pump Station—  
Kāne'ohe, Island of O'ahu  
Tax Map Key 4-4-037:014

Dear Participant,

On behalf of the City and County of Honolulu, Department of Environmental Services, Townscape, Inc. is preparing a DEA, pursuant to Hawai'i Revised Statutes, Chapter 343, and Hawai'i Administrative Rules (HAR), Chapter 11-200.1 for the Kāne'ohe Bay No.3 Wastewater Pump Station Fuel Storage Tank Improvements ("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 **May 1, 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](mailto: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](mailto: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

Fuel Storage Tank Improvements for the Kāne'ohe Bay No.3 Wastewater Pump Station  
Early Consultation Handout for Draft Environmental Assessment

<b>Project Name</b>	Fuel Storage Tank Improvements for the Kāne'ohe Bay No.3 Wastewater Pump Station
<b>Proposing and Determining Agency</b>	City and County of Honolulu, Department of Environmental Services 1000 Ulu'ōhi'a Street Suite 308 Honolulu, Hawai'i 96707
<b>Agent</b>	Townscape, Inc. 900 Fort Street Mall, Suite 1160 Honolulu, Hawai'i 96813 Phone: (808) 550-3894 E-mail: gabrielle@townscapeinc.com
<b>HRS, Chapter 343 Trigger</b>	Use of County lands and funds
<b>Project Location</b>	44-003 Nohokai Place Kāne'ohe, Hawai'i 96744
<b>Tax Map Key &amp; Recorded Fee Owner</b>	(1) 4-4-037:014, City & County of Honolulu
<b>Project Area</b>	0.1198 acres (or 5,218 square feet)
<b>State Land Use District</b>	Urban
<b>Development Plan</b>	Ko'olaupoko Sustainable Communities Plan
<b>Special Management Area</b>	In Special Management Area

**Overview of Proposed Project**

The Kāne'ohe Bay No.3 Wastewater Pump Station (WWPS) has been in service since 1966. The proposed project involves replacing the existing underground fuel storage tank with a new 1,000-gallon aboveground fuel storage tank. Additionally, the project includes replacing the underground fuel piping with new aboveground 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.

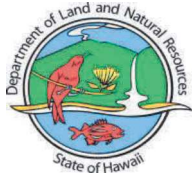
# Fuel Storage Tank Improvements for the Kāne'ohe Bay No.3 Wastewater Pump Station Early Consultation Handout for Draft Environmental Assessment





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 HAWAII | 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

May 1, 2025

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

via email: [gabrielle@townscapeinc.com](mailto:gabrielle@townscapeinc.com)

SUBJECT: Pre-Consultation Request for Draft Environmental Assessment (DEA) Fuel Storage Tank Improvements for the Kāne'ohe Bay No. 3 Wastewater Pump Station; Kāne'ohe, Island of O'ahu TMK: (1)4-4-037-014

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 Engineering Division 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](mailto:dayna.k.vierra@hawaii.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Ian Hirokawa".

Ian Hirokawa  
Acting Land Administrator

Enclosure(s)

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 HAWAII | KA MOKU'ĀINA 'O HAWAII'  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
KA 'OIHANA KUMUWAIWAI 'ĀINA  
LAND DIVISION

P.O. BOX 621  
HONOLULU, HAWAII 96809

April 11, 2025

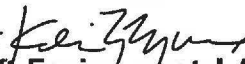
**MEMORANDUM**

FROM: ~~TO:~~

**DLNR Agencies:**

- ☐ Div. of Aquatic Resources
- ☐ Div. of Boating & Ocean Recreation
- ☒ Engineering Division ([DLNR.ENGR@hawaii.gov](mailto:DLNR.ENGR@hawaii.gov))
- ☒ Div. of Forestry & Wildlife ([rubyrosa.t.terrago@hawaii.gov](mailto:rubyrosa.t.terrago@hawaii.gov))
- ☐ Div. of State Parks
- ☒ Commission on Water Resource Management ([DLNR.CWRM@hawaii.gov](mailto:DLNR.CWRM@hawaii.gov))
- ☐ Office of Conservation & Coastal Lands
- ☒ Land Division – O'ahu District ([barry.w.cheung@hawaii.gov](mailto:barry.w.cheung@hawaii.gov))
- ☒ Land Division – Planner ([dayna.k.vierra@hawaii.gov](mailto:dayna.k.vierra@hawaii.gov))
- ☒ Land Division – Planner ([lauren.e.yasaka@hawaii.gov](mailto:lauren.e.yasaka@hawaii.gov))
- ☒ Aha Moku Advisory Committee ([leimana.k.damate@hawaii.gov](mailto:leimana.k.damate@hawaii.gov))

TO: ~~FROM:~~  
SUBJECT:


FOR Russell Y. Tsuji, Land Administrator   
**Early Consultation Request for Draft Environmental Assessment Fuel Storage Tank Improvements for the Kāne'ohe Bay No.3 Wastewater Pump Station**  
LOCATION: Kāne'ohe, Island of O'ahu; TMK: (1) 4-4-037:014  
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 to me by **April 29, 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](mailto: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: 04/25/2025

Attachments

**DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION**

**LD/Russell Y. Tsuji**

**Ref: Early Consultation Request for Draft Environmental Assessment Fuel Storage Tank Improvements for the Kāneʻohe Bay No.3 Wastewater Pump Station**

**Location: Kāneʻohe, Island of Oʻahu**

**TMK(s): (1) 4-4-037:014**

**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](https://msc.fema.gov)). Our Flood Hazard Assessment Tool (FHAT) ([fhathawaii.gov](https://fhathawaii.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: 04/25/2025



**STATE OF HAWAII  
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, Hawaii 96813  
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

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

DTS202504041604HE

Coastal Zone  
Management  
Program

April 11, 2025

Environmental Review  
Program

Land Use Commission

Land Use Division

Special Plans Branch

State Transit-Oriented  
Development

Statewide Geographic  
Information System

Statewide  
Sustainability Branch

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 Kaneohe Bay No.3 Wastewater Pump Station at Kaneohe, Oahu; Tax Map Key (1) 4-4-037:014

The Office of Planning and Sustainable Development (OPSD) is in receipt of your early consultation request, received April 4, 2025, on the preparation of an Environmental Assessment (EA), for the proposed fuel storage tank improvements for the Kaneohe Bay No.3 Wastewater Pump Station (WWPS).

The proposed project involves replacing the existing underground fuel storage tank with a new 1,000-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,

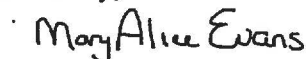
Ms. Gabrielle Sham  
April 11, 2025  
Page 2

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 SMA permitting requirements. As the supporting document for the SMA permit application, the OPSD suggests that the EA discusses compliance with the requirements of SMA use pursuant to the county SMA ordinance.
- 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 sea level rise on the project area, the OPSD suggests the EA review 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 DTS202504041604HE 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](mailto:rachel.e.beasley@hawaii.gov).

Sincerely,



Mary Alice Evans  
Director



**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, HAWAII 96813  
PHONE: (808) 768-8000 • FAX: (808) 768-6041 • WEBSITE: [honolulu.gov/dpp](http://honolulu.gov/dpp)

RICK BLANGIARDI  
MAYOR  
MEJA



DAWN TAKEUCHI APUNA  
DIRECTOR  
PO'O

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

REGINA MALEPEAI  
2<sup>ND</sup> DEPUTY DIRECTOR  
HOPE PO'O KUALUA

April 16, 2025

2025/ELOG-606(MM)

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

Dear Ms. Sham:

**SUBJECT: Early Consultation for Draft Environmental Assessment (DEA)**  
**Fuel Storage Tank Improvements for the Kaneohe Bay No. 3**  
**Wastewater Pump Station – Kaneohe**  
**Tax Map Key 4-4-037: 014**

This is in response to your letter, received April 4, 2025, for early consultation comments on the upcoming DEA to be prepared by the City and County of Honolulu, Department of Environmental Services for the proposed improvements on the fuel storage tank at the Kaneohe Bay No. 3 Wastewater Pump Station in Kaneohe (Project). The proposed Project includes replacing the existing underground tank with a new 1,000 gallon above-ground tank, replacing the new 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 system. The proposed above-ground storage tank will supply the fuel required for the emergency backup generator to service the Kaneohe Bay No. 3 Wastewater Pump Station.

The Project site is within the R-10 Residential District and the Special Management Area (SMA). The proposed Project meets Revised Ordinances of Honolulu (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 Environmental Assessment, pursuant to ROH Section 25-5.3(a). In this case, it should be noted that the DEA is also being prepared pursuant to ROH Chapter 25.

Ms. Gabrielle Sham  
April 16, 2025  
Page 2

Should you have any questions, please contact Molly Murai, of our Land Use Approval Branch, at (808) 768-8016 or via email at [molly.murai@honolulu.gov](mailto:molly.murai@honolulu.gov).

Very truly yours,

  
 Dawn Takeuchi Apuna  
Director

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

636 SOUTH STREET • HONOLULU, HAWAII 96813  
PHONE: (808) 723-7139 • FAX: (808) 723-7111 • WEBSITE: [honolulu.gov](http://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 21, 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 Kāne'ohe Bay No. 3  
Wastewater Pump Station  
Kailua, Island of O'ahu  
Tax Map Key: 4-4-037: 014

In response to your letter received on April 1, 2025, regarding the abovementioned subject, the Honolulu Fire Department (HFD) reviewed the submitted information and requires that this project follow all applicable codes in the Revised Ordinances of Honolulu Chapter 20 regarding Flammable and Combustible Liquid Storage Tanks.

The requirements above are 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 [hfdspb1@honolulu.gov](mailto:hfdspb1@honolulu.gov).

Sincerely,

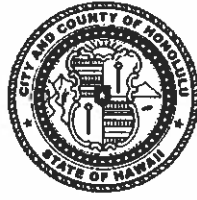
A handwritten signature in blue ink, appearing to read "C. Uchimura", is written over a horizontal line.

CRAIG UCHIMURA  
Assistant Chief

CU/MD:sk

HONOLULU POLICE DEPARTMENT  
KA 'OIHANA MĀKA'I O HONOLULU  
**CITY AND COUNTY OF HONOLULU**  
801 SOUTH BERETANIA STREET • HONOLULU, HAWAII 96813  
TELEPHONE: (808) 529-3111 • WEBSITE: [www.honolulupd.org](http://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 21, 2025

**SENT VIA EMAIL**

Ms. Gabrielle Sham  
[gabrielle@townscapeinc.com](mailto:gabrielle@townscapeinc.com)

Dear Ms. Sham:

This is in response to your letter dated April 1, 2025, requesting input for the Draft Environmental Assessment for the proposed City and County of Honolulu, Department of Environmental Services, Fuel Storage Tank Improvements for the Kāne'ohe Bay No. 3 Wastewater Pump Station.

Based on the information provided, The Honolulu Police Department (HPD) recommends that all necessary lights, signs, barricades, and other safety equipment be installed and maintained by the contractor during the construction phase of the project. Additionally, adequate notification should be made to area businesses and residents prior to possible road closures, as any impact to pedestrian and/or vehicular traffic or construction-related debris could lead to complaints. Lastly, the HPD recommends a long-term plan to mitigate the tracking of dirt, gravel, and debris to minimize potential environmental impacts from all affected areas.

If there are any questions, please call Major Randall Platt of our District 4 (Kāne'ohe, Kailua, Kahuku) at (808) 723-8640.

Sincerely,

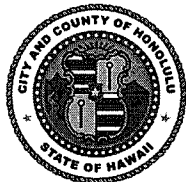
A handwritten signature in black ink, appearing to read "Glenn Hayashi".

F **GLENN HAYASHI**  
Assistant Chief of Police  
Support Services Bureau

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

650 SOUTH KING STREET, 11TH FLOOR • HONOLULU, HAWAII 96813  
PHONE: (808) 768-8480 • FAX: (808) 768-4567 • WEBSITE: [honolulu.gov](http://honolulu.gov)

RICK BLANGIARDI  
MAYOR  
MEIA



HAKU MILLES, P.E.  
DIRECTOR  
PO'O

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

April 22, 2025

SENT VIA EMAIL

Ms. Gabrielle Sham  
[gabrielle@townscapeinc.com](mailto:gabrielle@townscapeinc.com)

Dear Ms. Sham:

Subject: Early Consultation Request for Draft Environmental Assessment (DEA)  
Fuel Storage Tank Improvements for the Kāne'ohe Bay No. 3  
Wastewater Pump Station – Kāne'ohe, Island of O'ahu  
Tax Map Key 4-4-037:014

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,

A handwritten signature in black ink, appearing to read "H. Milles", is written over the printed name.

Haku Milles, P.E., LEED AP  
Director

HM:krm (937874)



**From:** Castillo, Carlos [carlos.castillo@hawaiianelectric.com](mailto:carlos.castillo@hawaiianelectric.com)

**Sent:** Thursday, April 24, 2025 4:53 PM

**To:** Gabrielle Sham [Gabrielle@townscapeinc.com](mailto:Gabrielle@townscapeinc.com)

**Cc:** Kakazu, Lisa <lisa.kakazu@hawaiianelectric.com>; Kuwaye, Kristen <kristen.kuwaye@hawaiianelectric.com>; Liu, Rouen [rouen.liu@hawaiianelectric.com](mailto:rouen.liu@hawaiianelectric.com)

**Subject:** Early Consultation Response – Draft Environmental Assessment - Fuel Storage Tank Improvements for the Kaneʻohe Bay No. 3 Wastewater Pump Station

Dear Ms. Sham,

Thank you for the opportunity to review and comment on the proposed Fuel Storage Tank Improvements for the Kaneʻohe Bay No. 3 Wastewater Pump Station (WWPS), located at 44-003 Nohokai Place, Kāneʻohe, Oʻahu (TMK: (1) 4-4-037:014). Hawaiian Electric Company has no objections to the proposed project.

We understand that the project, proposed by the City and County of Honolulu, Department of Environmental Services, includes replacing the existing underground fuel storage tank with a new 1,000-gallon aboveground fuel storage tank, replacing underground fuel piping with new aboveground piping, updating the fuel monitoring panel and sensors, and integrating the system with the facility's SCADA network. The work is required to be completed by July 15, 2028, in accordance with HAR 11-280.1.

The project site is currently served by existing Hawaiian Electric infrastructure. Depending on final design and electrical load requirements, coordination may be needed for potential service extensions or upgrades. We recommend early engagement during design to ensure adequate planning for electrical infrastructure.

If Hawaiian Electric facilities are located within or adjacent to the project area, we request continued access to ensure the safe and reliable operation of our infrastructure, including for maintenance and emergency response.

We appreciate being included in the early consultation process and respectfully request continued coordination as the project moves forward, particularly regarding electrical service needs.

If you have any questions or require further information, please contact me directly at (808) 285-6284.

Sincerely,  
Carlos Castillo (WA3 – PTA)  
Permits Planner  
Hawaiian Electric Company  
PO Box 2750  
Honolulu, HI 96840-0001

**Carlos Castillo**

Permits Planner, T&D Engineering

**C:** 808.285.6284

[Carlos.castillo@hawaiianelectric.com] [Carlos.castillo@hawaiianelectric.com](mailto:Carlos.castillo@hawaiianelectric.com)

**Hawaiian Electric**

PO Box 2750, Honolulu, HI 96840

**BOARD OF WATER SUPPLY  
KA 'OIHANA WAI  
CITY AND COUNTY OF HONOLULU**

630 SOUTH BERETANIA STREET • HONOLULU, HAWAII 96843  
Phone: (808) 748-5000 • [www.boardofwatersupply.com](http://www.boardofwatersupply.com)

RICK BLANGIARDI  
MAYOR  
MEIA

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

ERWIN KAWATA  
DEPUTY MANAGER  
HOPE MANAKIA



NĀ'ĀLEHU ANTHONY, Chair  
JONATHAN KANESHIRO, Vice Chair  
BRYAN P. ANDAYA  
LANCE WILHELM  
KĒHAULANI PU'U  
EDWIN H. SNIFFEN, Ex-Officio  
GENE C. ALBANO, P.E., Ex-Officio

April 28, 2025

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

Dear Ms. Sham:

Subject: Your Letter Dated April 1, 2025 Requesting Comments on the Draft  
Environmental Assessment Early Consultation for Fuel Storage Tank  
Improvements at the Kāne'ohe Bay No. 3 Wastewater Pump Station off  
Nohokai Place, Tax Map Key: 4-4-037: 014

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Thank you for your letter regarding the proposed replacement of the existing underground fuel storage tank with an aboveground fuel storage tank.

The existing water system is adequate to accommodate the proposed project. 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.

Ms. Gabrielle Sham  
April 28, 2025  
Page 2

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,



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



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 HAWAII | KA MOKU'ĀINA 'O HAWAII'**  
**DEPARTMENT OF LAND AND NATURAL RESOURCES**  
**KA 'OIHANA KUMUWAIWAI 'ĀINA**  
**LAND DIVISION**

P.O. BOX 621  
HONOLULU, HAWAII 96809

May 19, 2025

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

via email: [gabrielle@townscapeinc.com](mailto:gabrielle@townscapeinc.com)

**SUBJECT:** Early Consultation Request for Draft Environmental Assessment (DEA) Fuel Storage Tank Improvements for the Kāne'ohe Wastewater Pump Station, located in Kāne'ohe, Island of O'ahu, TMK: (1)4-4-037:014

Dear Ms. Sham:

Thank you for the opportunity to review and comment on the subject matter. In addition to our previous comments dated May 1, 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](mailto:dayna.k.vierra@hawaii.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Ian C. Hirokawa".

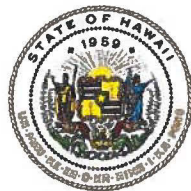
Ian C. Hirokawa  
Acting Land Administrator

Enclosures



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 HAWAII | KA MOKU'ĀINA 'O HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
KA 'OIHANA KUMUWAIWAI 'ĀINA  
LAND DIVISION

P.O. BOX 621  
HONOLULU, HAWAII 96809

April 11, 2025

MAY 07 2025

REL.

**MEMORANDUM**

FROM: **DLNR Agencies:**  
\_\_\_ Div. of Aquatic Resources  
\_\_\_ Div. of Boating & Ocean Recreation  
X Engineering Division ([DLNR.ENGR@hawaii.gov](mailto:DLNR.ENGR@hawaii.gov))  
X Div. of Forestry & Wildlife ([rubyrosa.t.terrago@hawaii.gov](mailto:rubyrosa.t.terrago@hawaii.gov))  
\_\_\_ Div. of State Parks  
X Commission on Water Resource Management ([DLNR.CWRM@hawaii.gov](mailto:DLNR.CWRM@hawaii.gov))  
\_\_\_ Office of Conservation & Coastal Lands  
X Land Division – O'ahu District ([barry.w.cheung@hawaii.gov](mailto:barry.w.cheung@hawaii.gov))  
X Land Division – Planner ([dayna.k.vierra@hawaii.gov](mailto:dayna.k.vierra@hawaii.gov))  
X Land Division – Planner ([lauren.e.yasaka@hawaii.gov](mailto:lauren.e.yasaka@hawaii.gov))  
X Aha Moku Advisory Committee ([leimana.k.damate@hawaii.gov](mailto:leimana.k.damate@hawaii.gov))

TO: FOR Russell Y. Tsuji, Land Administrator *Kei Tsuji*

SUBJECT: **Early Consultation Request for Draft Environmental Assessment Fuel Storage Tank Improvements for the Kāne'ohe Bay No.3 Wastewater Pump Station**

LOCATION: Kāne'ohe, Island of O'ahu; TMK: (1) 4-4-037:014

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 to me by **April 29, 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](mailto: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: *Jason D. Omick*  
Print Name: JASON D. OMICK, Wildlife Program Mgr.  
Division: Forestry and Wildlife  
Date: May 5, 2025

Attachments

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

SYLVIA LUKE  
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
KA 'OIHANA KUMUWAIWAI 'ĀINA

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

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

RYAN K.P. KANAKA'OLE  
FIRST DEPUTY

CIARA W.K. KAHANE  
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

May 2, 2025

**MEMORANDUM**

**TO:** Russel Y. Tsuji, Administrator  
Land Division

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

**SUBJECT: Early Consultation Request for Draft Environmental Assessment (DEA)  
Fuel Storage Tank Improvements for the Kāne'ohe Bay No. 3 Wastewater  
Pump Station on Kāne'ohe, O'ahu**

The Department of Land and Natural Resources (DLNR), Division of Forestry and Wildlife (DOFAW) has received your Early Consultation Request for Draft Environmental Assessment Fuel Storage Tank Improvements for the Kāne'ohe Bay No.3 Wastewater Pump Station at 44-003 Nohokai Place in Kāne'ohe on the island of O'ahu; TMK: (1) 4-4-037:014. The proposed project includes replacing the existing underground fuel storage tank with a new 1,000 gallon aboveground fuel storage tank. Additionally, the project includes replacing the underground fuel piping with new aboveground 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.

The State listed 'ōpe'ape'a or Hawaiian hoary bat (*Lasiurus semotus*) could potentially occur at or in the vicinity of the project and may roost in nearby trees. Any required site 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 Hawai'i please visit <https://dlnr.hawaii.gov/wildlife/files/2016/03/DOC439.pdf>.

State-listed waterbirds such as ae'o or Hawaiian stilt (*Himantopus mexicanus knudseni*), 'alae ke'oke'o or Hawaiian coot (*Fulica alai*), and the 'alae 'ula or Hawaiian gallinule (*Gallinula chloropus sandvicensis*) could potentially occur at or in the vicinity of the proposed project site. It is against State law to harm or harass these species. If any of these species are present during construction, all activities within 100 feet (30 meters) should cease and the bird or birds should not be approached. Work may continue after the bird or birds leave the area of their own accord. If a nest is discovered at any point, please contact the O'ahu Branch DOFAW Office at (808) 973-9778 and establish a buffer zone around the nest.

DOFAW is concerned about the wastewater treatment facility attracting vulnerable birds to areas that may host nonnative predators such as cats, rodents, and mongooses. We therefore recommend taking action to minimize predator presence, i.e., remove cats, place bait stations for rodents and mongoose, and provide covered trash receptacles. Implementing additional mitigation measures is also recommended to avoid avian mortality during project design and during operation for the long term.

The State endangered pueo or Hawaiian short-eared owl (*Asio flammeus sandwichensis*) could potentially occur in the project vicinity. Pueo are most active during dawn and dusk twilights. Remove and exclude non-native mammals such as mongoose, cats, dogs, and ungulates from the nesting area. Minimize habitat alterations and disturbance during pueo breeding season. These birds nest on the ground, and active nests have been found year-round. Before any potentially disturbing activities—like clearing vegetation, especially ground-based disturbance, DOFAW recommends a qualified biologist conduct surveys during crepuscular hours. Observation surveys should be done at those times from vantage points where they can see the whole project area for 2-3 nights before construction is to start. If any breeding displays are observed, it is likely there could be a nest. If pueo nests are detected in the area, a buffer zone should be established in which no activity occurs within a minimum buffer distance of 100 meters until the nesting cycle is complete, and the chicks are capable of flight. O'ahu DOFAW staff should be notified at (808) 973-9778 of any nests or adult displayed breeding behavior.

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](http://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.

We recommend consulting the O'ahu 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 'Ōhi'a 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](http://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.

To prevent the spread of Rapid 'Ōhi'a Death (ROD), DOFAW requests that removal, pruning/trimming, and potentially injury to 'ōhi'a 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 'ōhi'a 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. Spectricide, etc.). For more information, please consult <https://cms.ctahr.hawaii.edu/rod>.

The invasive Coconut Rhinoceros Beetle (*Oryctes rhinoceros*) or CRB is widespread on the island of O'ahu. CRB have been detected on other islands with moderate infestation on Kaua'i, one incipient site on Hawai'i 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 O'ahu, 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/>.

Due to the arid climate, high fine fuel load (grasses) surrounding the worksite, and risks of wildfire to listed species and native habitats, we recommend coordinating with the Hawai'i Wildfire Management Organization at (808)-850-0900 or [admin@hawaiiwildfire.org](mailto:admin@hawaiiwildfire.org), on how wildfire prevention can be addressed in the project area. When engaging in activities that have a high risk of starting a wildfire—like welding 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.

We recommend that Best Management Practices are employed during and after the environmental restoration activities to contain any soils and sediment with the purpose of preventing damage to near-shore waters and marine ecosystems.

We appreciate your efforts to work with our office for 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 additional questions, please contact Protected Species Habitat Conservation Planning associate Kinsley McEachern at (808) 587-0593 or [Laurinda.k.mceachern.researcher@hawaii.gov](mailto:Laurinda.k.mceachern.researcher@hawaii.gov).

Sincerely,



Jason D. Omick  
Wildlife Program Manager